

Herman Heyn

Baltimore Sidewalk Astronomer
Observing Notes for 1987-2018

Vol 1. - 1987-1999



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"SIDEWALK" TELESCOPE LOG - I

Mileage

- 9 1) 11/13/87 Fells Pt.(Fri) Jupiter with Myra \$11.05
- 9 2) 11/14/87 " " (Sat) Jupiter \$45.70
- 9 3) 12/12/87 " " (Sat) Jupiter \$13.60
- 9 4) 12/30/87 " " (Wed) 10-day moon + Jupiter \$11.27(may have had +/- \$10 stolen?)
 Temperature was 26°F at midnight, when I packed-up. RH 74%. Was probably set-up from about 9:30 to 11:45pm. Eyepiece was quite adequate, especially w/o glasses (ie., the 25mm ortho.). A wider field will probably help glasses wearers, at bit. Am thinking that a battery pack might be more useful now than another eyepiece, as it would be great to simply be able to talk to people and not have to check scope all the time. M-42 was discernable, even through thin clouds.(Want to try it again with perfect sky before buying nebular filter.) Image of moon was reversed in E and W but normal N and S.
- 7 5) 1/24/88 Fells Pt.(Sunday) 6-day moon with Jupiter almost directly beneath it about 2° away! A great duo! Could move scope back and forth between them very easily, so everybody who wanted could get to see both! Was on square from about 5:45pm till 9:15pm. Nancy Standish visited. A friend of her's, Dan, who works in Bertha's, brought out alot of customers. Total collection was \$38.73. Moon looked fine through 25mm ortho..real bright and crisp--despite some thin clouds. Jupiter looked ok, too(4 moon visible). Tried out just purchased 2X Barlow, but I was not happy with view--moon dimmed alot and crowded field. Jupiter looked fuzzy--althought seeing was not real great. Also, field of view was quite narrowed. Am thinking that if I need to use Barlow for Saturn/Mars, I should stick with a 20-25mm lens and try to increase size of field.....and/or get a battery pack. Looks like, at least tonight, Sunday is ok at Fells Pt., up till about 9pm. OR, just get a slightly higher power, wide field ocular and let it go at that. I do want a nice, birght picture, however, and I am wondering if 160X will ever give it--with whatever ocular. What? Erfle 20mm? Plossl 20? (20mm = 100X)((If, with 25mmx45° orth I have to move scope every 3 viewers, with Barlow need to do it every 1½ viewers!))
- 7 6) 1/30/88 Fells Pt.(Sat.) 9pm till 12:30am. 12-day moon.* Used 40mm Kelner and found it to be satisfactory. One person commented that it did not show whole moon. Wider field would have been nicer, but all lookers were pleased. First half of evening had layer of thin clouds which made image a bit flat.2nd half was clear--sharp. Moon was in Gemini and very high, so scope was pointing almost straight up. Legs were extended 10 1/4" but might well have been another 6 to 12 longer for convenience while moon was near zenith. Collection = \$71.21 (\$47.00/bills and \$24.21/coins).((Kelner has an A.F. 32.3°, meaning that on the Meade it yields 50X and real field of .65°. I used K. because 1) moon looked better thru clouds with it than with 80X and 2) it showed more moon than 80X--14% more.)) *Very obvious crater toward edge is TYCO--dia. 54-miles, walls rise to 16,000-ft.
- 7 7) 2/6/88 Fells Pt.(Sat.) arrived at 7PM. Looked at Jupiter, Venus, M-42(...looked amazingly good. Nebular filter whuld probably make it a worthwhile object from there!) Reported temp. was 18° with wind at 18MPH.....just too cold. Few people and very few contributions. Total \$2.80. Packed up at 8PM. Too cold, probably, for people to reach in pockets for money. Pleiades looked nice thru finder! Orion's belt fitted in finder!
- 8) 2/29/88 Corner of St. Paul and 31st Streets! 6:00-8:45pm. \$22.24(If had of had sign on hat would have probably doubled take.) Venus-Jupiter configuration, the moon(12-day...unimpressive compared to earlier phase). Used 3.1" w/25mm ortho(=36.4X). Found that people were more impressed when using Barlow(72.8X), which makes me think that 8-SC is really best way to go, because of nice image size with 25mm. Also did Sirius, M-42 (real faint), Betelgeuse. Air temp. at 8PM was 46°. My fingers were somewhat numb(maybe there was a significant wind-chill?)(Was on NE corner.) Some people remarked, "Only in Baltimore!"

Not visible in your scope.



SPIRAL NEBULA IN URSA MAJOR, KNOWN AS MESSIER 101
From photograph by G. W. Ritchey at Mt. Wilson Observatory

"SIDEWALK" TELESCOPE LOG II

- 2 9) 3/1/88 Corner St. Paul & 31st Sts. 6:00-9:00pm. \$39.80(Hat had CONTRIBUTIONS WELCOMED sign on it.) Venus-Jupiter configuration, plus the moon(13-day). Very clear evening; 44°F at 9PM. Very enthusiastic lookers! Used Meade SC-8, stayed with 25mm ortho. Soon after setting-up, I had to lower tripod legs down(to 11" extension), as scope was too high for Jupiter-Venus, which were about 30-35° elev. (To date = \$256.40)(Spent \$120.81)
- 2 10) 3/5/88 St. Paul & 31st Sts. 6:15PM-8:45PM. Sun reporter Rafael Alvarez and photographer McCardle on the scene. A lot of excitement. Very nice evening; Venus-Jupiter looked great. Dave Eberhardt, Gren Whitman stopped by. Isabel Biechl rode over with me and stayed for the duration. ~~Had~~ Two other guys helped me lift scope(SC-8) and move it across street after Jupiter was eclipsed by building. Handed out all the xeroxes of Luther Young's Venus-Jupiter article from Sun. (\$12.00 bills + \$19.05 coin = \$31.05) A young woman presented me with a clipping of the "Stephanie" column from yesterday's Evening Sun with a little write-up about my being on that corner earlier in the week. Went home after leaving corner, had some soup and a sandwich and headed for Fells Pt.
- 9 11) 3/5/88 Fells Pt. 9:30PM- 1:00AM looked at moon--about 1½ days past full. Used new 32mm Erfle, which gave a very nice picture, although I am not so sure it is giving the 65° AF I assumed it would. A lot of traffic--people lined up 6-8 deep sometimes for a look. A lot of amazement at view. Temp. +/-38°, RH 63%, wind 5MPH--a real nice night. A lot of people walking around. Met large group of Morris dancers(not in costume), who did a dance nearby--which was kind of disconcerting, but I did not complain. Jean Causey and Joann were among them, as well as John, my neighbor. (\$53.00 bills + \$23.22 coin = \$76.22). A lot of people asked about the two bright "stars" in the evening sky, which they had seen, earlier. I wish I had the Venus-Jupiter xeroxes with me, even tho the two planets were not visible. Most immediately visible feature on moon was Mare Crisis, I believe. A lot of viewers asked what it was. I need a map I can take with me to interpret moon features right on the scene, correctly.
- 2 12) 3/6/88 St. Paul & 31st. 6:15-9:30PM. Venus-Jupiter. This was the day the Sun article 'Telescope Man' hustles stars from street corners by Rafael Alvarez appeared! A number of people came considerable distances to look--having read article. Came from W. Balto., Perry Hall, Rosedale, Dundalk, Towson. Was a real good session. A lot of children for first time I used telescope case a platform for them to stand on. I think it will survive this treatment ok--I think! Gina (from Sharon's Halley's comet group) was on the scene and stayed the whole time. Jill from dancing came. Beside Jupiter and Venus, we saw M-42(quite well!) and Mizar. Whole families came and were fascinated. I wish I could get a better focus on scope; this must be first priority--at least for my own peace of mind. I handed out copies of Luther Young's article. Henry Easter(947-7418) wants me to call him to instruct him on his scope. Rafael, some of his Sun co-workers, and his children were there. I was able to show him M-42. Collection \$28.00(bills) + \$8.10(coins) = \$36.10. I have hints that people told others I would be there tomorrow night. If weather holds up, I guess I will be! IO appeared from (in front) of Jupiter around 8:30pm, as we were watching! Louis Glaser, a Sun sports writer, who lives in Fells Pt. asked if I could call him next time I go there(332-6200W; 342-2437H). ((Contradiction! If I travel to neighborhoods I cannot let especially interested people know in adv. where to find me. If I stick to one or two spots, like Fells Pt. and Ch. Vil., people in neighborhoods will next get opportunity to look. Idea would be to do both; have one scope visiting neighborhoods while another is pre-announced monthly as being at one particular spot--like Fells Pt. in June for Saturn.
- 2 13) 3/7/88 St. Paul & 31st(...ie., Charles Village) 6:15-8:50PM. Jupiter-Venus. J looked about as sharp as I've seen it with Meade. Venus had good ½-moon form. I think seeing must have been superb. Also did M-42 for a short while. Collection \$14.00 + \$17.99 = \$31.99(B+C). Used 25mm on planets and Erfle on M-42. Erfle did not take in all of Pleiades. Temp. in low 50's; mild wind. A beautiful evening! (To date = \$431.76) (Spent = \$127.50) (Avg. = \$33.21)

"STREET CORNER" TELESCOPE LOG III

- 2 14) 3/11/88 St. Paul & 31st. 6:05-8:45PM. Jupiter-Venus. (Mike O'Neill, 235-7545 gave me his tel. number to be called next time.) Seeing ok, but not the best. Some haze around Venus. J with four moons and stripes. Went back and forth between them, alot. Tonight was first night with "Baltimore's Street Corner Astronomer" printed on dew cap. People seemed to like it ok. Collected \$43.00 bills and \$8.01 coins. A \$20.00 bill was in the collection, but I don't know if it was from change or really a large contribution! (Given the bills/coins ratio, the latter would seem to be the case!) Today's total, \$51.01.
- 2 15) 3/21/88 St. Paul & 31st. 6:15-8:50PM 4-day Moon, Venus & Jupiter. Generally slow evening with but real good several times along the way. Was cold (56° at 9PM). A young man who was especially thrilled with the Moon, et al, brought me a cup of real nice warm tea from his home. Sky was fine; Moon was real good, as was Jupiter. Venus is still just so-so. The best is yet to come. Nevertheless, I started handing out my Venus sheet--about 1-doz copies. Collection was \$10.00 in bills and \$9.08 in coins = \$19.08 -- better than I was thinking it would be. When I arrived at corner I had that voice saying, "Why are you doing this? You are just making a fool out of yourself!" I should really guard against succoming to that voice because the enthusiasm of the people proved again that I was/am doing right! Again, even tho it was a relatively slo night, there were moments of high enthusiasm! Visits from Gren, Ginny, Alice Rodman.
- 2 16) 3/22/88 St. Paul & 31st. 6:15-8:45PM 5-day Moon-Venus-Jupiter. OK sky. Again, kind of slow evening. Learned that JHU is on spring break, which explains situation. Again, was ready to pack-up about 7:30pm, but then things started improving. As last night had some very enthusiastic people. Handed out twenty fliers, maybe (ie., Venus story). Collection \$11.00 + \$7.69 = \$18.69. A JHU grad student in astronomy (cosmology) stayed with me for about 1-hr. He said he stayed to watch the people, that he had never before seen people so enthused with the stars! Visits by David Cohen, Ginny (who took over my hand bell ringing stint for me!). Moon looked good, except "earthshine" was much less impressive, I thought. (Theophilus, Cyrillus-Catharina NOT yet in view.) Atlas & Herculese good. Used 40K all night. +/-42° at 9PM.
- 6 17) 3/24/88 (Thurs.) NEW PLACE! 800 Blk. N. Charles St. (across street from Green Earth Cafe). 7-day Moon, Venus. (Jupiter went behind bldg. just after I set-up.) I was really nervous about going to a new place, but once I started to set-up I felt better--though somewhat self-conscious and silly until people began looking, which took about 10 mins. Moon well positioned. Was on scene from 6:15 to 10:15PM Not nearly so many people on street as I expected. Was told by some to come back on Fri./Sat. night for the people. Some derelicts--more than Fells Pt. Alot of cops, incl. two on horseback who spent at least an hour talking with me about astronomy subjects. Contributions \$15.00 bills + \$23.79 coins = \$38.79 (+ some Canadian coins). Two big craters at top were Eudoxus (40mi x 11,000) and Aristotle (60mi x 11,000). View to S not too good--trees. Visited by Kay! Also by a Spark person, who bought me a drink and raisin/nuts.
- 7 18) 3/27/88 (Sun.) Inner Harbor audition. Sunny/cloudy day. Took both scopes. Set up 3" on sun upon arrival (2:30pm). Helped by Isabel. Also, Todd came along on bike, Joanne McPhey, David Dorsey all on scene. Sun was good, except covered by clouds too much! Set-up 8" at about 3:15 and pointed at flag on Federal Hill. Venus out of the quest. due to clouds. Went on stage about 3:45, with both scopes. Scratched thru Venus on easel and wrote "The Flag"! Three judges--K.K. Keegan disappeared while I was on. Hat = no bills + \$4.77 coins. (Parking cost \$4.00.) ((To date = \$564.10))

STREET CORNER TELESCOPE LOG IV

- 7 19) 3/29/88. 12-Day Moon. Sky clear all day, then high clouds formed toward late afternoon and stayed till about 9:30PM Nevertheless, Moon was satisfactory, but it would have been better w/o clouds. Headed for Market Place but after arriving and discovering 25¢/20-minutes meters and not great numbers of people, decided to go to Charles Village. Arrived about 6:15 and had a very good night. Was not able to pack up till about 10:30PM, because people kept coming by! Used 40K for most of time but then switched to 25 Ortho. (I should always use it!) Put 30% filter on after a while, which helped. Contributions \$29.00(bills) + \$21.92(coins) = \$50.92
- 2 20) 4/4/88. 31st & St. Paul. DAYLIGHT SAVINGS TIME! Was daytime at 6:15PM so decided to take solar scope to corner. By time I set-up sun was in trees. Attracted next to no attention. One serious looker(contrib.25¢). Need sign for that; need good spots or streaming clouds! At sunset, I put solar in car and set-up Meade for Venus/Jupiter. Both impressive, tho J was semi-boiling alot due to low altitude. Saw 4 moons. As it grew dark, I discovered that a VERY bright light has been installed on corner in front of drug store. Really lights up the whole area, making seeing significantly more difficult. Light gave me a mild headache, I believe. If I am going to keep using that corner, I must do something about it! For a short time used Barlow on Venus(160x). Was very impressive, telling me I really should get the powerpack drive! Gave out some Venus print-outs, as well as the handout. Contributions \$7.00 (bills) + \$5.53 (coins) = \$12.53.
- 2 21) 4/5/88 31st & St. Paul. Set up +/-5:30PM EDST and observed Venus in daylight. Looked white against blue background. Sharp image. After sunset found Jupiter and watched for +/- 45-mins. 3, then 4 moons! Street light not quite as bothersome, tonight. Packed-up about 9:30PM. Contributions \$32.00 (bills) + \$10.75 (coins). Bills included a \$20.00 contribution from a man on a bicycle who was thrilled at seeing Venus and Jupiter. Total = \$42.75. A guy showed up tonight to whom I had given Venus handout last night and who argued in favor of Ptolemy's theory! Claimed that when planes fly to CA they are outside pull of gravity!!
- 8 22) 4/10/88(Sun.) Federal Hill! Set-up +/-6:15PM(1¼-hrs. before sunset) for Venus. Looked good. Picked-up Jupiter after sunset and, as always, it looked terrific--which was for for about ½-hr, before it got into "boiling" atmospheric. 4-moons, nicely arrayed! Disappointed in number of people around--not enough to justify making it a regular stop. However, met some very enthusiastic local, working class residents--which makes me want to do S. Balto. again(maybe a band concert). Also met SANDY, a real nice, friendly young woman who stayed for over an hr., fed me french fries and helped recruit viewers! She would be great as a regular sidekick. Contributions \$4.00 + \$5.45(coins) = \$9.45. Was windy and cooler than I expected. Left around 9:30PM. New super Flossl with Barlow lived up to my hopes for it. Venus was great at 120X, and field was nice! Ambient light was difficult. M-42 looked reasonably good--except I goofed for a while and had 30% reduction filter on!
- 3 23) 4/15/88 JHU Spring Fair(noon-6PM) Took both both scopes, indenting to use 8" on Venus and 3" on Sun. Latter went ok, but in a whole afternoon of searching with bincos and also trying setting circles, I could not find Venus. Sky was a bit hazy, but it was bluish. Maybe, once, with binocs spotted it, but when I put binocs down I could not see it again. Alot of small to medium spots. I wore my new edition of TE T-shirt with a little card saying, "Please ask about this T-shirt"; got some askers but no sales at \$10/ea. Two telescopes is a little risky, because can't give full attn. to both simultaneously. At one point discovered a kid forcing the 8" to his eye level--to late. (Hope no damage done!) Gave out some fliers. Contributions \$10.00(bills--including a \$5 donation, I think) and \$1(coins) = \$11.00. At closing time started to drizzle, but no damage done. 4/16/88 Clouds. Did not set-up.
- 3 24) 4/17/88 JHU(10am-5:45PM) Venus in the daytime plus naked eye sunspots! Great sky...Terrific day and experience. A fifteen-yr.-old Hampden kid traced sun image and earth-size dot to take home to show his grandmother! Incredibly gratifying experience!! On other hand, alot of kids semi-manhandled equipment--including one boy who I stopped just in time after he had twisted around eyepeice to look directly at sun! Sold one T-shirt(only). Handed out 200-Venus papers(should have had all of them w/me!). Venus image a bit turbulent--I think from heat from patio stones. Next year, maybe, I should be on the grass. Contributions \$30 bills + \$66.50 coins = \$99.50. ((Total to date = \$790.25))

STREET CORNER TELESCOPE LOG V

- 2 25) 4/19/88 St. Paul & 31st, then St. Paul & 33rd (in front of the WAWA). Venus-Moon conjunction--sensational. Venus $\frac{1}{4}^{\circ}$ from Moon at closest. Arrived at first loc. a bit after 8PM. Had my very first looker as a result of recorded msg! About 8:45, foot traffic being very slow, packed up and moved to the WAWA--a good move, as there were a lot of lookers. (Also, discovered that it may be an ok place for looking at Saturn in June!) A lot of people had noticed conj. on their own and were happy to learn what it was and to see it in scope. (Using 3", as Meade was shipped back to factory, yesterday, for mirror re-silvering.) Contributions \$13.00 bills + \$13.46 coins = \$26.46. Used 25mm Ortho. 11PM 45°
- 9 26) 4/22/88 Fells Pt. 6-day moon and Venus. (People still talking about last Tuesday's Moon-Venus conjunction!) Weather rpt. cloudy, but sky was nice. 3.1" refractor. (This was a Fri. night.) 7:45am-12:15am. Visited by a couple from Chas. Vill. who called msg. machine! (Also, they lent me a long-sleeve T-shirt to ward off the cold!!) Visited by Mike Potter of Space Tel. Stayed mostly w/25mm but sometimes put in Barlow. It helped mostly for Venus, which was a nice crescent. Contributions \$29.00 bills + \$13.12 coins = \$42.12. Need sign--like easel with sign.
- 2 27) 4/24/88 Sherwood Gdns. for Sun w/3.1" 4:15-5:30PM. Visited by Myra. Too many clouds--blocked Sun $\frac{2}{3}$ 'rds time. Cold (54°) and windy (20-28mph)--too cold for many people. Did not put out hat, but someone put 70¢ in telescope box after reading handbill. Met woman who worked on daguerreotype photo of moon in S&T (11/86) (Susan Barger?) (She said PR contact at Naval Obsv. is Gail Clear.) Contributions, \$0.70.
- 2 28) 4/25/88 (Mon.) St. Paul/33rd, 7:30-10:30PM. 8-day moon + Venus. Swung back and forth between them. Moon looked great--even tho thin clouds slightly muting contrast. Copernicus very prominent near terminator. Watched gradual sunrise inside the crater. Used Barlow on Venus and number of times. Visited by person (Jim?) who drew my characterization for JHU article. Tripod should have been fully extended! Contributions \$13.00 + \$9.26 = \$22.26
- 1 29) 4/26/88 Waverly Community Carnival on S. parking lot of Memorial Stadium. Beautiful sky, mild weather. 9-day moon + Venus. Moon was real nice. Put sign on easel saying, (25¢) See the MOON thru powerful TELESCOPE! (25¢). A lot of local kids resisted paying and slicked me out of looks. A lot of others simply wouldn't look. However, there were some diamonds-in-the-rough--some who paid and looked and were really wowed! Traffic at fair was light; some rides hardly operated at all. Next time I guess I will do the hat thing to avoid hassling over 25¢--if I go back. Contributions at 25¢/look = \$9.00 (= 36 paid for looks!) was there from 7:15 until 9:50PM. Visited by Jim and Barbara from Tues. night pot luck. (Name of carnival boss who gave me ok--Phil Vavona.)
- 9 30) 4/30/88 Fells Pt. 13-day moon + Venus. Played nip & tuck w/clouds. Just when interest seemed to be peaking, moon disappeared behind cloud and stayed! I put scope in car and visited Bertha's & Cat's Eye. Moon was back in $\frac{1}{2}$ -hr., so I set up again. In Bertha's I found Terresa (from old days at R. Drive). She remembered me as one who took the eclipse picture. When I told her I had it on T-shirt, she said she would take three and that she would be at B's again Fri. night! Talked to owner* of B's about Mars party. He said I should contact Nelson Adlin, head of business assoc. Visited by Mary and children (Lucas and ???). Met Jeff Hettleman and wife. Handed out a good number of handbills w/T-shirt ad. Used HAV-A-LOOK! sign and feel it was effective. Contributions \$21.00 + \$12.77 = \$33.77 *Owner of B's is Tony Norris.) Met a woman who works in mayor's office in Annapolis, liked my thing, said I could take contributions in Annapolis but not solicit, said she would look for my letter to the mayor.
- 2 31) 5/1/88 Sherwood Gdns., 12:15-3:00PM. Sun with some moderate-sized spots. Had a lot of nice views, often with streaming clouds. Gradually however, clouds got thicker & thicker until, around 3PM, I packed up and came home. Too bad, because I was enjoying myself there. Had a lot of lookers; gave out a good number of handbills with T-shirt ad. We'll see what happens. Did not put down hat. On strength of "HAT" contribs. welcomed on handbill, collected \$1.25. Visited by a lot of friends, including Jim and Debbie.

STREET CORNER TELESCOPE LOG VI

- 9 32) 5/7/88 Fells Pt. 4-10PM, Venus (one day after greatest brilliance. Spent a long, frustrating time looking for it, found it, got it in scope, then lost it for another long time. Finally got it for good about 1-hrs. before sunset. Still using 3". Visited by Bill and Marilyn O'Connor. (Bill said L. Turbyville's art. in City Paper best thing they've ever published.) Got blown off square about 9:30PM by wind storm and went to Ceili. Earlier was beseiged by Jesus freaks of some sort--alot of them. Contributions \$17.00 + \$18.85 = \$35.85. Was also visited by Kay and Bertha--before I found Venus. Woman who worked in market said was a slow day all-over in Fells Pt.
- 2 33) 5/8/88 Sherwood Gdns. 3-5PM, Venus. Nice day. Found V in binocs fairly easily but again, like yesterday, couldn't get it in scope. Tried for 1/2-hr. and was about to pack up for home when, by dumb luck, there it was in eyepiece of scope! Held it for about 1 1/2 hrs but lost it and never found it again in scope when I shifted to other side of polar axis! A lot of lookers; gave out last copies of Venus paper. Contrib. \$0.75. If I am going to continue to do V in the daytime, I MUST find a better way to get it in the scope! Sold 2 TE-T-shirts mail order from today.
- 4 34) 5/14/88 Peace Fair at Friends School, Sun and then Venus 10AM-4PM. From 10AM till 2PM there were high, semi-transparent clouds. Around two the sky cleared to hazy blue, at which time I went for Venus. I found it on second attempt using setting circles and swinging 2h25m east and +9° from sun--which I pre-calculated the day before. It worked! Total time spend was, maybe, ten minutes! The secret is getting scope lined up on North--which I did by setting and re-setting tripod so projected sun drifted thru on a "straight" course. Met president of Poly High Astronomy Club, who lives in S. Balto. and will bring people next week to Federal Hill for Mercury! Contributions = \$5.70. (Am thinking I should change my name to Baltimore's Tele. Wizzard!) No spots on Sun, which makes it much less interesting--even w/clouds going by. Prob. should not do sun alone if no spots.
- 7 35) 5/26/88 (Thur) Fells Pt., 8:45PM-12:15AM. Great weather! Venus, 11-day Moon, SATURN! Picked up Saturn +/- 11PM. Was great at 80X. People really liked it. This is my first Saturn from Fells Pt. \$29.00 + \$10.23 = \$39.23.
- 9 36) 5/27/88 (Fri) Fells Pt. 8:30-12:30AM Moon (12-day) Clear early, but partly cloudy later. Completely hazed out at some points. Saturn not visible. Alot of interest, nevertheless. Visited by Isabel and Daniel Hettleman. Somebody suggested I read: Henry Mayhew, London Labour and London Poor (4-volumes)--section on "Curbstone Astronomers. Sold three Spike T-shirts! Contributions: \$33.00 + \$22.78 = \$55.78.
- 7 37) 5/28/88 (Sat.) Fells Pt. 9:15PM-2:30AM. Almost did not go because of high clouds! Contributions \$78.00 + \$39.30 = \$117.30! Also, sold 1-TE-XL. Moon + Saturn. Early-on clouds were problem, but mid-way thru cleared up and both Saturn and Moon looked great. Alternated eyepieces, but Barlow w/32mm seemed ok w/Saturn. 13-day Moon was a fine sight!
- 7 38) 5/29/88 (Sun) SOWEBO Festival (10:45AM-5:45PM) Venus in the daytime w/8"SC. Used "Sunhop" method to find V, but it was very difficult, for some reason. I felt like I lined up scope on true N fairly quickly (15-min.), but then it took me about 45-anguished minutes to find it. Maybe my interpolation was off? Once found, it looked great--with 32mm Plossl. It was only 16-days from inferior conj.! Held it for about 3-hrs then, somehow, lost it. Spent another 25-anguished mins. getting it back. Finally, lost it again about 5:30PM and gave up. Lookers were fairly impressed, but I am thinking a H-a sun view might be more interesting, and easier to do, as well. (One problem w/V I need to solve is how to make a notation on where it is on my circles, so I can find it a second time, if need be, w/o much trouble. The dec. should stay pretty much the same. I probably need to note the TIME I find it and then see how long it has been from then till it was lost, etc.) Collection = \$30.00 + \$25.95 = \$55.95. Sold three TE T-shirts.

((Total this page = \$310.56))

((Total to date = \$1,236.37))

STREET CORNER TELESCOPE LOG VII

- 9 39) 6/4/88 Fells Pt.(Sat.), 8:45PM-2:10AM. Vega and other stars until 10:30PM, when I spotted Saturn. Saturn until about 12:45AM. I packed up, but discovered moon rising, unpacked and finished off evening with it. Not a real comfortable time, because of an unusual number of rambunctious, big drunks! (Sometimes, I think I'd like to abandon Fells Pt. for the Inner Harbor, because I am guessing there are less messed up people at the latter!) Also, atmospheric were bad. Also, I was not happy with star images thru scope. Must collimate again--or, try too. Finally, from the time I set-up until Saturn rose, I collected very little money. I really should not have been there until Saturn was available; stars, by themselves, are not good enough subjects. Collection = \$38.00 + \$24.14 = \$62.14. Sold one Spike T-shirt.
- 9 40) 6/10/88(Fri.) Fells Pt. 8:30PM-2:15AM. Arrived at 8:30 and had 2-hrs of clouds. Had beer/pizza w/David and Jan. Set-up at 10:30, and had clouds till 11:15, then good. Saturn. Visited by Mary and Gene C. \$38.00 + \$14.34 = \$52.34. Sold 1-Spike T-shirt. Before putting away scope, I collimated it for tomorrow night--I hope! The perversity of the weather came through, tonight! It was clear all day, but then near sunset clouds began to appear. From sunset until 11:15PM, sky was pretty well socked-in. Weather report was clear and cool; in actually it was cloudy and warm!
- 9 41) 6/11/88(Sat.) Fells Pt. 8:30PM-1:AM. Arrived at 8:30PM and had beer w/people at Adm's. Cup. Set-up +/-9:20PM. Spotted Saturn at 9:45PM. Saturn! Used 25mm ortho, mainly. Small, but nice image. Titan easy to see. Left at 1AM because of rowdiness. \$58.00 + \$25.86 = \$83.86. Sold four(4) Spike T-shirts.
- 9 42) 6/24/88(Fri) Fells Pt. 8:20PM-1:45AM. 10-day moon, Saturn, Uranus! (U was +/-2.4° E and 1°21' S of Saturn. Got it simply by turning dec. knob. Looked like green dot. I acquired it three different times.) Nice evening. People sort of sedate until last hr. Tried out new 20mm Erfle. Short eye relief not good for glasses wearers--like myself! Otherwise, ok. Contributions: \$63.00 + 27.97 = \$90.97.
- 9 43) 6/25/88(Sat) Fells Pt. 8:15PM-1:00AM. 11-day moon(great!), Saturn. Used 32mm on moon and 25mm and 20mm on Saturn. Good views up until +/-11:45, then clouds. Looked at Vega for a while. Then clear again for Saturn, but I left at 1:00AM because of rowdiness. (I'd like to get out of Fells Pt., I think!) Handed out +/-150 WHFS Mars Party telephone call blurbs. Collection \$55.00 + \$32.38 = \$87.38.
- 2 44) 6/27/88(Mon) 33rd & St. Paul, in front of WAWA, 5:15-7:30PM. The sun w/large spots. Not many passersby and not much interest. Collection \$2.00 + \$3.05 = \$5.05.
- 2 45) 6/27/88(Mon) 33rd & St. Paul(WAWA) 9:15PM-12:15AM. 13-day moon, Saturn, Uranus. Steady but light traffic. Visited by Gina. Objects looked great--very clear sky! Saw at least three of Saturn's moons. A lot of interest from policemen there for baseball game traffic. Collection \$7.00 + \$14.58 = \$21.58.
- 7 46) 6/29/88(Wed) Pratt & Market Pl., 9:15PM-12:30AM, full moon, Saturn, Uranus. Finally made it to vicinity of Inner Harbor! A lot of light; S visible till it went behind Power House +/-11:45PM. Light, but steady flow of passersby, some very interested. First time out w/"HAT CONTRIBUTIONS APPRECIATED (\$1 SUGGESTED)" sign on hat! Contributions \$47.00 + \$13.86 = \$60.86.
- 7 47) 6/30/88(Thur) Pratt & Market Pl., 9:00-10:30PM. Saturn. Light foot traffic and not much interest, besides. About 10:15, the wind began gusting strongly. Even tho a beautiful moon was just coming into view, I decided to go home. Contrib. \$14.00 + \$6.99 = \$20.99.
- 9 48) 7/2/88(Sat) Fells Pt., 4:30-7:00PM Sun(w/naked eye spots) w/3.1" projection. Not many people around, plus not much interest. \$6.00 + \$3.05 = \$9.05.
- 9 49) 7/2/88(Sat) Fells Pt., 9:00PM-2:30AM. Saturn, moon(11:45PM), Mars(2:15PM). Great night, except an hour of clouds from 11-12 which almost drove me home.(Lucky I didn't go, because sky cleared nicely) \$70.00 + \$19.97 = \$89.97. Sold 3-Spike and 1-Total Eclipse T-shirts.

Page total = \$584.19
To date = \$1,820.56

STREET CORNER TELESCOPE LOG VIII

- 9 50) 7/3/88(Sun) Fells Pt., 9:15PM-2:30AM. Saturn, Uranus, Moon, Mars. Fantastic experience! About the best yet in terms of interest! Evening began w/clouds, and for considerable stretches Saturn was dimmed or invisible. Then it cleared, moon came up and everything was great!(Met David S. Nolan, 133 Chapeltowne Cir., (36) 256-0481 who has scopes and friends with scopes and will come to Mars Party.) Contributions: \$75.00+ \$21.00 = \$91.00. Sold two Total Eclipse T-shirts.
- 9 51) 7/16/88(Sat.) Fells Pt., 8:30PM-1:30AM. Saturn. Arrived at 8:30PM. Spotted Vega at about 9:15PM and Saturn about 9:50PM. Was really hazy. Vega & Sat. were only two objects I noticed all night. Could not see Titan--first time this has happened! Nevertheless, with 80X S. looked ok, and lookers were reasonably pleased. Collection \$49.00 + \$20.67 = \$69.67. Temp. was 87°F and rel. humidity 70%.
- 9 52) 7/29/88(Fri) Fells Pt. 9:15PM-2:30AM. Saturn, Moon, Mars. Back on the street after a long seige of bad weather. Felt somewhat scared driving down--like I did in the early days. But as I set-up, started to feel more comfortable. Great night! Due, somewhat, to three improvements: 1) hat up on tripod, 2) bull's-eye level to level tripod, and 3) shaved down 20MM Erfle. Used it almost exclusively on Saturn; it gave an impressive picture. Alot of interesting and interested lookers! \$75.00 + \$17.38 = \$92.38. Sold (2 Total Eclipse and 2 Spike T-shirts @ \$9/ea.) Despite heat & humidity, seeing was very good. Followed Saturn very low in west down Thames St. Moon 15-day. Visited by people from Space Tel. Inst. who encouraged me to do street corner at IAU convention.
- 9 53) 7/30/88(Sat) Fells Pt. 8:00PM-2:45AM. Arrived at 8:00 but did not set-up until 11:30PM because of clouds. Looked at moon thru clouds(kind of dynamic) and then in clear. Looked at Mars. Whereas I could see snow cap and a marking, none of my lookers could(at 100X). Kind of an inebriated crowd--not much fun. Moon looked great! Contrib. \$45.00 + \$12.86 = \$57.86. only other object I saw was Vega; never set eyes on Saturn!
- 7 54) 7/31/88(Sun) Pratt & Guilford. 9:30-11:45PM. Used News American parking lot. Tow truck came but honored my permit. Saturn (25mm ortho) and moon. Watching moon rise from behind Power House smoke stacks was impressive! (17-day moon.)Location was ok, but there is occasional stench from sewer beneath corner. Problem was there was very light traffic on foot. Just not a steady enough stream of passersby. \$20.00 + \$8.19 = \$28.19. Gave out three Spike T-shirt advertisements. Hot and hazy. temp. 85°; R.H. 85%. Visited by Greta Coleman, who was selling balloons along Pratt St..
- 7 55) 8/2/88(Tue) Pratt & Guilford. 9PM-11:30PM. Saturn. Found it w/binocs early. Over time, haze got thicker and thicker till I decided image looked too poor to continue, so I packed up. Intl. Astro. Union convention in town, and I was hoping to catch astronomers, which I did, but only a few. They were from Eng. and Fr. Very enthusiastic about image of Saturn! Stench from sewer was bothersome. Must move away from it! In general, traffic very light. \$17.00 + \$7.66 = \$24.66 (included a \$5 contrib.) Temp. 83; R.H. 87% Awful night!
- 7 56) 8/3/88(Wed) Pratt & Gay, where the hot dog and picture vendor are on week-ends. Clear sky, until clouds moved in. Saturn. Played hide and seek w/cloud till 11:30, and packed it up. But while it was good, S was great--had about forgotten how good it can look. 20mm worked good for a while, till seeing dropped. Had my first lookers from Kuwait! Some astronomers, but most simply walked by. Alot of friendly, interested police. \$28.00 + \$6.20 = \$34.20. A young couple saw a bright meteor as they were looking in the direction of Saturn!
- 7 57) 8/4/88(Thu) Fells Pt. 9:10-10:40PM Saturn. Good enough night to see a second moon. Checked Uranus at 100X. Looked like scope needs collimation. Met Kevin, owner of Lee's Ice Cream, who will give gift certificates for Mars Party costume event. He was thrilled w/ Saturn. First time ever. Visited by Isabel, who bought sundae and lent me jacket as I was somewhat cold because of my low grade bronchitis. \$8.00 + \$6.61 = \$14.61. Sold 1-TE-XL for \$9.00. Temp. 83°, R.H. 86%.

Page Total = \$412.57

To Date = \$2,233.13

STREET CORNER TELESCOPE LOG IX

- 9 58) 8/5/88(Fri) Fells Pt. 8:45PM-2:15AM. Good + sky! Took binocs and spotted Saturn early. Intense evening. Alot of talking, even tho I'm suffering from bronchitis! (Four guys got into a philosophical thing among themselves which went on for hours!) Met a microbiologist from Cornell who was totally fascinated. Wants to do public microscopy in Ithica, now! (I referred him to the Mayhew book.) Also Mars(better), Met ed. of Astronomy magazine. Visited by Jerry Klauber, who bought me icecream. Had trouble getting myself packed up to leave, especially after I spotted moon and then Jupiter rising! Followed Saturn right down Thames St. to the limit! Sold 2 TE T-shirts. Was told there is article about me in the IAU convention newspaper. \$75.00 + \$18.70 = \$93.70.
- 9 59) 8/7/88(Sun) Fells Pt. 8:45PM-12:15AM. Set-up right on Lees Icecream corner, as there was a beer truck in my usual spot. Was a GREAT move--at least for a Sun. night! Saturn and, later, Mars. Some trouble w/clouds early on, but then ok sky. Could see Titan. \$36.00 + \$8.41 = \$44.41. Sold 3 Total Eclipse T-shirts! Also, someone asked if I had the cat shirt, yet. When I said I'd have it by next week-end, she said she'd be back then! Went down w/a bad case of bronchitis, and several times during evening almost lost my voice and had pains in chest. Now, I feel none the worse for wear!
- 7 60) 8/8/88(Mon) Pratt & Gay. 8:45-10:45PM. Saturn. Ok sky. Still w/bronchitis and unable to do much "hawking", so I feel alot of people got away. Real good interest from motorcycle policemen. They are good for business--attract more lookers! A few IAU astronomers stopped, but most kept walking. No other "vendors", except Mr. Softee on parking lot. People really amazed when I pointed out S to them hanging over the Aquarium. \$28.00 + \$10.38 = \$38.38 (better than I would have guessed!).
- 9 61) 8/12/88(Fri) Fells Pt. Yুদ্ধie sky! (88°F/85%RH). Found Saturn w/binocs +/-8:45PM Was a passable image but steadily degraded. By 10:30PM I thought it was terrible, but lookers were still impressed! Could not even see S in finder. Packed up and left at 11:15PM. \$19.00 + \$1.87 = \$20.87. Sold one Cat and two TE T-shirts! Visited by Liz Berrigan & family, as well as Bill and Marilyn O'Connor.
- 9 62) 8/14/88(Sun) Fells Pt./Lee's Ice Cream corner. 8:30-11:30PM. Saturn. Hard work, but interesting and fun evening! Sky moderately good at start but steadily degraded. Lost Titan after 1st hour. Still, had alot of appreciative lookers. Used 100X for half the time. Treated to ice cream by Lee's workers and lemonaid and cookies by Maryellen Simcoe (card says Art Consultant, Martin Lawrence Galleries, The Gallery at Harbor Pl.) \$42.00 + \$7.59 = \$49.59. Sold 1-Spike and 2-CAT T-shirts! 88°F.
- 7 63) 8/16/88(Tue) Pratt op. Aquarium. 8:30-11:45PM Saturn. (5-day moon for a few mins.) Seeing not real good--turbulence. Also, I was very worried about collimation of scope. I should have never fooled w/it last night! In any case, I collimated again tonight after returning home. We'll see! Fairly steady business. \$26.00 + \$10.08 = \$36.08. Sold 1-CAT T-shirt!
- 7 64) 8/18/88(Thu) Pratt/Aquarium. 8:30-11:20PM. Saturn. (Moon behind World Trade Ctr.) Clouds early-on, but then nice sky for Saturn. Scope working ok after last night collimation panic! Intermittent people. Lookers from Ethiopia(Eritrea). I notice I'm not working so hard to please as before. Maybe excitement is beginning to lag a bit! \$25.00+\$12.00=\$37.00
- 9 65) 8/21/88(Sun) Fells Pt. 7:30-11:30PM. 10-day moon, Saturn, Mars. Real nice night. One of my lookers noted Cassini Division, unprompted. (Telescope in good shape!) Good people, alot of interest. Lookers from Peru. Accompanied by Joyce Yensen. Visited by Bill O'C and Cecil, Jill and Warren(who thought it was Mars Party night!), Dandelion (from Catoc tin 2 summers ago.) \$57.00 + \$12.11 = \$69.11(!) Sold 2 CAT T-shirts! Met Mary Henn's father! (Vince)
- 7 66) 8/22/88(Mon) Pratt/Aq. 7:15PM-12:00. 11-d. moon, Sat., Mars. Ok sky till late, then thin clouds. Alot of enthusiastic lookers. Visited by Joyce and a friend of her's from work w/his wife/kids. \$55.00 + \$18.17 = \$73.17. Sold 1-CAT T-shirt!
- 7 67) 8/25/88(Thu) Pratt/Aq. 8:15PM-12:00. Saturn, 14-d. moon, Mars. Nice sky/images(except Mars was low). Moderate traffic. Forgot to take my wooden sign! \$36.00 + \$9.00 = \$45.00. Sold 2 CAT T-shirts!

Page Total = \$507.31

To Date = \$2,740.44



THE SUN/AMY DAVIS

"The moth-kid from Mars," otherwise known as David Markland, 7, looks in vain as cloudy skies block his search for relatives way out here.

Gray skies fail to dampen Fells Point party for Mars

by David Michael Ettlin

Clouds kept the guest of honor from making an appearance, but hundreds of earthlings went on with a party at Fells Point last night celebrating the closest approach of Mars to this planet in 17 years.

Youngsters with painted red faces or bouncing antennae paraded in a Martian costume contest, a trio played Irish music and grown-ups with telescopes turned their sights away from the gray-floored sky to terrestrial targets — the tops of own building lights.

"See those windows down there," said Bunny Knipp, a member of the Baltimore Astronomical

Society whose small telescope was aimed across the harbor. "You can see what they're doing." But there was no one in the room, just furniture.

The Mars party was the brainstorm of Herman Heyn, a Baltimorean who offers a peek at celestial bodies as a street corner astronomer when weather permits.

"There's a hole in the clouds," Mr. Heyn said, pointing spaceward. But the weather did not permit. The holes vanished. The moon peeked through to applause, but it was gone before any of the cluster of telescopes at the foot of Broadway could be aimed and focused. In the costume contest, Miss Solar System — Laura Maria Semesky, 3, in a planet-decorated sky-blue cape and gold-

en-sun fedora — won the best-in-show award.

The children — like Lucas Henn, a Martian yuppie with a silver space helmet and an aluminum-foil briefcase — paraded in the spotlights provided by the headlights of two parked cars, and all won prizes.

"That's my boy," said John Markland, 36, a microfilmer in "Mr. Spock" ears, as son, David, was announced as "the moth-kid from Mars." He was named best bug-eyed monster.

As the party ended, Mr. Heyn announced that many of the amateur astronomers planned to return tonight if the moon shows. Mars might not be as close then, but Mr. Heyn said no one watching from the foot of Broadway would notice.

STREET CORNER TELESCOPE LOG X

- 9 68) 8/27/88(Sat) Fells Pt. 8:00-2:10AM. Saturn, 15-16 day moon, Mars, Jupiter. Intense night--alot of work. Moderate to poor seeing (Lost Titan, after a while.) Kept company by Joyce for 3-4 hrs. Scope may need colimating, again. \$103.00 + \$24.92 = \$127.92. Sold 1-CAT and 2-TE T-shirts!
- 7 69) 8/31/88(Wed) Pratt/Aq. 8:15-11:10PM. Saturn. (Went first to Fells Pt., but it seemed empty. Didn't set-up..simply drove to Pratt St. On Pratt met Carol, the bike messenger, who assured me Fells Pt. is hopping late on Wed. night. Arrived back there near 11:30PM, but there was next to no foot traffic compared to week-ends. Did not stay, although moon was up and looking good.) Sky looked a bit hazy, but could see Titan and, maybe, another moon. \$25.00 + \$9.03 = \$34.03. Sold 1-CAT T-shirt! Was presented with a round, black, polished onyx (she said) by an enthusiastic woman! There was a violent fist fight on the sidewalk about 25-feet east of me and my telescope. It lasted about a minute, until a police car happend along and shined a spotlight on the combatants. I simply stood there shouting, "Cut it out, you're making me nervous!"
- 7 70) 9/1/88(Thu) Pratt/Aq. 7:45-11:30PM. Saturn, Mars. Nice sky--Saturn looked good. Intermittent passersby--long periods w/no lookers. Had trouble packing up, because just as I'd get scope 1/2-apart, somebody enthusiastic would arrive. Moved scope east, at one point, to regain Saturn. Mars looked big! Musky detail, however. \$33.00 + \$10.31 = \$43.31.
- 9 71) 9/2/88(Fri) Fells Pt. 8:15PM-2:10PM. Saturn, Mars, Jupiter, Moon. Pretty good sky. S-J-M terrific. Mars really poor, During the hiatus when S went down before J and M rose, while I had only Mars, took in very little money. (Atmospherics + colimation + Mars made for an unexciting view.) I almost went home. Luckily, however, I didn't, and soon J came up with four moons all in a row on one side. Startling! Then the +/- 22-day moon. Breathtaking! Visited by Isabel. Treated to two gin/sprites and two hot dogs by Russell, who also helped me unload and set-up! Incredible night!! \$86.00 + \$26.93 + \$112.93. Sold Six(6) CAT and two(2) TE T-shirts! (Gross take = \$181.93!)
- 9 72) 9/3/88(Sat) Fells Pt. 8:15-10:15PM. Saturn. Found S w/binocs thru thin clouds. Looked OK until about 10PM, when thicker clouds moved in andobliterated image. Alot of wind, too. Remembering weather prediction of 60% chance of thunder storms, packed up and went home. Visited by Barbi Goldberg. \$29.00 + \$4.85 = \$33.85. Sold 1 CAT T-shirt! Visited by Jane Lepkowski (DC dancer) who fell backward over the telescope case. No damage done to Jane or case. (I'd better make sure case is sufficient distance from scope.
- 7 73) 9/5/88(Mon--Labor Day)Fells Pt. 7:45-10:30PM Saturn. Pretty good sky, except intermittent interference from clouds from 9-10PM. Light traffic. Russell, the hotdog man there, expecting better crowd, too. \$23.00 + \$4.09 = \$27.09
- 7 74) 9/6/88(Tue) Pratt St./Aq. 7:45-8:30PM Saturn. Ok sky, but just not enough foot traffic. Was feeling bored during intervals between lookers! Packed up! \$5.00 + \$2.27 = \$7.27.
- 7 75) 9/7/88(Wed) Pratt St/Aq. 7:45-10:45PM Saturn, Mars. Sky mostly Ok. Much better action, tonight! Visited by Mark Fiken and Jerry. \$22.00 + \$1.49 = \$23.49. Sold 1-CAT + 1-TE!
- 9 76) 9/10/88(Sat) Fells Pt. 10:15-2:30AM. Mars, Jupiter. Mars difficult--snow cap and one surface feature--hazily. Why? Colimation, seeing, dust storm? When it finally appeared, J was a winner with four moons. Accompanied by Frank Heynfor the evening. Visited by Isabel, Nancy O'C, Jean C. Alot of excitement--fire engines, ambulances, because--reportedly--someone fell in the river! Polish festival until 10:30PM. Had to set-up on raised, stone seats on SW corner. Ok spot. \$43.00 + \$11.57 = \$54.57.
- 7 77) 9/27/88(Tue) Pratt St./Aq. 7:30-11:30PM Saturn, Mars, moon. Good sky. Long stretches with no lookers punctuated by periods of intense activity. All in all, a good night for this location! Used baffle on Mars & moon. Worked w/120X and 160X. Moon terrific at 120X! Mars was tough, but I gave lecture and showed map to all lookers to prepare them. Could just see polar cap at 11PM, as Mars was high in sky. \$50.00 + \$6.42 = \$56.42.
- 9 78) 9/30/88(Fri) Fells Pt. 8:30-1:30AM. Saturn, Mars, Jupiter, Moon. Busy night! Sold 2-SPIKE and 1-CAT T-shirt. \$70.00 + 19.62 = \$89.62

Page \$610.50

To date \$3,350.94 (+ 57 T-shirts)

STREET CORNER TELESCOPE LOG XI

- 9 79) 10/9/88(Sun) Fells Pt. 7:00-11:15PM. Saturn, Mars, Jupiter. Saturn, still a winner, till +/- 9:30PM. Had to move scope once to stay with it. Then Mars. Difficult early on but better when higher in sky. Jupiter, starting +/-10:15PM A winner! Used baffle on reddish filter on Mars, which helped. Could see S. polar cap at 100X. Visited by Louise Zamoski and husband(Jack) and children. Sold 1 CAT T-shirt. \$36.00 + 7.87 = \$43.87.
- 2 80) 10/12/88(Wed) St. Paul & 31st. 6:30-9:00PM Saturn, Mars. Back at the old stand! Good show! Saturn from 6:40 (sunset, 6:30) till +/-8:00, then Mars. Mars not too bad--could see polar cap but not much shading. Cold(48°F) w/14 MPH wind. \$13 + 16.87 = \$29.87!
- 2 81) 10/13/88(Thur) St. Paul & 31st. 6:30-9:00PM Saturn, Mars. Ok sky. Could see polar cap on Mars, but markings looked pretty vague. (Used 100X and 120X + red filter). A woman dropped a bottle of soda on the sidewalk under the scope while she was looking at Saturn, which stickied up the sidewalk. \$18.00 + \$9.16 = \$27.16. Visited by Leah. Looked at Sat.
- 9 82) 10/14/88(Fri.)Fells Pt. 6:30-1:45AM 4-day moon(briefly!), Saturn, Mars, Jupiter. Started too early.Sunset, but not enough people around till of-8. Used baffle on Mars and Jupiter--which improved in definition with it. Visited by Ross and Mike Potter, Mars--could see polar cap when near meridian, but tough, otherwise. Met Joseph C. Trabert, director of the Baltimore City Film Commission, and he seemed very interested in my act from a movie perspective. \$76.00 + \$8.95 = \$84.95. Sold 1-TE-M T-shirt.
- 9 83) 10/15/88(Sat) Fells Pt. 7:30PM-12:30AM 5-day moon(briefly), Saturn, Mars, Jupiter. Good, intense evening, until clouds moved in, around 11:30PM. Played nip and tuck w/clouds, then gave up. Could see Mars' snow cap. Saw Europa pass from one side to other in front of Jupiter. Visited by a number of swing dance people, before and after dance. \$91.00 + \$16.76 = \$107.76 Sold 1-SPIKE-L T-shirt.
- 9 84) 10/16/88(Sun) Fells Pt. 6:30-7:30PM 6-day moon, Saturn. Moon totally eclipsed by clouds by 7:30PM. Packed-up. Maybe, should have stayed, because when I got home could see Saturn again, and Mars looked fairly good. On other hand, moon was low and would soon go behind building, while Jupiter would not be up till +/-9:30PM, leaving me with difficult Mars. For an hour +. Also, not a whole lot of traffic, tonight. Met Mary London and family--a friend of Zippy's. An old gentleman took alot of photos of me and people. \$6.00 + \$2.70 = \$8.70
- ! 85) 10/17/88(Mon) St. P. & 31st. 6:00-9:55PM. 7-day moon(terrific!), Saturn, Mars. Great sky, alot of enthusiastic lookers. Everybody impressed with moon and Saturn; most saw snow cap on Mars. Accompanied by Jim Nickols for ¾ time. Visited by Buzzy & Neil Hettleman, Ginny, Isabel. Met Triss and Mary Carroll on corner and then in nearby bar. Interviewed by Triss. Later, Mike Potter appeared in bar and we all talked. Moon was right down St. Paul St. ½-hr. before sunset; picked-up Sat. about 10 mins. after s.s. Also visited by Dave & Chris Eberhardt and Meridith (Bastian) and daughter and husband(Hank). \$35.00 + \$8.43 = \$43.43. Sold 1-CAT T-shirt. Visited by Kate Newman, whose pocketbook was stolen as she crossed the street leaving the telescope corner.
- 20 86) 10/18/88(Tue) Meeting of the Baltimore Radio Amateur Television Society(BRATS) at Baltimore Co. General Hospital in Randallstown. Slide show.(Too cloudy for telescope). \$20.00 honorarium. Sold 2 COMET T-shirts! 23 RADIO ASTRONOMY RESOURCES sheets distributed.
- 2 87) 10/19/88(Wed) St.P.& 31st. 6:30-9:00PM 9-day moon(Copernicus looking great, right on terminator), Saturn. Had to place scope +/-25' north on sidewalk of usual spot in order that moon would clear roof across street. This might have reduce visibility and business, somewhat. Also, it was somewhat cold. Scope did well with 12/amm ortho on moon, which redeemed my faith in it! (ie, w/o baffle). \$20.00 + \$7.71 = \$27.71. Visited by Leslie Gore.
- 2 88) 10/20/88(Thu) St.P.& 31st. 7:30-11:50PM 10-day moon, Mars, Jupiter(!). Started late because of uncertainty with clouds, but things worked ok. Great moon, Mars per usual, Jupiter terrific--neat array of 4 moons! Visited by Laura Malick for over 1-hr. She was very impressed. Wants me to do something in Waverly. \$23.00 + \$9.83 = \$32.83. To see Jupiter, moved scope into street +/-10:45PM.

This page \$426.28
To date \$3,777.22 (+ 63 T-shirts)

STREET CORNER TELESCOPE LOG XII

- 9 89) 10/23/88(Sun) Fells Pt. 6:15-8:30PM 13-day moon, Saturn, Mars. Nice sky until 8:30PM, when thick clouds suddenly arrived and stopped the show. Did not really work at Mars, so nobody saw much--except to have their curiosity satisfied. \$20.00 + \$8.88 = \$28.88.
- 2 90) 10/26/88(Wed) St.P./31st(6:30-8:00; WAWA 8:15-11:10PM. Saturn, Mars; Moon, Jupiter, Mars. Picked up Sat. w/binocs at 6:30--about 17 mins. after sunset. Held till +/-7:40PM. Mars--difficult, then moved to WAWA. Watched moon occulting Pleiades--beautiful! Moon (2-d. past full) and Jupiter both winners! Visited by Ed (Laura's friend) and two of his friends, plus Laura. \$19.00 + \$19.63 = \$38.63. ((Met Christopher Williams(945-1963) who wanted info on Arcturus for school and to whom I gave it over phone next AM.))
- 2 91) 10/27/88(Thu) St.P.&31st.6:30-8:00PM Saturn, Mars. Picked up Sat. at 6:30; Mars when S disappeared, about 7:40. Mars a loser, for me. Packed up. Visited by Gene Hay and family(now living on Cape Cod). \$10.00 + \$5.45 = \$15.45.
- 9 92) 10/28/88(Fri) Fells Pt. 7:00-2:10AM Saturn, Mars, Jupiter, 18-day moon. Nice sky, tho some high clouds for a while in mid-evening. Not as many Halloween costumes as I expected. Jupiter a real winner! Visited by Myra & Peter, in costume. Alot of shoeshine boys early on and semi-drunk hangers-onners, later. \$83.00 + \$26.91 = \$114.91
- 9 93) 10/29/88(Sat) Fells Pt. 6:25-12:30AM Saturn, Mars, Jupiter Moon. Got S right away, before dark. Mars for a short while after S, then J, then moon. Was Halloween night in Fells Pt.! Alot of great costumes! I had top hat, cape(of sorts), pumpkin picture taped to dew cap of telescope. Had to pack-up early because of clouds, but I might have anyway because I was very cold(+/-44° w/noticeable breeze). Visited by Kenny Heyn! \$117 + 25.95 = \$142.95.
- 9 94) 10/30/88(Sun) Fells Pt. 6:20-9:00PM Saturn, Mars, Jupiter. Ok sky..had Saturn by 6:20PM! Not nearly so much Halloween as last night. Visited by Dan from Wed. night dance. Left early because of sparce crowd. \$24.00 + \$4.98 = \$28.98.
- 4 95) 11/3/88(Thur) The Rotunda(south entrance)! Intended to do 31st./St.P. Found sewer work in progress at corner. Also, decided Sat. would be marginal from there, now. Drove to Rotunda, parked in handicap space in back, and set-up. Had Sat. by +/-5:20PM. Great E-S-W horizon! Visited by Wm.(Bill) P. Fulton, manager, who looked, seemed to like me, mentioned an astronomer friend in Westminster, said to call when I wanted to come back. Sat. until clouds rolled in at 6:30PM. Mars (200X w/filter and baffle) for some young girl students. Packed-up +/-7PM. Not a real heavy flow of people, but definitely worth pursuing! \$10.00 + \$2.00 = \$12.00 (Fulton's Tel. # is 235-8771) Visited by Frank Sommerville, Sun religion columnist .
- 4 96) 11/9/88(Wed) Rotunda. 5:15-7:35PM Saturn, Mars, Jupiter. With help of binocs had Sat. in scope by about 5:20. Did Mars on spec. request. Lost Sat. about 6:30, then moved on parking lot and did J(great!). \$11.00 + \$5.86 = \$16.86. Sold 1 CAT Dorm shirt.
- 9 97) 11/11/88(Fri) Fells Pt. 7:30-2:00AM Jupiter, Mars, Great Nebula in Orion(!). Very clear night. Saw semblence of Red Spot on Jupiter at 160X. Was very pale; a filter might help. Great Nebula looked remarkedly good. Will make it a prime object, when clear enough sky! Coldish--41°. Met David Weinstein, Atty, who seemed very impressed w/my act and who said he is a good friend of Felser, my attny. \$100.00 + \$12.26 = \$112.26
- 9 98) 11/12/88(Sat) Fells Pt. 9:30-10PM. Jupiter. Got a late start because of indecision over weather. J looked great, with all four moons on one side! Had to quit at 10:00PM because of clouds. \$3.00 + \$1.03 = \$4.03. (Cold wind would have become difficult, had I stayed!) Visited by Alfred Delaquesta, who was having his wedding party at Adm. Fell Inn!
- 4 99) 11/14/88(Mon) Rotunda, 5:00-8:30PM. Saturn, 5-day moon, Jupiter. Moderate to slow traffic. #'s 64, 67, and 68 very sharp on moon. Earthshine good. Jupiter fantastic--four moon, with one--Callisto, per S&T, right below planet! Also, a 7-8 mag. object(star?) positioned close to Ganymede! Visited by Ann Phillips(!), Karen Olson. \$24.00 + \$8.07 = \$32.07**
- 1 100) 11/15/88(Tue) Rotunda, 5:00-8:45PM. Saturn, 6-day moon, Jupiter. Moon great. Earthshine. #'s 85 & 90 real sharp--also straigh wall near A-11 site. Visited by Mark Steiner and Donna ???, and others. Occultation of bright star(invited Donna to observe it!) Moderate traffic. Cold! \$32.00 + \$15.32 = \$47.32.(Gratifying!)

***Sold 1-TE-T-shirt mail order from tonight!

This page = \$592.34

To date = \$4,369.56

(2 T-shirts this page for total to date of 65)

STREET CORNER TELESCOPE LOG XIII

- 4 101) 11/16/88(Wed) St. Paul St. branch of Pratt Library. Telescope and slide show. Showed 1st qt. moon from 5:30PM till 6:00PM. Gave slide show, then showed moon and Jupiter. About 30 people in attendance. Good interest. Gave out alot of literature. Received \$10.00 from Pratt + \$5.00 check personally from Linda Schwartz, branch librarian. Total = \$15.00. Also got \$2.00 contributions from a guy named Bruno who passed by, plus Bruno and one of his friends bought 2 TE T-shirts for \$9/each.
- 5 102) 11/16/88(Wed) Took scope to weekly Baltimore Folk Music Society at Lovely Lane Church. Showed dancers Jupiter at the 9:30PM break. A lot of enthusiasm! Jupiter looked great. Thin layer of intermittent clouds, but J came through OK. The 7-8 mag. object now way to the right(east) but still in plane of satellites. No money solicited but handed out handbill to everyone. Sold two TE T-shirts to Donna Long, musician! Weather was unusually warm. 60°F!
- 5 103) 11/17/88(Thu) St. Paul & 31st. 5:00-9:00PM. Cold(43°) & breezy!(Intended to do Rotunda, but I found it too cold and windy and moved on w/o unpacking!) Very clear sky, 8-day moon (Imbrium region very good. Nice shadows on Plato floor.). Jupiter w/four moons(cleared building +/-8PM). \$25.00 + \$10.46 = \$35.46.
- 12 { 104) 11/18/88(Fri) Rotunda. 4:45-7:15PM. 9-day moon, Saturn, Jupiter. Great sky, alot of enthusiastic lookers! Soup donated by Tomlinson Gallery people. \$26.00 + \$10.11 = \$36.11. Visited by Paul Reamer. Had Saturn from 5:15 till +/-6:15PM.
- 105) 11/18/88(Fri) Fells Pt. 8:15-1:30AM. 9-day moon, Jupiter, M-42. Sky tending toward hazy. Cold breeze(45°F). Some very intrigued lookers! People still mentioning Mars Party in a very positive way!! Visited by Ross, as usual. \$71.00 + \$14.73 = \$85.73.
- 4 { 106) 11/23/88(Wed) Rotunda. 5:15-8:45PM Saturn, Jupiter, Full Moon +. Good sky. Visited by John Payne and son and his friends. \$44.00 + \$11.70 = \$55.70!
- 107) 11/23/88(Wed) Fells Pt. 9:30-1:30AM 38°F. Jupiter, Full Moon +, M-42. Good sky. A lot of enthusiastic lookers. Visited by Jean Causey; Hurley Cox(guy in telescope costume at Mars Party). \$60.00 + \$26.00 = \$86.00.
- 9 108) 11/25/88(Fri) Fells Pt. (Midnight-2:00AM. (Spent early part of evening at Svoboda-Yatsevitch wedding) Accompanied by Joyee Jensen. Moon(2 1/2-d. past full--Crises very prominent.), Jupiter, M-42. Good sky. Youngest crowd I recall. \$39.00 + \$11.17 = \$50.17.
- 18 109) 12/1/88(Thu) Rotunda. 5:45-9:00PM. Jupiter. (Intended to try a shopping ctr. in vac. of Joppa and Perring Pkwy. Drove there, surveyed, found alot of cars but people too scattered for my liking. Drove to Rotunda, which has only two entrances.) Cold(40°F). Sky looked ok, but seeing, especially early-on, was poor. Could have done Sat. for +/-45min., yet, had I been set-up at sunset(4:45PM). Enthusiastic lookers--which tells me that no matter how down or hesitant I become with Street Corner Telescoping, personally, that I have nothing to fear from my lookers--they love it! Tried my new 100% cot. long Johns. Seem satisfactory but it will get colder! \$30.00 + \$9.00 = \$39.00.
- 9 110) 12/2/88(Fri) Fells Pt. 7:15-2:30AM Jupiter, Mars, M-42, 22-day moon(!). 40°F. Fair to good sky. Jupiter excellent--4 moons, then 3 moons, then 4 moons again! M-42 fairly good. Some enthusiastic lookers. Excitement, with police helicopter chasing a erratically driven car. I was scared(really!) that it would come my way!! Visited by David & Jan, who bought me ice cream, then soup. \$115.00 + 26.23 = \$141.23.
- 7 111) 12/3/88(Sat.) Fells Pt. 6:45-1:15AM. FIRST NIGHT W/DRIVE CORRECTOR! Was able to hook it up OK, but was somewhat unsure about how well it would perform. However, it did perform well and freed me up to relax a bit and to talk to people. I like it. I had hoped it would produce a significant increase income--to pay for itself in one night!--however, attendance seemed down tonight in Fells Pt. all around, especially compared to last night. Jupiter, M-42. Sky good until +/-12:30, then sudden appearance of clouds. Packed up at 1:15AM. and finished night at Cat's Eye Pub. Visited by Andrew Felser, my lawyer, and a friend. Good crowd while he was present which, I hope, impressed him. \$76.00 + \$15.70 = \$91.70. Sold 1-CAT T-shirt.

This page \$639.10

To date \$5,008.56

(5 T-shirts this page for total to date of 70)

STREET CORNER TELESCOPE LOG XIV

- 5 112) 12/6/88(Tue) Rotunda, 4:45-8:45PM Jupiter(accessible at sunset), Saturn(ugh--too low and murky, Forget it, now!), M-42(barebones--but always interesting--low, yet). Very sparse foot traffic, plus alot of lookers didn't contribute. \$28.00 + \$14.50 = \$42.50(!)
- 12/6/88(Tue) Space Telescope Institute, 9:15-10:15PM. Jupiter, M-42...both great! Was there at request of Jackie Zeum(BAS), who called last night to remind me I had signed up to do the Inst's. monthly Tuesday night lecture with my telescope. Was glad I was there, because I feel I made a very good impression on Eric Chasson, and others.(I was amazed, myself, at how much I had to say about M-42 to lookers!) No hat, but did manage to distribute some handbills and telescope sheets. Two other scopes there, too.
- 12/7/88 sold 1-SPIKE T-shirt(Isler) via TE handout.
- 10 114) 12/9/88(Fri) Fells Pt. 8:00-1:00PM; 30°F. Jupiter, M-42. J nice with four moons fairly close in. M-42 adequate. Handed out some of my new Great Nebula in Orion sheets. First night this season with temp. below freezing. Survived ok but need better hand warmth. Both auto and foot traffic seemed off. Dick Ochs and friends. \$44.00 + \$26.40 = \$70.40. Interesting turn around...Fells Pt. shoeshine boys and other local young boys are now putting coins in my hat for looks instead if trying to panhandle me!
- 4 115) 12/12/88(Mon) Rotunda, 4:45-6:30PM 20°(no wind). Had normal number of lookers, despite the cold, but quit early because of cold hands. I NEED BETTER GLOVES! 3-day Moon and Jupiter. Good sky. \$14.00 + \$2.41 = \$16.41. Tracker worked great.
- 3 116) 12/16/88(Fri) Rotunda(A) 4:30-5:45PM, 27°. Quarter moon & Jupiter. Great sky. Plugged in tracker, and it was dead.; no sound nor motion from telescope. I noticed I had not unplugged battery from inverter after last outing. Check of battery by Radio Shack showed it to be almost dead. I was very disconcerted! Decided that if I was going to be in Fells Pt. for an extended period later on, I would need tracker so I wouldn't have to used my hands alot in the cold. Packed up at 5:45PM, went home and hooked up charger to battery, and returned to Rotunda(B)6:30-8:45PM, 22° NEWLY PURCHASED XR-70 METALLIC THREAD GLOVE LINERS SEEM TO BE WORKING MODERATELY WELL--NOT TOTAL PROTECTION. Came close to loosing my eyepiece box containing Flossl, Erfle, wrenches, etc.! A worker came along pushing a trash cart full of empty boxes, some of which fell off right behind me. I helped him pick them up. Two mins. later I noticed the eyepiece box, which had been sitting on the low wall, was missing! I ran down the sidewalk to where the worker was already tossing stuff into a dumpster and shouted "Stop!". We searched the remaining boxexes, but w/no luck. A second worker joined us, and he found the box inside a larger box! Everything had fallen out and was sliding around in the bottom of the larger box, but it was all there! Close call! Clouds closed me down at 8:45PM, so instead of going to Fells Pt. I took equipment home, changed clothes and headed for the Gandy Dancer, where I handed out alot of announcements of my radio interview about "stars, telescopes, and Irish music to be aired Sunday morning. \$31.00 + \$18.34 = \$49.34. Sold 2 TE T-shirts!
- 10 117) 12/17/88(Sat.)Pratt & Calvert--infront of the Gallery! 5:15-9:00PM, 27°, wind. Gibbous moon, Jupiter(terrific!). Just didn't want to do Rotunda again, so I headed for Fish Mkt. At corner of Pratt & Calvert, I saw alot of people going to and fro and decided to try there. Parked car at W. end of taxi strip, which was 75° from where I set-up.(Could have moved to New Am. lot, but I wasn't bothered by police.) Alot of children,; alot of enthusiastic lookers! Many looked but did not contribute, maybe using cold as excuse. I stayed reasonably warm, especially since I was doing alot of talking. Telescope drive worked beautifully--alignment was right on! \$58.00 + \$26.92 = \$84.92. Closed down because of combination of clouds and wind. Drove to Fells Pt. but decided enough was enough. Went home.

22.64/hr

= 37

This page = \$263.57
 To date = \$5,272.13
 T-shirts this page = 3
 T-shirt total to date = 73

STREET CORNER TELESCOPE LOG XV

- 10 118) 12/19/88(Mon) Rotunda. 4:45-8:45PM, mild. 10-day moon, Jupiter, M-42. (Intended to set-up at Gallery, again. Stopped first at News Am. bldg. and got parking permit from Prew. Unloaded stuff on corner, parked car, returned to find Gallery cops telling me to pack-up. I objected. They said I was "impeding entrance of Gallery". J. Hidemann, a mounted policeman, came along and sided with me. In the midst of this, a man handed me a \$1.00 bill and said, "This is for the Rotunda last Thursday." I took that as a message to evacuate the Gallery, this afternoon, and to go to the Rotunda, where I would be welcomed! Will work on problem at Gallery tomorrow!) Alot of enthusiastic lookers. Received a lottery tkt. contribution(12/24 drawing); rec. invitation to Xmas eve party. Visited by David Kendall. \$45.00 + \$9.21 = \$54.21. Sold 1-TE-T-shirt. Visited by Steve Buttner, BAS vice president.
- 4 119) 12/22/88(Thur) Rotunda. 5:00-10:00PM. 34°F(still need to work on hands situation...maybe need pocket warmers). Jupiter, 13-day moon, M-42, Pleiades. Good sky, alot of enthusiastic lookers. A cashier at Giant, Tina, looked, was very turned-on, and sent alot of her customers out to look! \$74.00 + \$19.33 = \$93.33. Also, had a rush of interest just before 10PM, when movie let out.
- 19 12/25/88(Sun) Xmas night. +/-35° Great sky! Strong urge to set-up someplace. Arrived at Gallery +/-8PM but found very few people about. Drove to Fells Pt. Place very empty--parking spaces galore! Went home. Repeated circuit again +/-10:30PM. Gallery still empty. Took a few minutes and surveyed site, more. More cars in Fells Pt., but by no means capacity. Would have been long, lonely intervals between lookers, so I decided not to set-up. Also, noticed a knot of shoeshine boys on corner and did not want to hassle with them. Drove home.
- 4 120) 12/27/88(Tue) Rotunda, 5:45-8:45PM. 42°F(Finger dexterity problem. Maybe, I should stop drinking so much coffee; it may be constricting circulation. Or, could it be too much CHO? I notice loss of circulation after eating oranges.) Jupiter, Pleiades (for Tina). Hazy but ok. Visited by Mark Rule, Gene Baron, and Laura Green--who said she's meeting Thurs. w/John Pezulla of Inner Harbor Mgmt. about jugglers' convention and will put in a good word for me. Frank Claudy, too. \$29.00 + \$12.89 = \$41.89
- 4 121) 12/29/88(Thur) Rotunda, 6:00-6:45PM. Jupiter. Started late because of uncertainty over sky. Finally went out but had to close down after 45-mins. Visited by David Kendall and had supper with him at Jan at their house. \$5.00 + \$0.35 = \$5.35

This page = \$194.78
 To date = \$5,466.91
 T-shirts this page = 1
 T-shirt total to date = 74

= 41
 Year = 816 miles

Not for

SIDEWALK ASTRONOMY - EXPENSES (Jan. thru April, 1988)

E 1)	Barlow (Parks) 12/30/87	\$39.00
E 2)	Polarizing filter (Parks) 2/8/88	24.00
E 3)	Erfle (Wholesale Optics) 2/11/88	48.00
SP 4)	xeroxes of Sun article of 2/23 on V-1 (Repro. Spec.)	8.77
SP 5)	Paste-on stars	1.04
SP 6)	xeroxes of 2/23 article (JHU)	4.70
SP 7)	" of Alvarez art. of 3/6/88	2.00
	S.T.	\$127.50
SP 8)	3/11/88 Adcom--"Baltimore's Street Corner Astronomer" letters	8.40
SP 9)	3/13/88 15-xeroxes (JHU)	.75
E 10)	3/14/88 Wholesale Optics of PA (exchg. of Erfle for Super Plossl) bal due	44.00
P 3/15/88	Postage to return Erfle to Wholesale Optics of PA	\$2.42
B 3/19/88	"and there was Light"(book) 2nd Story Bks.	\$7.88
SP 3/20	xeroxes of Venus article	\$0.30
P 3/21	22-xeroxes of Venus paper	\$1.90
P 3/21	6-batts for easel	\$1.26
P 3/22	25 more copies of Venus handout	\$2.00
P 3/23/88	25 more copies of Venus handout	\$2.00
SP 3/25/88	HAV-A-LOOK! letters (Adcom)	\$5.40
E 3/25/88	Radio Shack Model TAD-325 Telephone Ans. Machine	\$83.95
	S.T.	\$287.84
SP 3/25/88	Moore Printing. 250 copies of Street Corner handout, set & print	\$23.47
A 3/27/88	Parking for Inner Harbor "audition"	4.00
SP 3/27/88	Dinner out with Isabel Beicl for her assistance at Inner Harbor	\$16.00
E 3/28/88	Great American Market(check) color swatch book(filters)	\$ 2.00
	3/28/88 Lee Colertran(cash) color filter swatch book	\$1.00
P 4/5/88	6-copies of Sun article @ 8¢/ea.	\$ 0.48
P 4/5/88	50-copies of Venus article @ 8¢/ea.	\$4.00
	4/5/88 Phone jack from Radio Shack (returned for exchange 4/6)	\$4.15
SP 4/6/88	60-second outgoing message tape for Tel. ans. mach. (Radio Shack)	\$5.20
4/6/88	L.D. tel. calls on MCI bill of 3/28/88	\$8.69
4/8/88	MD Rubber Stamp Co.(stamp to add tel. # to handbill)	\$3.15
4/14/88	Moore Printing Co. 400ea Venus tract for JHU Fair	\$10.00
4/18/88	Allen wrench for Meade (Boulevard Hdwr.)	\$0.48
4/18/88	To package scope for shipment to Meade(The Packaging Store) + shipmt.	\$33.22
4/22/88	Telephone bill(installation fee + service) of 4/13	\$90.36
4/23/88	Xeroxes(100) of handbill (Moore Printing)	\$ 4.95
4/27/88	Xeroxes of Mars article for Mars Party promo(17 copies)(Loyola)	\$1.70
4/27/88	Xeroxes of Sun and JHU articles(Moore)	\$1.10
4/28/88	250 HAV-A-LOOK handbills(w/T-shirt on back) (Moore Printing)	\$15.86
4/29/88	Balto. Street Corner Astro. HAV-A-LOOK! letters (Ad Com)	\$16.12

160.34

240.78

SIDEWALK ASTRONOMY - EXPENSES (May thru July)

SP	5/6/88 CITY PAPER for "Glimpse" Mercury ad	\$ 8.50	
SP	5/9/88 Xerox Mars article for 98-ROCK Mars Party proposal	.45	
SP	5/11/88 Xeroxes of "Heavens Above" City Paper article	\$1.80	
SP	5/14/88 Postage to mail material to Publick Enterprise newspaper	\$0.45	
SP	5/13/88 Xerox of City of Annapolis letter	\$0.25	
SP	5/15/88 19-copies of Venus paper (JHU)	\$0.95	#
P	5/16/88 Book of stamps	\$5.00	49.39
P	5/19/88 postage for letter to B-104 (Mars Party)	\$0.65	
T	5/23/88 Telephone bill (889-0353) due (5/13-6/12)	\$17.04	
SP	5/24/88 30 copies of "Telescope Man" and other articles @ 9¢/ea. (Moore)	\$2.70	
SP	5/29/88 \$5.00 Swebo Festival space	\$5.00	
SP	6/1/88 \$0.60 Xeroxes of Planetary Soc. ad	\$0.60	
SP	6/1/88 Xeroxes of Mayhew's "The Telescope Exhibitor"	\$1.00	
P	6/2/88 Postage stamps	\$5.00	578.01
E	6/5/88 20mm 1.25" Erfle, 61° field (Astronomics)	\$44.50	
E	6/6/88 Spare telescope wrenches (Boulevard Hdwd.)	\$2.52	
TE	6/7/88 Envelopes(100) Rite Aid	\$2.08	
SP	6/8/88 Xeroxes of "Telescope Man" article(9ea.) (Moore)	\$1.35	
SP	6/10/88 Ball for constructing Saturn model (Woolworth)	\$1.04	
P	6/13/88 Stamps (postage)	\$5.00	
A	6/20/88 parking at Inner Harbor	\$0.50	
P	6/21/88 postage (letter to French Mkt. Corp.)	\$0.45	
SP	6/21/88 4-copies of JHU article	\$0.36	97.69
SP	6/25/88 22-copies of WHFS Mars Party blurb(JHU)	\$1.10	
SP	6/25/88 "Telescope Exhibitor" copies(5) (Loyola)	\$0.50	
T	6/26/88 Telephone (889-0353)	\$17.04	
SP	6/28/88 Moore Printing, new batch of handbills(500)	\$20.47	
STA	6/29/88 ballpoint pen (JHU)	\$0.42	
SP	6/29/88 4-xeroxes of proposal for WHFS (Moore)	\$0.36	
		675.70	
P	7/1/88 1-book of stams + 6 post cards	\$5.90	
SP	7/1/88 letter w/enclosures to Office of Tourism	\$0.45	
SP	7/6/88 10 decorative stars (\$3.68) + masking tape(\$3.60) (ADCOM)	\$7.28	
P	7/7/88 postage	\$5.00	
SP	7/8/88 xeroxes of Mars Party press release(40) and street corner articles(28)	\$6.12	
SP	7/16/88 copies of press release and permit (Moore) 6 @ 15¢/ea.	\$0.90	
E	7/18/88 hardware to attach hat to tripod (Hechinger)	\$1.35	
STA	7/19/88 Stationery (12-file folders)	\$2.93	
SP	7/21/88 Posterboard for telescope diaphragm (Woolworth)	\$0.73	
T	7/23/88 Phone bill (889-0353) of Jul. 13	\$17.04	
SP	7/25/88 copies of Persied article (Pratt) 4	\$0.60	
SP	7/25/88 copies of Dept. of Recreation rules(City Hall) 9	\$2.25	
SP	7/25/88 6 copies of Bur. Rec. appl. form (Moore)	\$1.00	
P	7/26/88 book of stamps	\$5.00	
E	7/29/88 Bull's-Eye Level (Hechinger)	\$2.09	
SP	7/30/88 White enamel paint(Hardware Fair)	\$3.66	

(Page # 209.38)

738.00

SIDEWALK ASTRONOMY - EXPENSES (8/1/88 thru 11/7/88)

SP	8/1/88	6-copies of Mars info for Capt. Chesapeake (Loyola)	\$00.60
P	8/2/88	mail info to George Lewis, Channel-45	\$0.45
SP	8/2/88	7-copies of Mars info for Terry O'Neil, etc. (Loyola)	\$0.70
SPL	8/5/88	1-roll of film to photo street performers on Constellation Dock (Service Photo)	\$2.15
SP	8/9/88	6-copies of Planetary Soc. announcement of Mars Party (Loyola)	\$0.60
P	8/9/88	1-book of stamps	\$5.00
SP	8/9/88	10-copies of Planetary soc. release (JHU)	\$0.50
P	8/11/88	postage \$0.45 (letter to Mayor Schmoke)	\$0.45
L SP	8/12/88	photos (prints) Constellation Dock "hat"	\$7.09
L SP	8/13/88	4 copies of Dept. Rec. appls. for lawyer	\$0.20
SP	8/13/88	2 copies of graphic for Mars Party	\$0.10
L A	8/15/88	Round trip bus fare to lawyer's office (Andrew Felser)	\$1.80
SP	8/16/88	6-copies of Keene book for Bill Gent	\$0.60
SP	8/16/88	3-copies of Discover art. on NY street corner astronomer	\$0.30
SP	8/16/88	Handbills (1000) Moore Printing	\$20.00
SP	8/17/88	copies of Mars info for Dick Dyszel	\$0.30
Book	8/17/88	copies of Harpers SETI article	\$0.80
Equip	8/18/88	U-bolts and nuts/washers for telescope handle (Hechingers)	\$1.63
Sta	8/18/88	Stationary supplies (Rite Aid)	\$3.23
L SP	8/22/88	6-copies of Dept. Rec. permit form (Moore)	\$1.44
L SP	8/22/88	1-copy of letter to Caldwell for Felser (Moore)	\$0.15
T	8/24/88	telephone bill (889-0353)	\$17.04
P	8/22/88	book of stamps + 1 twenty-cent stamp	\$5.20
P	8/29/88	book of stamps (Mars Party mailing)	\$5.00
P	8/30/88	postage--Mars Party press release mailing	\$3.95
Equip	9/1/88	2-strap hooks for telescope case (Hechinger)	\$2.71
P	9/6/88	1-Book stamps (Mars Party mailing)	\$5.00
SP	9/14/88	2-sheets posterboard/Mars Party parking signs (Rite Aid)	\$0.60
L A	9/15/88	Round trip bus fare to lawyer's office	\$1.80
SP	9/15/88	Copies of "Star Party" (Bur. Rec. 0 flier (Kinko)	\$0.38
SP	9/20/88	3-copies of Mars Party Mars map. (Workers Action Press)	\$0.30
SPT	9/19/88	tel. call to Bob Calhoun for telescope (301-778-4809)	
SP	9/20/88	Mars Party Mars Map (Workers Action Press) 500 ea.	\$16.68
T	9/22/88	Telephone bill (889-0353) 9/13/88	\$17.04
SP	9/22/88	40-copies of MARS PARTY press clippings (Moore)	\$2.00
SP	9/28/88	200 add'l Mars maps (Workers Action Press)	\$7.96
SP	10/11/88	3 copies of NYT article for Radio Club talk (Loyola)	\$0.30
SP	10/17/88	30 copies (both sides) of radio astronomy handout (Moore)	\$3.00
A	10/19/88	repair of flat tire on bicycle (Horizon)	\$6.99
SP	10/19/88	3-copies of BRATS Inner Harbor petition (Moore)	\$0.15
T	10/21/88	Telephone bill (889-0353) 10/13/88	\$17.04
Book	9/19/88	3-year subscription to Sky & Telescope magazine	\$59.95
SP	10/24/88	Hat for street corner Halloween costume (Artistic--lost receipt)	\$8.35
SP	10/24/88	Plastic pumpkin + decorations for telescope (Rite Aid)	\$2.71
SP	10/26/88	Halloween shirt (Goodwill)	\$1.84
SP	10/26/88	Halloween spider web and batteries (Rite Aid)	\$1.43
SP	10/29/88	Halloween decoration	\$1.36
SP	11/4/88	1000 street corner handbills (Moore Printing Co.)	\$26.25
SP	11/7/88	30 copy sides of radio astro handbill for BAS mtg. (Moore)	\$1.50

\$86.99

\$177.63

STREET CORNER ASTRONOMY - EXPENSES (11/8/88 thru 12/31/88)

SP	11/8/88	10 copies of street corner articles (Moore)	\$00.50
P	11/8/88	Postage to mail articles to For Spacious Skies	\$00.85
E	11/9/88	Porta-Pac battery + Digitrak drive (Vogel Entpr.) ck.#2246	\$145.90
SP	11/11/88	80 copies of "Getting Started in AstrohomY" (Moore)	\$ 4.00
SP	11/15/88	30 copies of Street Corner newspaper arts. (Moore)	\$1.50
P	11/16/88	Postage (letter, clippings to Jack Horkheimer, "Star Hustler")	\$0.45
	11/22/88	1-Book Stamps	\$5.00
E	11/25/88	winter underwear and socks(Sunny's Surplus)	\$19.27
A	11/25/88	Parking meter(Fells Point)	\$0.50
SP	11/28/88	"Great Nebula in Orion" copies for Bill O'Connor (Moore)	\$0.25
T	12/2/88	telephone bill (889-0353)	\$17.29
E	12/3/88	pocketbook to hold battery and inverter beneath tripod (Goodwill)	\$2.37
E	12/5/88	screws for telescope eyepiece holder (Hechingers)	\$0.36
B	12/5/88	Sky Scientific catalog (cash)	\$1.00
SP	12/6/88	50 copies of "Getting Started..." (Moore)	\$2.25
STa-	12/8/88	2 rubber fingers for counting money (Ginns)	\$0.32
SP	12/8/88	Bus fare to and from WYST interview	\$1.80
SP	12/9/88	7 copies of Orion Nebula photos for handout (Loyola)	\$0.70
SP	12/9/88	9 copies of Great Nebula material for handout(Moore)	\$0.45
SP	12/9/88	60 copies of Great Nebula handout(Moore)	\$3.00
SP	12/10/88	5-copies of WYST interview announcement(JHU)	\$0.25
G	12/12/88	21-copies of grant money foundations pages (Loyola)	\$2.10
SP	12/13/88	4-copies of Great Nebula(Moore)	\$0.20
SP	12/13/88	6-copies of Great Nebula(Kinko's)	\$0.63
E	12/13/88	glove liners (EMS Outdoor)	\$4.73
SP	12/14/88	52-copies Great Nebula; 10-copies WYST announcement(Moore)	\$3.10
G	12/16/88	postage to mail grant letter	\$0.45
G	12/16/88	15-copies of clippings (Moore)	\$0.75
G	12/16/88	postage to mail grant letter	\$0.20
G	12/21/88	postage to mail grant letter	\$0.45
P	12/21/88	copies of Gallery corner map(Balto. City receipts)	\$2.00
T	12/22/88	telephone (889-0460) for 1988 (31.95% of total billing)	\$159.16
T	12/22/88	telephone bill (889-0353)	\$18.00
SP	12/23/88	1000 copies BSCA handbill (Moore)	\$25.00
SP	12/23/88	60 copies (50-telescopes flier) (10-letters)	\$ 3.00
LP	12/23/88	postage for letters to city council reps. + Felser	\$ 1.60
T	12/29/88	telephone call from Rotunda to Megan Greene saying don't come	\$0.25
A	12/29/88	AUTO - 816 miles @ 20¢/mile =	\$163.20

Page = \$592.83

Year = \$1,595.46

1989

Not for Distribution

- 122) 12/31/88(Sat) Rotunda, 5:00-6:45PM. Jupiter. Clouds moving in, but still ok sky. Visited by Donna Keck, who said she received my Eiffel Tower West proposal letter and thought it is "far out". She also said that Dee Ann and Linda liked the cat nightshirts she gave them a whole lot. \$19.00 + \$11.30 = \$30.30.
- 123) 12/31/88(Sat) Pratt St. across from Aquarium + Fells Pt. Left Rotunda thinking I should be doing better, its being NYE. Checked out Gallery corner. Alot of people, but I didn't have it together to deal with parking sit. Ended up at old stand across from Aquarium. Rush of viewers right at start, but it then became slow--too slow. Alot of people passing by but very few lookers. After 45-min. packed up and head for Fells Pt. Not many passers-by, but it looked like it would get better. Set up but was in business only about 15-min. before increasing cloudiness closed me down. Visited by Johnny Yensen(Joyce's son.) \$11.00 + \$4.17 = \$15.17. Went home at 9:45PM.
- 124) 1/2/89(Mon) Rotunda, 4:50-8:00PM. Jupiter(w/100X till thin clouds degraded image!), M-42(briefly!). A number of enthusiastic lookers! \$46.00 + 10.86 = \$56.86. Visited by Dr. Pembroke.
- 125) 1/4/89(Wed) 31st & St. Paul, 5:00-6:45PM. Jupiter. Clear sky, 25°F, wind. Used the pocket warmers Jean Causey gave me, and they worked ok. Fingers stayed limber, but wind really got to me, and I had to pack it up. Battery went dead after 45-min., which tells me I need to be alot more disciplined about recharging it! Some enthusiastic lookers. \$13.00 + \$6.13 = \$19.13. Not bad at all, considering weather/time!
- 126) 1/15/89(Sun) Gallery(!), 4:15-5:00PM. 8-day moon. Run-off again by Gallery police after 45-mins. of enthusiastic lookers. Simultaneously, clouds got pretty bad, so might have closed up, anyway. Visited by Scott, of Poly Astro. Club. (Wanted badly to go someplace, tonight, but was very confused about where. Visited Rotunda, first, but decided not enough people, and I headed downtown. Number of people out at St. Paul & 31st as I passed by, but I kept going. Reached Gallery corner, saw it would be good, parked in taxi strip, and set-up.) (One comment I received that made me feel very good was, "This is better than the Science Center!".) \$11.00 + \$19.95 = \$30.95. (#41.27/hc)
- 127) 1/16/89(Mon) St. Paul & 31st, 5:00-9:15PM. Jupiter, 9-day moon, M-42. Moon heading for Pleiades occultation--a nice view thru finder. My car in shop; was transported to and from corner by Isabel. We first went to Rotunda, but it was very windy there, so headed to 31st & St.P. Slow interest for a long while, except for some derelict types, including Richard, from the old PAC days, all of whom had looks and hung around. Great sky! Temp. 41°F(didn't even wear gloves!). Excitement: a fairly vicious dog fight on sidewalk nearby. Other excitement, which I did not learn of until way after the fact; the Homewood Deli was robbed at gunpoint by two men. A policeman asked if I saw anything, but I didn't. I was totally unaware of holdup. Did M-42 alot, show Science News picture + handout. \$30.00 + \$12.02 = \$42.02. (Incl. an \$8.00(!) contrib.)
- 128) 1/17/89(Tue) Rotunda, 4:30-9:15PM. 10-d. moon, Jupiter, M-42, Sirius(by request), Mars (by req.). Fantastic sky; have never seen Sirius shining so brightly! Was kept company for several hrs. by a kid from Hampden who asked to look at it and who thought it was the best of all the objects of the evening! Was minus my wooden sign, which I must have forgotten last night at St. Paul & 31st. (Called drug store to look for it this afternoon, but person did not find it. I drove past on way to R., and ditto. I feel a little discombobulated w/o it.) Interest got off to a slow start and was only moderate all eve., with some exceptions--especially a couple who had been to the first day of the Mars party and still wanted to see it. I went all the way for them, baffle and all, but Mars still remained a tiny blob. M-42 looked very good! \$38.00 + \$11.22 = \$49.22.
- 129) 1/18/89(Wed) Rotunda, 5-9:15PM 11-d. moon, J., M-42, Sirius, Domino Sugar sign, etc. Crazy night! Opened w/clear sky, but clouds came after 1/2-hr. Packed up, then saw moon and J. again, so set-up again. Visited by Joyce. Clouds returned, Packed-up. Shortly after, Angus arrived, and clouds parted some, again. Set-up for 3rd time! During cloudy periods did downtown objts. \$21.00 + \$11.62 = \$32.62. The Hampden kid didn't return tonight, which was a little disappointing, as one of the reasons I returned to the R. was to reinforce his interest in astronomy. I saw a satellite go by as I was watching J.

STREET CORNER TELESCOPE LOG XVII

- 2 130) 1/19/89(Thu) St. P. & 31st, 5-9:45PM 50°F(!) incredibly good sky! J., 12-d. Moon, M-42. Visited by Megan Shook and Alex, plus some of her women friends w/children. Visited by Mike Field of City Paper, who took interest in my I.H. problem and suggested a story by Tom Chalkly. Visited by Laura Malick, who called my message machine, heard Great Nebula on bill. \$39.00 + \$22.90 = \$61.90. Alot of interest!
- 7 131) 1/21/89(Sat) Pratt & South(Stouffer corner!...used News Am. park. lot!) 5:15-9:00PM 28°F Great sky! J (3 moons, then 4), full moon, M-42. Cold, but Jeans pocket warmers allowed me to stay as long as I did. Good interest...alot of kids & out-of-towners. Lent \$4 to my magician friend (name?) for parking. \$60.00 + \$19.62 = \$79.62 Battery went dead after +/-3hrs. Met a woman who said she's an accountant and does Meade Telescope Co.'s books. She lives in St. Louis; says Meade owned by investment co. located there.
- 12 132) 1/23/89(Mon) Rotunda, 6-10PM. 41°F(!); great sky! J (first 3, then 4 moons); M-42, Sirius; 15-day moon(Watched occultation and reappearance of Regulus. Terrific scene!). Intended to set-up at Falls Rd. & 36th, in Hampden, at 7-11 store. Arrived there to find few cars in lot and a number of kids on skate boards in vicinity. Decided to keep going. Drove to Belvedere Sq. but felt not sufficient passerby traffic. Drove to Rotunda, arriving about 30-mins after sunset. Moderate traffic, some enthusiastic lookers; alot of no-contribs. Visited by Cindy & Jennifer; Nancy Tommaso, a free-lance writer, who took alot of notes and said she'd get back to me (tel.: 435-3420)\$28.00 + \$11.66 = \$39.66.
- 2 133) 1/24/89(Tue) 31st & St.P., 5:30-8:45PM. 54°F(!); Very good seeing, until clouds rolled in. As good a view of J. as I've seen thru scope. Used 100X, mostly. Even tho moons were as widely spaced as they get, 20MM Erfle kept them all in view. Alignment of scope near perfect. Tried M-42 a few times, but it was not real impressive. Is better at Rotunda. Visited by Barbara(L. Turbyville's sister). \$21.00 + \$17.19 = \$38.19.
- 134) 1/27/89(Fri) 31st & St.P., 5:30-8:45PM. Jupiter and M-42(kind of). Visited by Nancy Tommaso, working on her article. Had alot of lookers while she was on scene. \$17.00 + \$15.29 = \$32.29. Visited by Latter Day Saints group who called msg. machine!
- 135) 1/27/89(Fri) Fells Pt. 9:30-1:15AM. Jupiter, moon. Visited by Christopher(English dancing). First time in F.P. this yr. Was looking forward to returning, but I left feeling somewhat discouraged by the number of drunk roudy's. Had some ok people, of course, but there were too many obnoxious ones for my liking. Trouble with my hands because the new pocket warmer fuel sticks (Trail Boss) I bought from Sunny's went out soon after being lighted. Must improve on that situation! \$50.00 + \$18.43 = \$68.43
- 12 136) 1/28/89(Sat) Stouffer corner, 5:30-8:15PM. Jupiter + 3-moons. Great image, after thin clouds dissolved. Alot of enthusiastic lookers. Evicted by park police claiming Stouffer mgr. gave order that I was on private property. I need immediate help from Attny. on the question of property lines on Gallery and Stouffer corners! Visited(accidentally) by Cindy & Jennifer. Used newly purchased handwarmer fuel sticks(Caliber brand); they worked great! (Felt very bad in mid afternoon; forced myself to up-chuck; felt better and went out. Nevertheless, I felt somewhat weak, and it took all the energy I could muster to keep my patter at normal level!) \$50.00 + \$10.14 = \$60.14. (= \$21.87/hr.)
- 137) 1/28/89(Sat) Fells Pt.--Lee's Icecream corner. A great move--alot of passers-by! J. 9:30-11:30PM Left early despite ok sky, as was feeling weaker and weaker. Visited by Phil Bradford(!), Ross, Joe Antonelli, a mystery man(who asked if I could guess who he was!). Image inferior to Pratt St. Some haze. \$45.00 + \$12.47 = \$57.47 (= \$28.74/hr.)
- 2 138) 1/31/89(Tue) St. P. & 31st, 5:35-8:55PM. Jupiter (3 moons, then Io's shadow, the Io = 4 moons), M-42(so-so). Good interest. Visited by MIT concert band which is playing tonight at JHU. One member was part of team which photographed Pluto-star occultation last summer. Was fascinated with my operation! Recommended Harvard Sq. at night rather than Tech Sq. Visited by Ami & Denny Bliss. Was somewhat frightened by a particularly psychotic drunk, who was harassing me and passersby. I had Margaret (L. Turbyville's sister) to summon a nearby policeman. Had my toughest "can't see anything" case, yet, but eventually succeeded with him! \$25.00 + \$14.66 = \$39.66 (\$11.90/hr.) An especially moment when a little girl(+/5yrs) with my guidance discovered 3 of Jupiter's moons for herself! Visited by Bob Lopez (98-Rock), also an astronomer, who said he'd call about scheduling a radio interview.

page total = \$477.36
year total = \$753.63

STREET CORNER TELESCOPE LOG XVIII

- 4 139) 2/1/89(Wed) Rotunda, 5:30-10:00PM. 50°F+(1) Jupiter, M-42, Pleiades, Sirius. Wonderful sky. M-42 almost jumped out at you thru the scope! Visited by Eric Hallengren, Isabel, and regular Rotunda people. Attempted to collimate scope to better separate Lambda Ori and am afraid I might have degraded image, somewhat. Will see next time out. Visited by Hampden kids on skate boards, including the one from Jan 17th, who is now hooked on astronomy and tells the others what they are looking at! Sold 1-TE T-shirt! \$42.00 + \$15.39 = \$57.39 (\$12.75/hr.) +/-59°F(11)
- 2 140) 2/6/89(Mon) 31st & St.P., 6:15-8:15(partly cloudy, then overcast). 40°F(problem w/ hands...but did not wear gloves). Jupiter(nice, w/four moons). Set-up near bank, instead on usual corner. This is day of Sun article w/photo of me discussing my problem w/Inner Harbor. A few people mentioned it. \$14.00 + \$9.87 = \$23.87 (\$11.94/hr.)
- 6 141) 2/7/89(Tue) 31st & St.P., 5:30-7:30PM. Jupiter, M-42, 1-day moon(briefly!). Nice sky. Moderate interest.(Left early to go to Space Telescope Institute lecture and set-up scope there. M-42. Incredibly nice!) \$17.00 + \$3.45 = \$20.45 (\$10.23/hr.) A woman(name of Nancy) said she saw a "shooting star" go by while looking at M-42. Visited by Bob Dalsemer, Dave Eberhardt.
- 2 142) 2/10/89(Fri) 31st & St.P., 5:30-8:30PM. 30°F. 4-day moon, Jupiter, M-42. Good sky. Fairly steady traffic; some very enthusiastic lookers. A few people said they read Monday's Sun article and sympathized with me. I asked them to write letters to the editor. Hand warmers worked so-so. \$25.00 + \$18.08 = \$43.08 (\$14.36/hr.)
- 12 { 143) 2/11/89(Sat) Pratt St., 5:30-8:30PM. Mild. 5-d moon, J. Good sky. Scouted whole area with Isabel and decided on News American corner. Moderate traffic, few contributions, unpleasant odor from sewer. Packed up after 1-hr. and moved to old summer spot across from Aquarium. Some enthusiastic lookers. \$28.00 + \$15.62 = \$43.62 (\$15.86/hr.)(2~~h~~-hrs.) Friendly visit from mounted police officer John Heidemann.
- 144) 2/11/89(Sat) Fells Pt., 9:15-12:15AM. 37°F. Ibid. Moderate sky. Lots of enthusiastic lookers. Visited(sort of!) by Andy Felser. Shouted to by Ted Rouse driving by. Wanted to know if I rec. copy of his letter to Tony Hawkins. I haven't. Moon set +/-11:45, and when I packed up, Jupiter only had +/-15 mins. left. Too bad! Means my good winter object is slipping from the late eve. sky! \$57.00 + \$16.94 = \$73.94 (\$24.65/hr.) Somewhere around 11PM saw a bright, flaming, green obj. streaking down toward W. horizon. Was it a meteor or a firework?
- 9 145) 2/12/89(Sun) Fells Pt., 5:45-9:30PM. 34°F. 6-d moon, J., M-42(marginal, due to moon). Fantastic sky! This was day of Bob Lopez 98-Rock radio interview, on which I announced I'd be in F.P. tonight. One looker had heard me; another, who just purchased a C-8, came all the way from Parkville. This afternoon I was tired and not eager about going out, beside it was windy (I first set up on corner but then moved 25' east on the sidewalk, which was a very good move, as I was not bothered at all by wind!). However, again, my enthusiastic lookers bouyed my mood, and I went way "up". When will I learn to believe in my own ability?? Moderate traffic, but good interest. Visited by Sara and friend and Marge and friends from dancing. \$42.00 + \$11.08 = \$53.08 (\$14.15/hr.) Collimated scope and think I got it back to image quality before last collimation(good)!
- 9 146) 2/19/89(Sun) Fells Pt., 5:30-10:30PM. 36°F. J., 13-d moon. Started on J 15 mins. before sunset. Slowly increasing cloudiness. J erased by +/-9PM, just about time moon cleared lamppost. Moon, w/clouds streaming across it, was good till 10:30PM. Visited by John (bike rider, dancer), Debora(old potluck person). Moderate but interested traffic. Some were in town for a craft show. People from Phila. said South Street, there, would be great for me. \$71.00 + \$15.78 = \$86.78!(\$17.36/hr.)
- 4 147) 3/1/89(Wed) Rotunda, 6-8PM. 40°, windy. J.,M-42, Sirius, Pleiades. Was hesitant to go out (negative "voice" working in my head), but as usual had a number of lookers who were pleased to have found me. Visited by Barbara Salsman. Quit a bit early because of cold wind and bad need for bathroom. Nobody mentioned "Messenger" article. One reason I went to Rotunda was that I'd be recognized from the article!\$15 + \$8.88 = \$13.88 (\$6.94/hr.)

page total = \$416.09 + 1 T-shirt

year total = \$1,169.72

STREET CORNER TELESCOPE LOG XIX

3/3/89 1-TE-M sold thru mail(Scally)

- 2 148) 3/9/89(Thu) St.Paul/31st. 6-9PM 33°F. J, 2-d moon, M-42. Mars & J 2° apart--a nice pair. Ju w/all 4 moons on right (east) side. Moderate traffic; some enthusiastic lookers. Accompanied early-on by Gren Whitman, who took numerous photos. Visited by Linda Turbyville, Saul Seely(who introduced himself as person who gave me "Curbstone Astronomer" article ref. in Fells Pt, last summer). \$23.00+\$6.81 = \$29.81 (\$9.94/hr.) Visited by Nancy (from 2/7/89. Collimated scope after returning home.
- 2 149) 3/10/89(Fri) St.P.&31st. 6-8:30PM. J(alot better, I feel, after last night's collimation!), 3-d moon(great!), M-42(a few times--so-so). Good traffic--almost a jam sometimes! Visited by Bob Lopez & wife, Isabel, Bill O'Connor. Lookers reporting that the giant sunspot was on TV news tonight. So, instead of continuing on to Fells Pt., I went home to rest up and prepare for showing spot, tomorrow. \$37.00 + \$11.41 = \$48.41 (\$19.36/hr.)
- 9 150) 3/11/89(Fri) Fells Pt.--Lee's corner. 6-9:30PM (Did not do sunspot during day,) J(incredible grouping of moons--4 on one side + background star. Beautiful!), 4-d moon(great!), Sirius, M-42(once). Good traffic; alot of enthusiastic lookers. Good sky till +/-8:45; intermittent clouds, till socked in at 9:30PM. Visited by Kevin(dancer), Steven (Eng. dancer) and Morris dancers, Frank Claude. \$48.00 + \$8.39 = \$56.39 (\$16.11/hr.) Visited also by Council Tony Ambridge, who said he's written a letter to the Dept. of Rec. & Parks on my behalf. He was surprised when I reported I had not rec. copy.
- 20 ((3/12/89(Sun) J. Patrick's Pub, 1371 Andre St.(South Baltimore). 5-day moon thru 3" refractor w/green plastic filter in ocular to render moon green in honor of St. Patrick's Day, 3/17/89. Respectable enthusiasm, as well as numerous expression of support in my battle with Harborplace. Garnered three free Budweisers. Was out 1hr., then went inside to socialize and dance. This all started earlier in evening at the Gandy Dancer. At sunset, the sky was poor, so I decided to give up on the idea of going to Fells Pt. in favor of joining the "after the parade party" at the G.D. Turned out there was no big party because of a Ceili someplace else. I had some Irish stew and beer and great conversation at bar, whereupon I discovered the sky was clear and moon, J. and Mars were all in a straight line, I decided, not knowing about Ceili, that dancer crowd must be at J. Patrick's. So I went home, tested 3" w/green filters I had devised, yesterday, invited Isabel to have a look, and headed for J. Patrick's. Alot of people there! Many looked. I feel it was a good move on my part to do this!))
- 2 151) 3/16/89(Thu) St.P.&31st. 6-9:30PM. Balmy weather, clear sky! J + 9-d-moon, M-42(twice). Moderate to light traffic. Visited by Mike Potter. Woman left a dry-cleaned blouse nearby. Had green bunting rapped around tube for St. P's Day. \$16.00 + \$8.58 = \$24.58 (\$7.02/hr.) Visited by Bernie Chaulk(British sq. dance caller), Myra & Peter(seperately). Sold 2-DL-T's (Was wearing a D-1 with "Please ask me...." button!! (3/17/89 Two TE T-shirts sold by mail order. Returned above blouse to cleaner on ticket.)
- 9 152) 3/17/89(Fri--St. Patrick's Day)Fells Pt. 5:45-1:30AM. 10-d-moon, J. Wild scene! Alot of Irish revelers w/green trappings, early on, giving way to a huge crowd of kids toward mid-evening--probably more people than Halloween. Alot of police and police cars chasing around the area as excitement developed in one spot or another. Accompanied on corner by Myra, Peter, Jill & Warren with music, which seemed much appreciated by the crowd. Visited by Isabel, who I telephoned to bring me a sweater (It was so mild during day that I made mistake of going out with too little clothing. Visited by Ann Phillips and Ross. Had alot of lookers, but I did not do a whole lot of hussling for money. Sold 1-SPIKE T-shirt. Eyepiece w/green filter did not accomplish anything--nor, green "moon rock". Green bunting probably sufficed to keep me in step. Alot of people expressed sympathy for me in my problem w/Inner Harbor. \$112.00 + \$40.95 = \$152.95. Was alot of hard work! (\$19.74/hr.) Was on Lee's Ice C. corner, meaning that moon obsv'd thru tree branches for 1st. 2-3 hrs.!

44
page total = \$312.14 + 6-T-shirts
year total = \$1,481.86 = 7-T-shirts

STREET CORNER TELESCOPE LOG XX

- 4 153) 3/22/89(Wed) Rotunda, 6:15-8:30PM. J + 15-d-moon. Nice sky. Moderate traffic, but some enthusiastic lookers. However, I feel that if I had have been in a good Inner Harbor spot, I would have had alot more lookers. Need to concentrate on finding a good place for myself, downtown! \$18.00 + \$4.83 = \$22.83 (\$10.15/hr.)
- 9 154) 3/26/89(Easter Sunday) Fells Pt., 6:30-9:45PM. J (first 2, then 3, then 4 moons!), Sirius. Incredible sky early in evening, which renewed my faith in my telescope. Used 100X. Lost J behind street light at 9:45PM (Lee's corner). Light traffic. Visited by Isabel and by Bennett Goldberg(salesman with co. I got comet rubber stamp from). Also visited by a gang of about a dozen of the most hyped-up, chattery kids I've ever seen! They eye'd hat, but I kept a sharp eye on them! \$22.00 + \$8.13 = \$30.13 (\$9.27/hr.) Had one of those peak experiences talking a little kid through the Jupiter scene. The kid then talked his mother through Jupiter. Unbelievable experience! Father gave \$2.00
- 23 155) 3/27/89(Mon) Solomon Schecter Day School(attn: Marge Hoffman, 486,8640), 7:15-8:30PM. J(nice, w/two moons close in on each side), Big Dipper, Mizar, M-42, Sirius. Jupiter in the clear at start, but increasing haze until, at 8:30PM, on Sirius visible. 20 kids plus parents. Alot of enthusiasm. Two Bushnell 60mm scopes (yuk!), which I made work for J. Gave out star charts, "How to Get Started..." flier, "Mr. Halley's Comet" book, J. schedule for Mar. S&T. Received pre-agreed fee of \$40.00. (Spent +/- \$5 on handouts.)
- 5 156) 4/14/89(Fri) JHU SPRING FAIR (12:15-6:00PM) Nice sky until 5:30PM, then thickening clouds. (First time out w/solar skreen filter. Did ok, but maybe a full-aperture filter would make scope easier for lookers to see thru, as exit pupil latitude w/reduced aperture seems very narrow.) with spots; 9-d moon (Cleared roof of MSE Library +/-4:15PM.) Not a real sharp image. Searched for Jupiter for 1-hr upon setting-up, but could not find, despite what I thought were good calculations and telescope alignment. (I visited site two nights ago, aligned scope of Polaris and marked tripod points w/chalk.) Fair traffic. Some enthusiastic lookers. Visited by Rebecca V. \$21.00 + \$13.08 = \$34.08 (\$5.93/hr.)
- 5 157) 4/16/89(Sun) JHU S.F.(11:30AM-6:15PM) Sun. 50% clouds until about 4PM, then clear. For an hour in mid-afternoon was completely clouded over, so I looked at chocolate chip co- okied sign across quadrangle. Took in little money during this period. Used welders lens filter to good advantage. Two spots just naked eye! \$36 + \$25.69 = \$61.69(9.14/hr.) Maybe 50-60% of lookers could see spots throught the welders lens.
- 9 158) 4/16/89(Sun) Inner Harbor--behind Connelly's restaurant, between Pier 5 parking lot and foot bridge to Harborplace. Good spot, while it lasts! 11-d moon, Jupiter (4 moons on one side), Mizar, Sirius. Alot of enthusiastic lookers. Accompanied by street performing fiddler for a while. Nice sky. 8PM-10:20PM. \$34.00 + \$20.28 = \$54.28 (\$23.30/hr.)
- 11 159) 4/19/89(Wed) Infront of Connelly's(after a good bit of scouting around). Nice spot, except right under light. Doug, of Connelly's,said it was a slow night. I had moderate traffic, including some very enthusiastic Japanese(+/-8), some of whom paid twice--once each for moon and Jupiter. 13-d moon and Jupiter(nice, w/3 moons and 1 moon). Also had some sizable groups of kids, which makes me think I should be cautious in my approach to giving away buttons. Should go some cheap way! 7:45-10PM \$26 + \$5.85=\$31.85 (\$14.16/hr.)
- 10 160) 4/22/89(Sat) Behind Connelly's (7:45-11:45PM) Copula on City Hall + pulley wheel on top of crane before sunset. Actually got some contribs. for them! Jupiter (w/4 moonsbeautifully close-in--real inspiring!); then in hour between when J set and moon rose, Sirius and Mizar; moon--terrific(1.9d past full), except for some poor atmospheric. Generally good sky, but it was cold and windy. Enthusiastic lookers.\$51 + \$35.72 = \$86.72 (\$21.68/hr) Visited by Mrs. Nunn--my Coppin St. College math teacher.
- 9 161) 4/23/89(Sun) Behind Connelly's (7:50-9:15PM) Flag on Fed.Hill w/0 hat till found Jupiter. M-42! for Doug. Doug helped me move scope at +/-9PM to retain J a little longer. Lost J behind stacks of Power Hse. at 9:15; packed it up. Traffic getting light by then, anyway. Good sky. J very nice w/4 moons. \$29.00 + \$4.51 = \$33.51 (\$23.65/hr.)

page total = \$395.09 + 0 T-shirts
 year total = \$1,876.95 + 7 T-shirts

- 45 162) 4/24/89(Mon) "Hardees Party"(Hardees Restaurants), auspices Auty Associates.(One of the Hardees bosses, Jim, looked thru my telescope in front of the Gallery and suggested to Auty that I be signed-up for Hardees' District #1 company party. +/-7:50-9:50PM. This is my first party job! There must have been over 100 people, and alot took a look. Jupiter w/four moons, Nice sky but lousy image due to heat from a nearby row of porch lights Originally set-up at swimming pool, where party began. But then everybody went to supper at far end of bldg., and I had to move to new location. DISCOVERED A WOMAN WHO MAYBE CAN SEE ALL FOUR MOONS WITHOUT OPTICAL ASSISTANCE! She is Patti Anderson, G-2 Harbour West, Rocky Mt., NC 27803. Time was 8:05PM EDT (00:05UT). Maybe three people had already looked thru scope and left. There was a line of about six or eight, and I am expounding on Jupiter. Possibly in response to a question I say, "One out of ten million people can see the moons with their eyes," whereupon a woman (Patti) says, "I see them; there are three on the left and one on the right!" I said, "Come on, you're kidding; don't tell me you're the one out of ten million." She says again, quite confidently, "I CAN see them; there are three on the left and one on the right!" Through the telescope there were three on the right and one of the left, so the way she was describing them was actually how they would appear to the unaided eye! If one of the few people who had already looked had quid her, she probably would have described them as they are thru the telescope. I was sort of unnerved by this, but I got her name and address and will try to follow-up, somehow, to have her tested again! My pay for the evening was \$100.00, which I am supposed to receive by mail from Auty. Despite my misgivings, had alot of interest, which suggests that I should feel ok about taking these kinds of jobs in the future, when offered. Location: Turf Valley CC. Mercury was also in view below Jupiter. Looked bright but was "twinkling". Through the telescope at both 80X and 160X it looked like a writhing blob.
- 10 163) 4/25/89(Tue) Southern High School (Kevin Boone's "science & technology" week). 6:30-9:00PM Slide show & telescope for five students, of which one--John--was very responsive. Was cloudy at start and didn't expect to do scope, but was hazy-clear by end of show, so set-up scope in back of school and showed Jupiter & Castor. Also, teacher & students located Big Dipper and Polaris. \$25.00. Worked hard; should charge more!
- 164) 4/30/89(Sun) Sherwood Gardens, 3-6:30PM. Sun w/one naked eye spot; very little activity, otherwise. 3" refractor w/projection(great set-up), plus welders lens (always a hit!). Alot of lookers. Did not put out "hat" but handed out alot of HAV-A-LOOK! handbills which, I hope, will bring T-shirt or other returns in the future. \$2.00 (\$0.57/hr.) Visited by Donna Keck and friend, plus saw alot of people I know. Nice afternoon!
- 16 165) 5/5/89(Fri) Cloisters Childrens Museum (Contracted by Lucy Rouse for fund raiser party.) 7-Midnight) Terrible weather--heavy rain. Set-up 3" pointed at picture on wall down hall; set-up project and screen and gave intermittent slide presentations. Had a few very interested lookers, but since I was in a room somewhat off the beaten track, traffic was moderate to light. \$25.00. Worked hard; should charge more!
- 20 166) 5/20/89(Sat) 1989 Baltimore Area Scout Show, Timonium, Noon-4:30PM. 3" refractor. Sun w/scattering of spots, incl. one naked-eye group. Used two #14 welders' lens, which elicited alot of "cool" and "wow!" reactions! Alot of interested lookers. Gave out many handbills. Visited by Craig, one of the group I lead to Ramonas Bar in 4/86 to see Halley. He was wearing a Comet Halley T-shirt! Gratis performance--no hat.
- 9 167) 5/21/89(Sun) Pratt & Market Pl., 10:15-11:15PM. 16-day moon.(Moonrise was at 9:45PM. I first set-up on NW corner and showed people Domino Sugar sign--sans hat--till moon appeared. I discovered it was up but behind Connelly's, so I moved W on Pratt 75* to acquire moon as soon as possible.) Had moderate traffic. I think that corner has ok possibilities for Saturn. \$5.00 + \$2.89 = \$7.89 (\$7.89/hr.)
5/26/89--1-TE T-shirt sold mail order from handbill.

page total = \$159.89 + 1 T-shirt
year total = \$2,036.84 + 8 T-shirts

STREET CORNER TELESCOPE LOG XXII

- 10 168) 5/28/89(Sun) SWEBO Festival, 11:45-6:45PM. Sun w/Meade(60mm Erfle) + welder's lens. Cloudless sky. Sun w/three moderate-sized groups--one just barely naked-eye. Used Solar Skreen filter on 2 3/4" mask taped to front of scope.(Eye needed to be a just the right distance to hold whole sun image. Maybe a full-aperature filter would do better in this respect.) Alot of lookers. I worked VERY hard to explain to them what they were seeing. 3" w/projection would have been alot better for teaching, as there was not all that much detail in the spots, anyhow. Set-up on corner of Hollins and Carrollton. Alignment near perfect(+/-3° clockwise from Hollins). Alot of people, and good interest in telescope. Visited by Johnny Heyn. Alot of people said I was missed at Fells Pt.(having not been back since 3/17). Visited by a Mr. Dunham, who said he lived next door to Governor and would say something to him re my Inner Harbor problem. Alot of people remembered seeing Venus last year at JHU Fair and SWEBO. Today was hard and intense, but it was a very positive experience for me, after my recent spell of discouragement. People like what I'm doing. I must ry to rremember it! \$45.00 + \$30.49 = \$75.49 (= \$10.78/hr.) Sold 3-CAT, 2-TE and 1-SPIKE T-shirt.
- 10 169) 5/29/89(Mon...Memorial Day). Pratt St.(on bridge between Connelly's and Power House, 2:00-2:50PM. 3" refractor. I first set up telescope for projection. People walking by took no notice. I had one looker in 30-mins. I switched to direct viewing; had three lookers in 20-mins. I had to shut down because of wind, however--afraid it would blow filter off end of scope. Need to figure out how to guarantee it will not blow off! Conclusion: a) 3" w/projection is GOOD for free situations(Sherwood Gdns., Scouts), but not so good in public traffic; 3" w/direct viewing better than projection--if for now other reason than I seem able to "hawk" it better; 8" is probably best because of its size/visibility. Bottom line may be that public needs to see evidence of some kind of investment in the project to take it seriously enough to stop and pay money; otherwise it smacks of simple panhandling. From Pratt St. I checked out Fells Pt. I probably would have had moderate interest, had I set-up. \$4.00 (= \$4.80/hr.)
- 170) 6/3/89(Sat) Eldersburg Luthern Ch. Crafts Fair(w/HC Designs), 9AM-1:00PM. 3" "SUNSCOPE" direct viewing. Moderate interest. People, including myself had some difficulty in holding image. Used 25mm ortho. (Would be better w/o aperture reducing mask, I'm sure.) Several times I felt it would have been better w/projection. A goodly scattering of spots, but none were naked-eye. No hat.
6/6/89 1-TE T-shirt sold thru mail order.
- 5 171) 6/10/89(Sat) Mt. Washington Elem. School Fair(w/HC DESIGNS), 9AM-4:00PM 3" SUNSCOPE, projection. Alot of moderate size spots. None N.E. Moderate traffic. Gave out a small quantity of literature, plus reprints of Messenger letter re Inner Harbor. No hat out.
- 7 172) 6/10/89(Sat.) Fells Pt.(Lee's corner), 8:20-12:00, 8-day moon(25mm ortho.--good). Visited by a number of friends--Mary Sue, Diana Duty & family. Promised alot of lookers that I'd have Saturn by 11PM, but didn't! Sold 3 CAT T-shirts. \$49.00 + \$14.71 = \$63.71 (\$17.41/hr.)
- 7 { 173) 6/11/89(Sun.) Fells Pt., 3-6PM, SUN (w/easy N.E. gp. 2-3 days beyond E. limb). SUNSCOPE. Moderate traffic, little interest, small contribs. Projection method, only. Most people simply walk past scope w/o noticing it. With big scope, a little later, took in more con- tribs. in first few mins. than in all afternoon w/SUNSCOPE! \$4.00 + \$7.24 = \$11.24.(\$3.75hr)
- 7 { 174) 6/11/89(Sun) Fells Pt., 8-12 midngt. 8-d moon, SATURN(!), acquired at 11:45PM from behind corner of Rec. Pier bldg. Great view--Meagan and Larry were first lookers. Moon was ab- solutely terrific. Extremely good seeing--used 160X alot. No wind--a perfect observing night. Sold 2 CAT + 1 SPIKE T-shirts. \$40.00 + \$13.26 + \$53.26 (\$13.32/hr.) From Lee's corner was able to see Saturn +/-2hrs. after it rose.
- 7 175) 6/18/89(Sun) Pratt & Mkt. Pl., 9:15-11PM, nearly full moon. Moon rose at +/-8:35PM and cleared Connelly's at 9:15PM. Saturn rose at 9:25PM, but I never saw it. Clouds started drifting thru +/-10:30PM and moon was gone by 11PM. Visited by two young boys who lived on Penna. Ave. and were very interested/intelligent and who stayed around hoping to see Sat. Good traffic. Troubles w/inverter hook-up--for a while was afraid it would not work at all. Must contact Vogel Entpr. again! Since Tyco is the outstanding feature on full moon, I should work up a better routine for it--like pictures, data.\$20 + \$5.11 = \$25.11 (\$14.35/hr.) Witnessed a brutal assault on a young boy in the crowd near the Power House.

STREET CORNER TELESCOPE LOG XXIII

- 40 176) 6/20/89(Tues.) Md. Dept. of Natural Resources, attn: Linda Block (527-1879). Gunpowder State Park, Hammerman Area, 7:30PM. Lousy weather--heavy rain. People were to arrive by boat, but by 8PM there was no sign of them and rain was coming down harder. I left for home. I was to be paid \$50.00 for evening, but at this time I do not know what will come of it. Beside milage, I paid \$5.00 for handouts.*
- 3 177) 6/24/89(Sat.) Peace Fair at Friends School, Noon-4:30PM. SUNSCOPE. Projection, except direct for last 15 mins. Good interest. Alot of people aware of my Inner Harbor problem. I gave them copy of my letter to Messenger and asked them to write to Schmoke. No hat out.
- 42 178) 6/29/89(Thu) Beth Tfiloh Camp, Owings Mills, attn: Steve Ellers(653-3322) and Andrew Levy(356-4242) 7-11PM. Great sky! Slide show then Saturn--came into view +/-9:45PM This was my first summer camp date. Alot of good kids. Good q's and interest in slides. Asked for \$60.00 but was paid \$70.00--because I did a good job, I guess! Maybe 200 kids! Left 200 star maps, per agreement, to be given out tomorrow.
- 10 179) 6/30/89(Fri) Fells Pt., 8:45-2AM. Set-up on W. side of square. Vega, Alberio, Saturn--acquired at 9:15PM. Incredibly good sky! Used 160X 50% of time. 28 Sag easily in view w/80X. Visited by Clyde and his woman friend. They gave me a nice photo of me, Diane and scope at Catoctin. Alot of the lookers on roudy side. Crowd seems to be getting younger. Would like to move on. Maybe will try Pratt St. or Harrison's Hotel tmw. \$64.00 + \$17.28 = \$81.28 (\$15.48/hr.) Sold 1 CAT T-shirt.
- 10 180) 7/1/89(Sat) Harrison's Pier 5 Hotel(on the restaurant veranda), 9:15-12:45AM. Saturn. Accompanied by Isabel for 1st hr. My first stint on the premises of a business. Permission gained from Buddy and Sandra MaGee Harrison, both of whom said yes with no hesitation(!) Alot of traffic early-on, but it was real in intermittent from about 11PM, on. \$44.00 + \$5.80 = \$49.80 (\$14.23/hr.) Met a woman from WPOC radio, which is located at the Rotunda, and turned her on to Monday morning's Saturn event at the Rotunda. Contributions total disappointing. Also, I had more sceptics ("It's a slide!") than usual. On other hand, Harrison's has a great view of the sky, plus I might meet some helpful, useful people there. Will go back.
- 7 181) 7/3/89(Mon) Saturn occultation of 28 Sagittarii. Rotunda, 12:30-3AM. Cloudy--saw only Vega, directly overhead. This was a public event, on which I sent out press releases and invited the public, and which was co-sponsored by the BAS. Two groups totalling about 9 people actually came. Telescopists present, beside me, were Jim Nickel, Rich Stein, and Larry Rosen. Jacki Zeun, BAS president, attended, too. It was time pleasantly spent, but it was disappointing that we missed the event. No hat.
- 9 182) 7/7/89(Fri) Fells Pt., 7:45-9:45PM. 5-day moon(51-mins. before sunset) Arrived early to wait out a parking space, but I got one immediately, so I set-up scope earlier than expected. Good interest. Moon looked fine, once sky darkened a bit. Expected to show Saturn as soon as moon set over Adm. Fell Inn, but clouds rolled in, right then, and I never found it. Packed up and went to Gandy Dancer. \$19 + \$4.25 = \$23.25 (\$11.63/hr.) Sold 1-SPIKE T-shirt.
- * \$10.00 received on 7/8/89 by mail from Linda Block.
- 9 183) 7/8/89(Sat) Fells Pt. 8:30-1:45AM. 6-d moon, Saturn(acquired from behind Rec. Pier at 9:50PM from Lee's corner. Heavy clouds, then intermittent, then clear. Slow traffic early-on, but heavy in middle and latter part of tour. Lookers not quite as hyper as a week ago. Two \$5 contribs.! \$91 + \$32.23 = \$123.23 (\$23.47/hr.) Sold 3-CAT T-shirts.
- 13 184) 7/10/89(Mon) Fells Pt. 9:15-11:15PM. 8-d moon, Saturn(Too hazy to see w/eye, but I found it based on where it was Sat. night.) S looked palid to me, but lookers were impressed. (Started evening looking for spot in Connolly's-Harrison's-Pratt St. area, but people were sparse. Went to Fells Pt. as last resort but found a number of people, so I set-up on Lee's corner. Visited by Lou Williams. Had alot of interested lookers. Was dogged a bit by same derelict who hung around Sat. night. Takes a bit of the fun out of things. After packing up, I drove across Boston St. to the Bay Inn. May have good possibilities. \$31.00 + \$2.11 = \$33.11 (\$16.56/hr.) Includes \$20.00 contribution! T-shirt slogan which came to mind tonight--"ONLY IN FELLS POINT!"

page total = \$390.67 + 5 T-shirts
 year total = \$2,660.32 + 23 T-shirts

STREET CORNER TELESCOPE LOG XXIV

- 9 185) 7/11/89(Tue) Fells Pt., 8:15-11:15PM. 9-day moon + Saturn. Mixed hazy and clear sky, but then total clouds at 11:15PM. A lot of enthusiastic lookers. Stopped at Pratt and Mkt. Pl., first, but it looked bleak, so I headed for Fells Pt. Have done so well there on week nights, this week, that I think I'll just make it my priority place for rest of summer! \$26.00 + \$8.21 = \$34.21 (\$11.40/hr.) Sold 3-CAT T-shirts.
- 30 186) 7/14/89(Fri) Fells Pt., 8:00-2:00AM. 12-d moon, Saturn. (First, drove to Ellicott City, intending to set-up for "Mill Fest". After surveying scene, however, I decided I best go to Fells Pt.) Intermittent clouds for first hr., then nice and clear. Visited by Nancy and Norma and Doug (old dancer) and his friends from Chapel Hill. Scene got wilder and wilder as time went on. By 2AM there were several fights going on on Thames St. \$86 + \$16.93 = \$102.93 (\$17.16/hr.) Sold 1-TE T-shirt.
- 10 187) 7/17/89(Mon) F.P., 9:15-11:00PM. Moon (just short of full-nice!), Saturn. Surveyed corner of Pratt & Mkt. but went to F.P. Good traffic. A lot of enthusiastic lookers. Clouds at 10:45PM, so packed it up. (Of course, by the time I arrived home the sky was good, again!) Acquired S at 9:15 from Lee's corner. \$24 + \$4.21 = \$28.21 (\$16.12/h)
- 9 188) 7/18/89(Tue) F.P., 9:15-1:00AM. Saturn, moon--just past full (beautiful!) Great traffic; many interesting and interested lookers. Haze early on, but then very clear sky with intermittent clouds--but not enough to put me out of business. Scene with me in it sketched by local, UFO believing street artist. \$56.00 + \$18.29 = \$74.29 (\$19.81/hr.)
- 13 189) 7/20/89(Thu) "Return to the Moon Party", Fells Pt., 5-10PM. Sponsored by National Space Society. Picked-up Jim Nickel and his 10" Meade SC on the way. Was too cloudy to see sun, even, so we set-up his scope on a moon poster I taped to the back of a truck +/-400-ft. down pier. Had about 5-mins. of looking, then it started to drizzle, and we packed it in. Rain came down very hard, for a while. We never set-up again. Visited by Norma and Isabel. Fair amt. of people at event, even with bad weather.
- 9 190) 7/22/89(Sat) Fells Pt. (Latino Festival night), 9-2:15AM. Saturn, moon (rose at 10:47PM) thru tree. Haze, early on, but then nice sky. For first hour had an incredible number of lookers, many of whom refused to believe Saturn was real and did not contribute. Was very discouraging. However, things turned for the better around 10PM. Visited by David. A lot of interested lookers, but also a lot of wildees! Huge number of young people in F.P. tonight. \$100.00 + \$24.99 = \$124.99 (\$23.81/hr.) Did a dance with Jan at Festival. Scope was incredibly well aligned. Hardly had to touch it.
- 9 191) 7/23/89(Sun) F.P. 8:45-11:30PM. Venus (for +/-5 mins., then set behind bldg.), Saturn. A no-fun night. Because I set-up scope too far in from curb, view was blocked by tree for +/-15-mins. Spend time trying futilely to see it thru tree. Had a lot of potential lookers, then, but by time I acquired it, they had drifted away. After that, it was a slow night. \$20.00 + \$7.81 = \$27.81 (\$10.11/hr.) Sold 1-TE T-shirt.
- 9 7/24/89(Mon) Sky hazy at sunset but drove to F.P. in hopes it would clear after dark, which didn't happen. Stayed till 9:45PM. Met Bill and Marilyn O'Connor. Sold CAT NS.
- 9 192) 7/28/89(Fri) F.P., 9-1:00AM. Saturn. Nice sky, except for bothersome clouds between 10-10:45PM. A lot of skeptical lookers--some very insistent. Generally rowdy crowd--rowdy enough to make me close-up at 1AM rather than 2AM and to not want to go back to F.P. tomorrow night. Visited by John and Sally. \$68.00 + \$21.01 = \$89.01 (\$22.25/hr.) Sold 1-VERDI T-shirt.
- 9 193) 7/29/89(Sat.) CITICORP company party, auspices Gala Concepts, Inc. 3-8PM. Sun with 8"---direct viewing. One moderate spot. Set-up on blacktop parking lot. A lot of lookers, many w/good interest. Was a long, hot session--one of my hardest, most wearing, ever. Tried for Venus late in afternoon but failed to find it. Gave out lit. Fee = \$150.00
- 9 194) 7/29/89(Sat) F.P., 9:30-1:45AM Sat. Bothersome clouds first half; good sky later. A lot nicer experience than last night--older crowd, less inebriated. Musicians from New Orleans (Dave Leonard w/family) performing in square; a lot juggler (Jill?). Artist on my corner. Visited by Eve and Leah! Sold 1-CAT. \$57.00 + \$17.49 = \$74.49 (\$17.53/hr.) Battery went dead about 1:15--meaning it supplied power for a total of 9/4 hrs. Gave Jill the juggler a ride home from F.P.

page total = \$705.94 + 8 T-shirts
 year total = \$3,366.26 + 31 T-shirts

STREET CORNER TELESCOPE LOG XXV

- 9 195) 8/2/89(Wed) F.P., 8:45-9:45PM. Saturn. Sky was grey all day but weather rpt. called for clear, tonight. Near sunset, sky looked like it was clearing. Set-up in F.P. and had S. for about 10-mins, then clouds. Waited it out for a while, but it never got better. Light traffic but interested potential lookers. A number asked about coming Lunar eclipse, and I gave them my blurb on it \$2.00 + \$1.52 = \$3.52 (\$3.52/hr.)
- 9 196) 8/3/89(Thu) F.P. 9-11:30PM Saturn. Sky hazy but S. ok till 11:30, then clouds. Moderate traffic. Visited by Jack Eisenberg. \$25.00 + \$13.41 = \$38.41 (\$15.36/hr.) Sold 1-CAT-T-shirt.
- 9 197) 8/5/89(Sat) F.P. 8:15-1:15AM. 4-day moon(welcome back!) till 9:15PM, then S. Nice sky, except for one brief seige of clouds. Alot of pleasant lookers till 11PM, then a younger, more inebrated crowd. Visited by Danny Greenebaum, Fiola and Harry Blum. Packed-up as S went behind light, but was ready to, anyway, because of roudiness. Gave out alot of Perseid and TE moon blurbs. Sold 1 CAT. \$81.00 + \$25.30 = \$106.30 (\$21.26/hr.)
- 10 198) 8/8/89(Tue) F.P. 8:05-12:15AM. 7-day moon + Saturn. High clouds troublesome, early-on (especially for moon), but then very clear. Cool, breezy (sunspot weather) evening! Wore light jacket. First time out with new Edmund RKE 15mm occular. It did very well, despite my fear that eye relief was too short. I made a good decision in getting it! Moderate to heavy(sometimes) traffic. Alot of interested lookers. \$44 + \$14.54 = \$58.54 (\$14.05/hr.)
- 9 199) 8/13/89(Sun) F.P. 7:45-12:00AM. 12-day moon + Saturn. Best night ever in Fells Pt. Great lookers--just a whole lot of interesting and very interested people. Alot planning to come to TE Moon Party, Wednesday night. Alot asked about how the Perseids were(rained out!) Visited by Shiela Eliasberg & Frannie Friedman. Occasional high thin clouds, but generally an incredibly good sky. Used 160X most of the time! Cassini Division easily seen. \$52.00 + \$17.44 = \$69.44 (\$16.34/hr.) 1-CAT T-shirt.
- 29 200) 8/14/89(Mon) OPEN DOOR SUMMER CAMPS, 9-3:30PM. Dundalk--sun + slides; Highland--terrestrial + slides; Elmwood--sun + slides. 5-10 year olds. Difficult, but I did well, I am sure! Lunar eclipse slides well received. Gave out orangesun stickers. \$75.00 Hard work. I should ask \$100.00, at least, next year!
- 23 201) 8/15/89(Tue) OPEN DOOR SUMMER CAMPS, 9-3:30PM. Parkville--tower + slides; Pine Grove--tower + slides; Fullerton--flag + slides. \$75.00
- 28 202) 8/16/89(Wed) OPEN DOOR SUMMER CAMPS, 9-1:00PM. Catonsville--Sun + slides; Woodbridge--Sun + slides. Good kids at both places. Good interest and questions. \$50.00 + \$19.60 for 80-miles travel = \$69.60.
- 13 203) 8/16/89(Wed) F.P. 8:00-1:30AM TOTAL ECLIPSE OF THE MOON PARTY. A total Success!! Weather rpt. was very iffy--30% change of rain with thunder storms. Sky was hazy right from the start. Could not find Saturn while waiting for the moon to appear. (Never saw Saturn, all evening!) Could see Vega, and that's all. Somewhere around of-nine, someone reported he saw the moon down Thames St., and shortly after it rose, real dull and orange looking over the Rec. Pier. However, by time of umbral contact(9:21PM), it looked reasonably good. We observed the whole eclipse, except that for most of the total phase the moon was gone--maybe because of haze, maybe because of a dark eclipse--or both. Alot of people, alot of media, alot of street performers--Morris dancers, Jim Van Lieu, Harley Cox, Cajun players, a electronics synthesizer musician, Jessica with blue grass, Jill the juggler, the ballards, etc. Telescopes included Larry Rosen, Jim Nickel(using my 3"), John Sanford, and other assorted small ones. I received alot of compliments for the event. Had hat out after first hour but did not talk it up. When I arrived home at +/-2AM, moon was totally clouded out! Alot of my folk music, Irish music and other friends on hand! \$46.00 + \$8.54 = \$54.54. Sold 1-TE T-shirt.

page total = \$550.35 + 4 T-shirts
 year total = \$3,916.61 + 35 T-shirts

- bus 204) 8/17/89(Thu) Kiwanis Club of Baltimore City, Inc., Noon-1:30PM. Luncheon talk "Ten Most Often Asked Questions on Astronomy". Lunch and then talk. I was invited by Jeff Schumer, 2nd VP of club. I dealt with three often asked q's--telescope cost, flag, UFO's--and then talked about my T-shirt business. It went well. Free lunch(no honorarium). Sold 2-CAT T-shirts.
- 10 205) 8/20/89(Sun) F.P., 8:30-10:30PM. Saturn. Had alot of trouble locating S thru clouds, but it finally appeared. Was in the clear for most of the first 1½-hrs, but then clouds came again and I shut down. Pretty good traffic. Visited by Lynn Wheeler and Jonathan Jensen, as well as Ruth(from potluck) and Isabel. \$20 + \$3.90 = \$23.90(\$11.95/hr.) Had alot of lookers who didn't contribute. Must improve my pitch!
- 9 206) 8/24/89(Thu) F.P., 8:10-12:10AM. Saturn + several attempts to find Neptune, this being Voyager 2 flyby night. May or may not have found it; main problem was that passerby traf- fic interfered with my ability to spend sufficient time studying the situation. Moderate traffic; individual lookers not all that inspiring. On arriving at F.P. I spotted a man wearing a Spike T-shirt. It looked well worn. He said Spike is famous, that the rhinestone eyes are doing fine.(Before leaving home, tonight, I got a call from Leah saying that Spike, himself, diarrhea and was very weak. I called her from F.P. at 10:30PM and stopped there on way home. Spike was weak and breathing very hard, but he could change from lying on his side to lying upright, ok, which was a hopeful sign. His(\$12.82, breath had a putrid odor. Visited by Jack Eisenberg and his friend Stewart. Jack gave me a nice photo he took a few weeks ago of me, smiling, and holding my Saturn model. Visited by Brian, David K's friend. Sold 1 VERDI(which I wore, tonight)\$34+17.27=51.27
- 9 207) 8/25/89(Fri) F.P. 8:10-12:30AM. Saturn. Good night. Alot of lookers, a good number of them sort of mature people, plus children. Saturn went behind light +/- midnight, re- appeared about 5-mibs later, then was blanked out by clouds. I gave up at 12:20PM, having looked at Altair for a few minutes. Visited sailboard of Yefonne, tied up on Thames St. Sold 1- VERDI and 1- CAT T-shirt.\$59.00 + \$19.91 + \$78.91 (\$18.21/hr.) Alot of mention of Voyager 2 and Neptune. I did not attempt to pick-up N., but I showed people star map of Saturn (visible) relative to Neptune, emphasizing that N. was right there in sky, just a little to the left of(east) of Saturn . A good night!
- Ø 208) 8/30/89(Wed) F.P. 8:10-11:40PM. Saturn. Very clear sky. My car in shop. Was driven down by Steve Cunningham and called for by Leah. Visited by Isabel. Moderate traffic, plus a number of lookers who didn't contribute. However, received a \$10 contrib., which helped alot! Early in evening had scope perfectly aligned, but then tripod was kicked slightly by a looker, which caused mild, but not bad misalignment. \$40.00 + \$9.29 = \$49.29(\$14.08/hr.)
- Ø 209) 8/31/89(Thu) F.P. 8-12midnt. Saturn. Very nice sky, again, except for a few minutes of thin clouds. Moderate to light traffic. Visited by Libby Hirsh and Linda Baer and her friend, Cynthia M. Lang-Bachur, who bought two T-shirts. Still no car, so was driven down by Mike Duty and came home in cab driven by Phil(\$6.30). \$26 + \$9.71 = \$35.71(\$8.93/hr.) Sold 1-TE and 1-CAT. Visited by Alton(Jim) Balder. I saw Saturn's shadow on ring!
- 2 210 9/2/89(Sat) Waverly Farmers Mkt. 10-12noon. Sun with gigantic spot group. 3" refractor ("Sunscope") and eyepiece projection. Also used #14 welders glass. Moderate traffic but some very interested lookers. Did not put out hat but received contributions of \$1.50. Sold 1 TE T-shirt. Learned from someone that JHU mentions me in new student orientation, saying that students can find me with telescope at St. Paul and 31st. Visit Larry Rosen.
- 9 211) 9/2/89(Sat) F.P. 7:30-12:30AM. 2-d. moon + Venus + Sat. V.G. sky. Till close to 11PM, I had the most mature F.P. crowd in memory. Was marvelous. Except, early in evening I had a particularly obnoxious alcoholic--trying to extort money from me by being obnoxious. However, I held out and eventually was able to hail a policeman, whose arrival caused the alcoholic to leave. Visited by Rafael Alvarez and his three children. Alot of en- thusiastic lookers. Tried to find Denebola after S left sky but was blocked by tree. Probably should move to square. now, to hold S longer. \$80.00 + \$28.03 = \$108.03(\$21.61/hr.) Visited by Julian(Jimmy) Hecht and wife. Met a woman from NYC who works with Tony Hoffman street corner astronomer written up in Discover Mag. a year ago. She'll give him my address.
- | |
|---------------------------------------|
| page total = \$348.61 + 8 T-shirts |
| year total = \$4,265.22 + 43 T-shirts |

- 6 212) 9/3/89(Sun) Kurt Milam's "Deck Buster" party. 3" Sunscope. Sun with long group containing four large spots. Had some spectacular scenes of clouds passing in front of spotted sun. Kurt is blind. I introduced him to the telescope (he touched it all over) and gave him a "Braille" sun w/spots, for which he was very touched and appreciative. 4-6PM. Sun behind house by 6PM, ending show. I left for home and Fells Pt. No hat out.
- 9 213) 9/3/89(Sun) F.P. 7:40-12:40AM. Saturn, then Alberio and Vega. Crystal clear night. Saturn could not have looked better--ie., for the first 3/2-hrs, until it passed behind a street light and then over Brown's Warf, at which point it degraded rapidly. Another very mature crowd of lookers, early on. \$74.00 + \$12.90 = \$86.90 (\$17.38) 3-CATS SOLD
- φ 214) 9/4/89(Mon) F.P. 8:30-11:00PM Sat. Another super clear sky! Moderate to light traffic but good enthusiasm. Driven down by Lenore Myers and returned by taxi. \$20.00 + \$12.67 = \$32.67 (\$13.07/hr.)
- φ 215) 9/6/89(Wed) F.P. 8:00-10:45PM Saturn, 6-d. moon(Aristotle & Eudoxos--terrific). Set-up in square, for a change, to hold moon longer. Light to moderate traffic. Visited by Nan from Nancy's music circle. Ran out of battery power +/-10PM. Shut down by cloud(\$11.4 Borrowed Lorinda's car, as mine still in shop! \$27.00(incl.\$5 contrib.)+ \$4.46 = \$31.46
- 9 216) 9/8/89(Fri)F.P. 7:45-10:15PM Sat., 8-d. moon. Square--maybe a mistake, as was very slow for 1st hr., the traffic then picked-up nicely. Clouds at 10:15PM(went to Gandy Dancer!) Some enthusiastic lookers. No tracking system! Why? I was really unnerved by this. I hope I don't have to send scope back to factory for repair. Am trying re-charging from different wall outlet, tonight. \$16 + \$6.56 = \$22.56 (\$9.02) Sold 2 UNICORN T-shirts!
- 9 217) 9/9/89(Sat) F.P. 7:00-11:45PM Sat., 9-d. moon(terrific--Tyco + Copernicus). Drive worked for +/- 1-hr., then died. Why? Hazy sky, but moon good and Saturn adequate. Set-up in square, again. Periods of intense interest interspersed w/periods of nothing happening. Visited by Charles Holly(!). \$64.00 + \$18.99 = \$82.99 (\$17.47)
- 9 218) 9/10/89(Sun) F.P. 7:45-11:15PM. Saturn, 10-d. moon. Hazy night. Saturn a bit murky but moon terrific. Moderate traffic; interested lookers. Drive not working at all. Why? Arrived home to find Spike unable to walk. Will probably have to put him to sleep--will definitely have to--tomorrow. He's been a good pet. \$38 + \$10.30 = \$48.30 (\$13.80)
- 30 219) 9/24/89(Sun) Oregon Ridge "Sunday in the Park", 11:30-4:30PM. Sun w/"Sunscope". Naked-eye spot. Also used #14 welder's lens. Beautiful sky. Not a cloud all day. Could clearly see waning crescent moon. Alot of interest. Handed out alot of fliers to parents with young children, suggesting they contact me about school presentations. No hat. Sold one welder's lens.
- 9 220) 9/24/89(Sun) F.P. 7:15-10:45PM. Venus, then Saturn. Clear night but somewhat unsteady atmosphere. Tracker stopped working after 20-mins. (Very discouraging.) There was a star beyond Titan at same magnitude. Light traffic. Not a fun night. Am getting a bit tired of street corner astronomy. Tonight was somewhat chilly, making me feel not very eager about going out this winter. Light traffic. \$16.00 + \$13.10 = \$29.10(\$8.31/hr.)
- 10 221) 9/26/89(Tue) Pratt St., south side, in front of Aquarium. Good sky & horizon. 7:45-10:45PM Light to moderate traffic. Saturn with Titan and background star. Got my first "street corner" parking ticket (\$17) for not feeding meter. \$27.00 + \$17.41 = \$44.41(\$14.80/hr.) I'd like to go back to that location this week-end!
- 10 9/27/89 take battery to UPS for shipping back to Vogel Enterprises for check-up
4 9/27/89 to Rotunda to buy batteries
- 10 222) 9/27/89(Wed) F.P. 7:30-11PM. Sat. Great sky. Intended to go to Aquarium, again, but as there were very few passersby at 7PM, I drove to F.P. Moderate traffic. My Radio Shack-Rite Aid battery pack (I sent regular battery back to Vogel Entpr., today) did not work, discouragingly, as I think I wired the two battery sets in parallel. Will rewire and try again! \$24.00 + \$11.10 = \$35.10(\$10.03). Visit by Isabel. Sold L*OP. NS.

page total = \$413.49 + 6 T-shirts
year total = \$4,678.71 + 49 T-shirts

STREET CORNER TELESCOPE LOG XXVIII

- 9 223) 9/28/89(Thu) F.P. 7-10PM Sat. Great sky till intermittent clouds closed me down. Moderate, but good caliber traffic. My Rite Aid/Radio Shack battery pack worked! I had rewired it this morning--apparently correctly(in series)! Visited by Clyde and Robbin. \$25 + \$9.77 = \$34.77 (incl a \$10 contrib.!) (\$11.59/hr.) One of my lookers was a guy from NASA Greenbelt who studies Saturn's rings! He asked me alot of testing q's., which I think I did OK on. He said that latest theory put age of rings at about 30 millions yrs. Got a free order of French fries from the McKiosk guy.
- 10 9/29/89 Visit to the National Federation For The Blind to present program.
- 2 224) 10/4/89(Wed) St. P. & 31st(!). 6:45-9:15PM. 5-d. moon(briefly!), Saturn. Great sky. Moderate to sometimes heavy traffic. Visited by Val Smith, Isabel, Anthony Armstrong (from PTI). Battery pack still working. \$16 + \$17.31 = \$33.31(\$13.32) Sold 2 CAT(black) T-shirts!
- 2 225) 10/5/89(Thu) St.P.&31st.6:50-10:10PM. 6-d. moon, Sat. OK sky, thin clouds. Also did ((8.8 Alberio for a few minutes after Sat. disappeared behind roof. Moderate traffic. Visited by Paula, a young woman who lives above the drug store, who was very interested in my battery hrs.)) activity and who brought me two cans of beer. \$25 + \$14.77 = \$39.77 (\$11.93/hr.) Bat. OK.
- 2 226) 10/7/89(Sat) St.P.&31st.6:50-9:50PM. 8-d.moon(Archimedes prominent), Saturn. Went here rather than F.P. as this is F.P. Fest. week-end, and I figured I couldn't park there. Should have tried, anyway, as traffic was moderate to light. Visited by Leah. \$31.00 + \$15.65 = \$46.65 (\$15.55/hr.) ((battery hrs. 11.8))
- 4 227) 10/9/89(Mon) Rotunda(!) 6:20-9:35PM. 10-d. moon(Copernicus on stage!), Saturn. The two bad lights at rear door were turned off for me.(I accidentally met Bill Fulton, bldg. manager at Rotunda earlier in day and asked him if light could be turned off. He said yes, and gave inst. to the guards about it.) Moderate traffic, with some very enthusiastic lookers. Visited by Karen Olson, Bob Potter, Cinder (Donna's housemate), Lee (Alice Adam's friend). \$20.00 + \$12.08 = \$32.08(\$9.87/hr.) ((15.05 battery hrs.)) Copernicus was absolutely magnificent framed at 160X. Cassini easy at 133X.
- 9 3) 10/12/89(Thu) F.P. 6:20-12:50AM. 12-d. moon(Tyco & Aristarcus). No clouds but less than excellent seeing. Noticeable dew. Also JUPITER(!) first time this season, Was located in plaza near kiosk. J noticed over Lee's Icecream about 12:15AM. Good traffic. Alot of interested lookers. Late afternoon was confused about whether to go to Rotunda, F.P., or Chas. Vil. Was balancing off angles of view with potential traffic. Chose F.P., somehow, which turned out to be a great choice! Visited by Ross and Phil. Alot of inquiries on cat T-shirt but no takers. \$83.00 + \$11.86 = \$94.86 (\$14.59/hr.)((21.55 bat. hrs.)) Another thing about tonight, the weather was unseasonably mild--easy strolling weather.
- 7 229) 10/14/89(Sat)F.P. 6:50-2:50AM. Saturn, Moon(was full at 6:30PM), Jupiter(4 moons and 1 stripe. Peak night in Fells Pt. Heavy traffic. Alot of really turned-on lookers--even after 11PM! Visited by Isabel and, as there was a swing dance, a number of dancer friends. PROBLEM! Threads holding thumb screw which secures diagonal and/or eyepieces to scope somehow became stripped and would not hold. After some panic and fear that I'd have to pack up just at the start of an excellent night, I discovered a way to rig up the system with a rubber band. Result was not as handy as original thumb screw, but it got me thru the evening ok! \$129.00 + \$36.72 = \$165.72(\$20.72/hr.) ((29.55 battery hrs.)) BEST HAT EVER
- 9 230) 10/15/89(Sun)F.P. 6:30-11:30PM. Venus, Saturn, Moon. Nice sky--good seeing. Good traffic. Eyepiece holder with rubber bands worked ok--in fact, has some positive aspects. Nevertheless, I should get holder fixed. \$65.00 + \$11.88 = \$76.88(\$15.38)((34.55 bat.hrs.))
- 9 231) 10/22/89(Sun)F.P. 6:15-10:15PM. Venus, Saturn, Alberio, Mizar, Pleiades. Very clear sky. Tried to find M 31 but no luck. Light to moderate traffic. New screw holes in eyepiece holder worked ok. \$39.00 + \$9.18 = \$48.18 (\$12.05/hr.) ((38.55 battery hrs.))

page total = \$572.22 + 2 T-shirts
year total = \$5,250.93 + 51 T-shirts

STREET CORNER TELESCOPE LOG XXIX

- 4 232) 10/23/89(Mon)Rotunda, 6:15-9:00PM. Venus, Saturn, Alberio, Gamma And. Moderate traffic. Forgot "hat". Improvised with eyepiece box! Visited by Lorinda and Jim F. \$24.00 + \$7.03 = \$31.03 (\$11.28) ((41.3 battery hrs.)) Had a woman looker who had written her masters thesis on the atmosphere of Venus but who had never before seen the planet through a telescope!
- 4 233) 10/24/89(Tue)Rotunda, 5:50-8:50PM Venus(25mins. before sunset), Sat., Alberio(once). Light traffic, plus alot of no-contribs. \$23.00 + \$9.50 = \$32.50(\$10.83/)((44.3 Bhrs.))
- 9 234) 10/26/89(Thu)F.P., 5-12MN. Venus(at 5PM...ss 6:13PM), Sat., Alberio(for quite a while after loosing Sat. It brought ok contribs.), Jupiter(on demand by some lookers. Moved from Lee's corner to blacktop area across street. Moderate to heavy traffic. Met Zippy Larson upon arriving. Visited by Ross, Lindsay, Duncan. Good sky. Plenty of enthusiasm. Wore TE shirt but sold 1-CAT. Arrived in F.P. at +/-4PM but didn't set-up till 5PM, as scene was very quiet. Traffic very slow till +/-6PM, when more people began to appear. I told Steve Bunker I'd send him article for is paper. \$51 + \$18.65 = \$69.65(\$9.95/hr.) ((Drive cut out at 8:15PM, as I was picking up battery pack to explain to looker. Never worked again. Will have batteries checked tmw. Will buy new set if these no good. Battery hrs. total to date = 47.55hrs.)) No Halloween manifestations obsv'd. in F.P.
- 9 235) 10/27/89(Fri)F.P., 5:50-12:25AM. Venus, Sat., Alberio, Capella, Jupiter. Had Sat. till about 9:15PM, then moved to square for Alberio. Traffic dropped off precipitously. Acquired J. about 11PM. Looked very fuzzy for first 1/2-hr., then quite nice. Two moon at start, and two appeared early-on. Crowd after 11PM got younger and younger and more and more rowdy. Packed up early! \$45 + \$25.54 = \$70.54(\$10.72/)((6 new bat. hrs.))
- 9 236) 10/28/89(Sat)F.P., 5:45-10:40PM. Venus, Sat.Vega. Tried for Alberio, but even tho I could see it w/binocs, I never got it w/scope! Too bad, because it would have been alot more impressive than Vega. Visited by Isabel. Halloween night in F.P. Big crowd, lots of good costumes.Intended to move fromLee's corner, where I started, to square for Jupiter, but in view of the size and energy of the crowd, I dropped the idea. \$41 + \$13.99 = \$54.99 (\$11.18/hr.) Sold two TE T-shirts. ((10.9 bat. hrs.)) Rising Jupiter looked pretty murky. If it had looked better, I think I would have set up again. Bus load of "born again on scene. Shouting match between them and a Black woman, but not sure whether she was more born again then them, or against them. I tried to compete with preacher by talking up Vega (he was standing on the stone chess table). Someone grabbed end of my scope and pulled it off of Vega. I saw him walking toward square, looking back angrily.
- 10 237) 10/29/89(Sun)F.P. 4:55-8:35PM. Venus, Sat., Vega, Alberio (took along time to find, but when I finally did I recorded dec. and packed-up). Peak night sofar as interest. (STD. TIME!) Atmosphere very dewie, so I decided not to wait around for Jupiter. A young boy looker said of Sat., "It looks like a basketball going through a hoop."(!) Made connection for possible talks before several gps. Sold 1-TE(before I even got bolts tightened...to a local realstate agent who said she gives talks on eclipses(!)) and 1-CAT. \$43.00 + \$10.57 = \$53.57 (\$14.61/hr.) ((14.6 bat. hrs.))
- 18 238) 11/4/89(Sat)F.P. 5:30-8:30PM.(Arrived at 4:30PM but returned home for warmer clothes!) 6-d moon(Aristotle, Eudoxus), Sat., Venus. Moon set behind Surfside Sally's at 8:30PM. Packed up to await Jupiter about 10PM. Had some beer, but at 10PM sky was pretty Murky. Went home. \$25.00 + \$10.18 = \$35.18 (\$11.73/hr.) ((17.6 bat. hrs.))
- 9 239) 11/5/89(Sun)F.P. 4:55-7:25PM. 7-d. moon, Saturn. Great sky, even tho weather rpt. said clouds and chance of rain! Slow traffic. F.P. quite empty. However moments of high activity, incl one \$5 contrib.\$33 + \$6.26 = \$39.26(\$15.70/hr) ((20.1 Bh)). Even tho moon was still great, I left because of cold. MUST REMEMBER TO DRESS WARMER FOR F.P.. IT IS ALWAYS 20° COLDER THERE THAN IN WAVERLY--ESPECIALLY BECAUSE OF WIND CHILL!
- 2 74 240) 11/9/89(Thu)St.P.&31st(!)4:35-9:20PM. 11-d. moon(Tyco; Aristarcus coming into view), Venus, Saturn(still!). Nice sky. Visited by David, Paula(brought me a beer), Peter, Jim Nickel. Moderate to light traffic. Alot of no-pays.\$30+22.41=\$52.41(11.03)((24.85)) Also visited by Chris Whitman and Myra B.

page total = \$439.13 + 4 T-shirts
 year total = \$5,690.06 + 55 T-shirts

STREET CORNER TELESCOPE LOG XXX

- 9 241) 11/10/89(Fri) F.P. 7:40-11:30PM. 12-d. moon(Tyco, Aristarcus, plus good craters on terminator), Jupiter(starting +/-9PM). Set-up on Admiral Fell Inn corner. Good spot. Heavy traffic at times. Quit early, however, because of what is becoming regular, scary Friday night alcohol rowdiness in F.P. \$77 + \$25.46 = \$102.46(\$26.75/) ((28.68))
- 2) 11/11/89(Sat) F.P. 8:15-11:25PM 13-d. moon(14-11 hrs. before full--Tyco good!), Jupiter. High hazy clouds 50% of time. Arrived at F.P. about 6PM, but sky was completely clouded over till +/-8PM. Night of Md.-Penn State football game. A lot of young people present. Evacuated corner (Adm. Fell Inn) as inebriation seems close to out of control. (Was observed for about 10-mins. by a very creepy man with an intense stare. Was about 6', 35, 160-170 lbs., cropped beard and hair, glasses--wire rim--, sport jacket.) Visited by Authur and Mary London, who bought T. Had pizza with Ross before setting up. Electric drive out of commission as wire on Radio Shake battery holder came loose! (No fun!!) \$65.00 + \$28.17 + \$93.17(\$29.42/hr.) ((28.68)) Sold 2 CAT T-shirts
- 9 243) 11/12/89(Sun) F.P. 5-10:15PM. PEAK NIGHT in F.P., in terms of both quality of lookers and quality of sky! Followed Saturn right down to the trees on Thames St. (was on Adm. Fell Inn corner). Venus, Sat., 14-d. moon (Tyco + some craters on SW limb), Jupiter (only 2 moons). Moon was 6-11 hrs. past full. I was in great form, too--meaning that I was especially articulate with my descriptions. Electric drive working again, after soldering job by me and Peter, this morning. Venus was incredible in blue sky just at sunset! \$72.00 + \$22.08 = \$94.08 (\$17.92/hr.) ((33.93)) Sold 1-TE T-shirt!
- 4 244) 11/13/89(Mon) Rotunda, 4:45-9PM. SECOND ANNIVERSARY SESSION! I announced this to lookers from time to time and one, a woman named Julie, came back with a party horn for me to blow! Venus, Sat., 15-d. moon(Tyco, plus some craters on W limb). Moderate traffic. Visited by Barbara Salzman Hastings; also by Sheryl Giffis of the Charles Villager who said they'll use my Nat. Geo. eclipse photo release in Dec. \$39.00 + \$10.13 = \$49.13 (\$11.56/hr.) ((37.93)) Mild weather; thin high clouds. Venus beautiful in sunset sky! 366-days + 365-days = 731-days, + 244 = 2.996-days avg. between outtings = 2.336-d/week. These figures are not conclusive, because I started slow and really did not reach a sustained pace until about 3/1/88: 306-d. + 317 = 623-days, + 236 = 2.64-days = 2.65-d./wk.
- 9 5) 11/17/89(Fri) F.P. A 5:00-6:38PM. Adm. Fell corner. Venus (paired with Sigma Sag--nice!); Saturn. Followed till both went behind building/tree. Packed up and had meatloaf dinner at Gimmy's. B 8:30-11:30PM. Jupiter w/4 moon + 2 stars, 19-day moon. Elec. drive stopped at 10PM. I changed batteries, but it did not restart. Why? Intermittent clouds, no drive, plus increasing rowdiness moved me to again pack up early. \$52 + \$22.95 = \$74.95(16.19/) ((41.06)) Both sets of batteries worked again after +/-45mins. at home. Could low temp. (+/-35°F) be the problem? Visited by Isabel. Bats. stored outside overnight(+/-32°F). After +/-2 1/2-hrs. in cold, original batteries still drive scope. Returned to outside(+/-34°F) for 3 more hrs. Still ran scope. Put in freezer for 3 hrs. Ran scope after +/-45mins. briefly, than would not. Put in oven after 1 1/2-hrs. They then ran scope but feebly on start up. Switched to new batteries, which kick off well.
- 9 246) 11/24/89(Fri) F.P. A 4:30-6:30PM. Adm. Fell. Venus, Sat. Moderate traffic, good interest. B 8:10-11:40PM. Jupiter. Heavy traffic, a bit rambuncious. Battery quit after 1-hr. (+/-32°) (Actually, they quit at 6:30PM, but I warmed them up at supper, and they worked again for another hour!) \$92.00 + \$19.41 = \$111.41 (\$20.26/hr.) ((44.06))
- 9 247) 11/26/89(Sun) F.P. A 5:30-6:40PM Adm. Fell. V + S. Light to moderate traf. Visited by Jim Balder + his son/daughter, with whom I had supper at Jimmies. B 8:05-10:50PM. Jupiter(4 moons, then 3, then 2) L-M traffic. \$38 + \$8.91 = \$46.91 (\$12.98/)((45.06--end of set.))
- 9 248) 12/1/89(Fri) F.P. A 5-6:55PM. 4-d. moon, V, S (briefly). Family scene(nice!). Brass quintet + Xmas caroling. B 8:05-11:30PM. J + 4 moons. Nice crowd till +/-10PM, then it started getting younger and a bit inebriated. Left at 11:30PM but planned to, anyway, for early start tmw. Handed out alot of star maps and telescope sheets. ((5.33 new "ENERGIZER bat. hrs. Insulated bats. w/paper bag+wool hats.)). Temp. +/-35°F. \$72 + \$30.85 = \$102.85(19.29/hr.)
- 8
75
12/6/89 Delivered Xmas Telescope releases to TV and radio stations on Television Hill.

page total = \$674.96 + 3 T-shirts
year total = \$6,365.02 + 58 T-shirts

STREET CORNER TELESCOPE LOG XXXI

- 9 249) 12/9/89(Sat) F.P., 4:35-6:35PM(then clouds!). Moon(Tyco, Aristarchus), Venus(quite in-
to crescent. 22°F w/breeze(cold!) Moderate traffic but enthusiastic. \$23.00 + \$4.27 =
\$27.27 (\$13.64/hr.) ((7.33 ENERGIZER hrs.))
- 9 250) 12/10/89(Sun)F.P. 4:15-7:55PM, Venus, 12-d-moon, Jupiter(briefly, then clouds). Nice
sky till +/-7:15PM, then increasing clouds. Light traffic, plus a number of passers-by
who said they'd looked previously. 27°F. Not too uncomfortable, as no wind. Used newly
supplied "Carefree" rechargeable battery. \$26.00 + \$5.66 = \$31.66 (\$8.63/hr.!)
- 4 251) 12/23/89(Sat) Rotunda. 4:45-7:15PM. 17°F. Venus till 6:45PM, then Jupiter--beautiful,
w/four moons on one side! Great night, with good traffic and good enthusiasm, including
a woman who had seen the play, Galileo, at JHU and was thrilled to see J, itself. Visited
by Elizabeth(astronomer and Wed. dancer), Dr. Pembroke, Peggy & Mike Potter.(There has
been several weeks of extremely cold weather, and this is the first time I've gathered
the will to brave it--probably because I was at the Farmer's Mkt. this morning selling
T-shirt and realized I could survive in the cold, plus I called Elizabeth w/an invita-
tion to come look at Venus and she said she would, which was more incentive for me to
go out. \$38.00 + \$15.17 = \$53.17 (21.27/hr.)
- 4 252) 12/28/89(Thu) Rotunda. 4:45-7:50*M.32°F. Venus(+/-51' crescent--nice!), M-42!(Briefly,
on request.Was just clearing roof.), Jupiter(3 moons, then 4. Excellent!) Moderate but
enthusiastic traffic. A man looker requested my autograph, which I gave! Great align-
ment--hardly had to touch scope. \$38 + \$17.82 = \$55.82 (\$18.11/) (Incl. a \$5.00 contrib.

26

Year = 1248

page total = \$167.92 + 0 T-shirts
year total = \$6,532.94 + 58 T-shirts

Not for Distribution

P = Postage
LP = Legal Permits

STREET CORNER EXPENSES - 1989

page 1 of 5

P	12/30/88	Postage stamps	\$ 5.00
LP	" "	" 5-copies(Moore)	\$.25
Sales	" "	" 10-copies(")	\$ 1.00
LP	" "	" postage for Mary Pat Clarke Letter (Permits)	\$ 0.65
S.P.	1/2/89	7 copies of Ed. info for F. Claudy (Moore)	\$ 0.35
L.P.	1/4/89	7-copies of documents mailed w/Sun letter to Ed.(Moore)	\$ 0.35
L.P.	1/4/89	postage to mail letter to Sun	\$ 0.65
L/P	1/9/89	25-copies of info in preparation for Sun interview	\$ 1.25
EQUIP	1/11/89	6" x 6" sheet of SOLAR SKREEN (Tuthill)	\$39.00
S.P.	1/12/89	3-copy of S&T article for Ann Hughes (Moore)	\$ 0.15
L.P.	1/16/89	20-copies of Dept. Rec. appl. form (Moore)	\$ 1.00
S.P.	1/18/89	50-copies Great Nebula(Moore)	\$2.50
Stationery	1/23/89	Pocket warmer fuel (Sunny's) 12-sticks	\$1.57
tel	1/24/89	Tel. Bill of Jan 13 th	\$17.72
P	1/26/89	Book of stamps	\$ 5.00
SP	1/26/89	3-copies(Loyola)	.45
Stationery	1/28/89	Fuel sticks & lighter 'B&H Camping)	\$2.09
L-P	1/31/89	parking to get Pratt St. maps	\$1.25
L-P	1/31/89	maps from City	\$4.50
L-P	1/31/89	15-copies of maps (Moore)	\$0.75
SP	2/1/89	25-copies "Telescopes" flier (Moore)	\$1.25
L-P	2/6/89	10-copies "Telescope Man/Harborplace" art. (Moore)	\$0.50
SP	2/6/89	10-copies (5-telescopes; 5-Gt. Nebula) (Moore)	\$0.50
L-P	2/8/89	add'l postage on Carney Shopping Plaza letter	\$0.20
-auto	2/11/89	Bus fare home from Pratt St. for Isabel	\$1.00
L-P	2/12/89	5-copies of Telescope Man--Inner Harbor article(JHU)	\$0.25
SP	2/12/89	15-copies How to buy telescope flier(JHU)	\$0.75
SP	2/12/89	15-copies Great Nebula flier(JHU)	\$0.75
SP	2/12/89	"hat" donation to musicians at Lebedders (Fells Pt.)	\$1.00
L-P	2/14/89	Street Artists' Guild form 3-copies (Moore)	\$0.15
SP	2/15/89	20-copies Messenger article (Moore)	\$1.00
L-P	2/15/89	Membership in Street Artists' Guild (ck#2263)	\$25.00
L-P	2/15/89	Court & Legal Citations pamphlet from above (Ck#2263)	\$ 5.00
P	2/16/89	Book of stamps	\$5.00
SP	2/22/89	Letter & clippings to G. Dalsheimer (postage)	\$1.00
Sta	2/23/89	Envelopes (Rite Aid)	\$1.04
SP	2/24/89	20-copies of newspaper articles (Moore)	\$1.00
Sta	2/24/89	Typrwriter ribbon (Northway)	\$3.68
L-P	2/27/89	Sample ordinances packet from Guild (ck #2266)	\$5.00
P	3/3/89	book of stamps	\$5.00
tel.	3/7/89	tel. bill of 2/13/89 (ck.# 2268)	\$17.72
SP	3/10/89	copies of handouts (Moore)	\$1.75
SP	3/13/89	20-copies of articles for Rolex application (Moore)	\$1.00
Grants	3/13/89	6-copies of material for Rolex application (Kinko)	\$0.32
Grants	3/14/89	Postage to mail Rolex grant application	\$6.00
Sta	3/15/89	"white out" (\$3.34
Sta.	3/15/89	file folders(12)	\$2.93
SP	3/15/89	6-copies (Moore)	\$0.30
SP	3/16/89	St. Pat's Day decorations(Woolworth)	\$1.15
SP	3/16/89	" " " " (Rite Aid)	\$0.41
SP	3/16	" " " " (Blvd. Hdwe)	\$0.94
SP	3/16/89	to Gren Whitman fro photos he took at 31st & St. Paul	\$4.00
SP	3/17/89	10-copies "How to get started..." (Moore)	\$0.50
tel.	3/17/89	call to Isabel from Fells Pt. to bring sweater	\$0.25
SP	3/17/89	contribution to "hat" of musicians Myra, Peter et al	\$1.00
SP	3/17/89	hot dog for Ross at Fells Pt.	\$1.00

SP 3/21/89	40-copies of sky maps(Solomon Schecter school)		
	20-copies of "How to get started..."	"	(Moore)
	1-copy letter to mayor of Cambridge		\$ 3.05
P 3/22/89	letter to Geo. Keene		\$0.45
SP 3/27/89	20-copies of S&T monthly sky chart for school		(Moore) \$1.00
P 3/28/89	book of stamps		\$5.00
SP 3/28/89	3-minute announcement tape for OP. MOONWATCH		(Radio Shack) \$5.20
SP 3/29/89	1-copy of HAV-A-LOOK! button art		(Moore) \$0.05
TEL 3/29/89	Tel. bill of 3/13 for 889-0353		\$18.52
SP 3/30/89	20 copies of network for revised handbill (Moore)		\$1.00
SP 4/4/89	500 x 2 =1000 handbills "HAV-A-LOOK!"		(Moore Printing Co.) \$30.00
SP 4/8/89	Membership in "Friends of Balto. Astronomical Soc.		\$7.00
SP 4/8/89	Contribution to above.		\$7.00
SP 4/8/89	Copies of revised moon crater resolution article(JHU)		\$0.25
L.P. 4/9/89	7-copies of letters re: Inner Harbor		(Loyola) \$0.70
L.P. 4/11/89	8-copies of letter to ed. of Sun		(Moore) \$0.40
L.P. 4/11/89	postage to mail letter to Sun		\$0.45
SP 4/17/89	Sun news paper ad "Operation Moonwatch-89"		\$40.20
SP 4/18/89	1/2-book of stamps		\$ 2.50
SP 4/18/89	23 copies of "Getting Started..." flier		(Moore) \$1.15
SP 4/18/89	1-roll of film to photo HAV-A-LOOK! for button		(Service Photo) \$2.42
SP 4/19/89	9-copies art for HAV-A-LOOK! button		(Moore) \$0.45
SP 4/20/89	5-copies " " " " " " " " " " " "		\$0.25
SP 4/21/89	postage to mail letter to Audy Assoc.		\$0.30
SP 4/21/89	52-copies of TEMP street performers' announcement		(Moore) \$2.60
SP 4/24/89	4-copies of stars maps for Hardee Party		(JHU) \$ 0.20
SP 4/25/89	24-copies "Getting Started...." (JHU)		\$1.20
STA 4/26/89	ellipse template from ADCOM		\$4.91
SP 4/26/89	HAV-A-LOOK! photos		(Service Photo) \$1.32
SP 4/27/89	4-copies of SATURN art		(Loyola) \$0.40
SP 4/28/89	20-copies HAV-A-LOOK! art		(Moore) \$1.00
SP 4/28/89	15-copies HAV-A-LOOK! art		(Moore) \$0.75
SP 5/1/89	40-copies SATURN sticker art		(Moore) \$2.00
SP 5/2/89	2-copies of star charts		(Loyola) \$0.20
L.P. 5/2/89	1-copy SUN editorial of 10/23/78		(U.of B.) \$0.05
L.P. 5/2/89	2-copies of SUN editorial (ibid)		(Moore) \$0.10
L.P. 5/3/89	50-envelopes		(Rite Aid) \$1.04
SP 5/3/89	5-copies sticker art		(Moore) \$0.25
SP 5/4/89	6-postcards		\$0.90
SP 5/4/89	15-copies Messenger article + HAV-A-LOOK! sticker		(Moore) \$0.75
TEL 5/8/89	bill of 4/13/89 (889-0353)		\$18.46
P 5/12/89	return cape to Lucy Rouse		\$1.30
SP 5/14/89	1-copy of tel. book summer camps list		(JHU) \$0.05
SP 5/16/89	3-juggling bean bag balls		\$15.16
LP 5/22/89	1-copy of Caldwell letter for Felser		\$0.10
SP 5/23/89	6-copies "Star Party" flier for camps		\$0.57
SP 5/25/89	20-copies of newspaper articles		(Moore) \$1.00
TEL 5/26/89	bill of 5/13		\$18.07
SP 5/26/89	stamps		\$ 5.00
LP 5/26/89	2-copies Inner Harbor rules		(Loyola) \$ 0.20
SP 5/26/89	3-copies Saturn occultation from Astronomy mag.		(Loyola) \$ 0.30
SP 5/30/89	2-copies " " " S&T		(Loyola) \$0.20

PAGE TOTAL \$ 204.42

TO DATE \$ 391.58

SP	5/31/89	50-envelopes (Rite Aid)	\$ 0.99
L-P	5/31/89	2-copies of Caldwell letter	\$0.20
SP	6/1/89	2-SUNSCOPE logos (ADCOM)	\$8.40
L-P	6/4/89	1-copy Caldwell letter (Crystal)	\$0.10
SP	6/6/89	20-copies of revised TE MOON PARTY flyer(Moore)	\$1.00
L-P	6/8	25-copies of Messenger letter to ed for distribution	\$1.25
WOOD	6/11	supper in Fells Pt. (Jimmies) between afternoon & evening sessions	\$5.90
SP	6/12	3-copies Astronomy mag. articles (Loyola)	\$ 0.30
SP	6/13	5-copies of Saturn occultation announcement (Moore)	\$1.00
		15-copies of "Getting started..." handout	
SP	6/14	14 stamps (Occultations press releases + Harrison's Pier 5)	\$3.50
STA	6/14	typewriter ribbon, purple pen, type correction paper (Dawns)	\$7.33
SP	6/14	27-copies of occultation announcements (Moore)	\$1.35
L-P	6/15	2-copies of Lipstein letter of 6/13 (Moore)	\$0.20
SP	6/15/	6-copies of Saturn occultation announcement(Moore)	\$0.30
SP	6/15	2-copies star maps (Moore)	\$0.10
SP	6/19	100-copies star maps, etc. for Md. Nat. Resources mtg.(6/20)	\$5.00
L-P	6/19	25-copies Messenger letter	\$1.25
SP	6/20	13-copies of SATURN and MOON PARTY flyers	\$0.65
SP	6/23	15-copies paste-ups for "Constellations of Summer flyer (Moore)	\$0.75
SP	6/23	500-copies "Constellations..." flyer (Moore) (ck.#2300)	\$19.69
BOOKS	6/24	Used book (author Abell) w/good star maps	\$00.25
BOOK	6/29/	TIME magazine w/cover article on sun (7-Eleven)	\$ 2.10
TEL	6/30	tel. bill of 6/13 (889-0353)	\$18.07
Postage	6/30	6-postcards	\$0.90
BOOKS	6/30	ASTRONOMY DICTIONARY (2nd Story Books)	\$3.36
SP	6/30/89	parking at Fells Pt. meter	\$0.50
auto	7/1/89	bus fare from Isabel home from Harrison's Pier 5	\$1.00
SP	7/5/89	book of stamps	\$5.00
BOOKS	7/5/89	8-copies. Astronomy articles in 7/89 LIFE magazine(Loyola)	\$0.80
SP	7/7/89	101-copies STREET PERFORMERS T.E. MOON flyer (Moore)	\$5.05
SP	7/7/89	book of stamps to mail TE MOON PARTY press release	\$5.00
SP	7/789	20-copies of TE MOON PARTY press release (Moore)	\$1.00
SP	7/789	50-envelopes (Rite Aid)	\$1.04
SP	7/10/89	quid pro quo tip to musician in Cat's Eye Pub, Fells Pt.	\$1.00
SP	7/12/89	1-copy of Smithsonian Mag. letters on John Dobson (Loyola)	\$0.10
SP	7/12/89	6-copies of Apollo sites in Astronomy Mag. (Loyola)	\$0.60
SP	7/13/89	50-star maps; 2-moon maps; 20 TE MOON PARTY flyers (Moore)	\$3.60
L-P	7/18/89	registration fee to Md. Lawyers for the Arts	\$10.00
SP	7/23/89	11-copies Persied meteors/TOTAL ECLIPSE announcement(JHU)	\$0.55
SP	7/23/89	12-copies HOW TO GET STARTED IN ASTRONOMY handout(JHU)	\$0.60
SP	7/28/89	red marker pen for Sunspots poster (ADCOM)	\$2.13
SP	7/28/89	15-copies of sunspot articles for poster (MOORE)	\$0.75
SP	7/29/89	14-copies of Persied/TOTAL ECLIPSE announcements(JHU)	\$ 0.70
AUTO	7/20/89	Parking in Fells Pt.	\$ 1.00
EQUIP	8/1/89	1-Edmund RKE 15mm ocular (Wholes Optics of Denna.) \$166.25	\$41.89
TEL	8/2/89	bill of 7/13 (889-0353)	\$17.23
TEL	8/2/89	bill of 7/13 (889-0460)	\$11.48

Page Total \$194.96
To date \$ \$586.54

TEL	8/2/89	bill of 1/13/89 (889-0460) 1/3 of C&P chgs.	\$ 8.23
TEL	8/2/89	bill of 2/13/89 (889-0460) 1/3 of C&P chgs.	\$ 8.23
TEL	8/2/89	" " 3/13/89 " " " " " "	\$ 8.23
TEL	8/2/89	" " 4/13/89 " " " " " "	\$ 8.53
TEL	8/2/89	" " 5/13/89 " " " " " "	\$ 8.34
TEL	8/2/89	" " 6/13/89 " " " " " "	\$ 8.34
SP	8/3/89	21-copies of street corner handouts (Moore)	\$1.05
SP	8/4/89	10-copies of "Getting Started...." (Moore)	\$ 0.50
SP	8/4/89	15-copies of TE Moon announcement (Moore)	\$ 0.75
LP	8/9/89	9 copies street performers legal rulings for Mello	\$ 0.45
SP	8/9/89	15-copies of handouts (Persied blurb + star maps)	\$ 0.75
SP	8/10/89	copy of Evening Sun w/TE moon article	\$ 0.25
SP	8/11/89	looo orange stickers for kids at Open Door Camps(Northway)	\$ 5.95
AUTO	8/13/89	Fells Pt. parking meter	\$ 0.25
AUTO	8/17/89	bus home from Kiwanis Club talk	\$ 0.90
BOOKS	8/18/89	library fine on astronomy book	\$ 0.20
SP	8/21/89	10-copies "How to get started...." (Moore)	\$ 0.50
SP	8/24/89	3-copies position of Neptune (Moore)	\$ 0.15
SP	8/30/89	20-copies "How to get started..."(Moore)	\$1.00
AUTO	8/31/89	Taxi home from Fells Pt. (see receipt)	\$6.30
TEL	9/1/89	bill of 8/13/89 (889-0353)	\$17.47
TEL	9/1/89	bill of 8/13/89 (889-0460)	\$11.47
SP	9/1/89	1000 (2x500) handbills (Moore) (ck#2309)	\$19.69
AUTO	9/2/89	Parking Waverly Farmers Mkt.	\$ 0.45
AUTO	9/4/89	Taxi home from Fell Pt. (no receipt)	\$6.50
AUTO	9/6/89	gas into Lorinda's car for Fell Pt. trip	\$3.00
SP	9/8/89	20 copies "How to.." + 20 copies star maps (Moore)	\$ 2.00
SP	9/8/89	tip to man in Fells Pt. to help me move scope location	\$ 2.00
SP	9/11/89	21-How to's and 28 star maps (Moore)	\$ 2.00
SP	9/11/89	newspaper w/"Face on Neptune" article (7-Eleven)	\$0.70
Postage	9/13/89	Postage to return tractor (VE 100) to factory for repair	\$2.40
TEL	9/21/89	bill of 9/13 (889-0460)	\$8.81
TEL	9/21/89	bill of 9/13 (889-0353)	\$17.47
SP	9/25/89	8-copies Balto. Mag. art. (Moore)	\$ 0.40
SP	9/26/89	postage for letters to Cloisters and Balto. Co.	\$ 0.65
SP	9/26/89	book of stamps	\$ 5.00
POSTAGE	9/27/89	UPS battery back to Vogel Entrp.	\$ 2.49
AUTO	9/27/89	10 miles out to UPS	
EQUIP.	9/27/89	2 ea 4"D" cell battery holders (Radio Shack)	\$ 3.13
STATIONERY	9/27/89	8 ea. "D" cell batteries (Rite Aid)	\$ 8.36
SP	9/28/89	20-copies star maps(Moore)	\$1.00
AUTO	9/29/89	payment of parking citation #5293136 of 9/26/89	\$17.00
SP	10/1/89	3-copies art. from Astronomy on small refractors(Loyola)	\$ 0.30
SP	10/6/89	Rubber stamp (Attn: Herman Heyn) (Moore)	\$ 4.20
SP	10/6/89	20-copies star maps (Moore)	\$ 1.50
SP	10/12/89	31-copies newspaper articles (Moore)	\$1.55
SP	10/12/89	6-copies articles (JHU)	\$ 0.30
SP	10/15/89	23-copies street corner handouts (JHU)	\$ 1.15
SP	10/16/89	29-copies handouts(JHU)	\$ 1.45
EQUIP	10/18/89	repair eyepiece holder(American Precision Tool Engr., Inc.)	\$20.00
SP	10/19/89	admission to DC Area Astronomers mtg.(ck#2314)	\$ 5.00
TEL	10/23/89	bill of 10/13/89 (889-0460)	\$9.02
TEL	10/23/89	bill of 10/13/89 (889-0353)	\$17.47

PAGE TOTAL
TO DATE\$262.83
\$849.37

SP	10/26/89	25 handouts(maps, Getting Started...) (Moore)	\$ 1.25
STA	10/27/89	8 ea. "D" cell batteries (Rite Aid)	\$ 8.36
SP	10/27/89	2 ea Halloween decorations for scope (Rite Aid)	\$ 0.94
SP	10/28/89	20 ea. "Getting Started..." (JHU)	\$ 1.00
POSTAGE	11/1/89	due on letter to Canada	\$ 0.05
SP	11/1/89	star maps (JHU)	\$ 0.60
SP	11/1/89	star maps(Moore)	\$ 0.60
SP	11/1/89	"Getting started..."(2); Lonak art.(2); Telescope making(3)(Moore)	\$ 0.35
SP	11/3/89	stamps	\$ 5.25
SP	11/6/89	8-copies "Buying a Telescope" article(JHU)	\$ 0.40
SP	11/9/89	8-copies of "Buying a Telescope" (revised) (JHU)	\$ 0.40
SP	11/11/89	35-copies star maps and "Buying a Telescope".(JHU)	\$ 1.75
SP	11/13/89	38-copies star maps and "Buying a Telescope"(JHU)	\$ 1.90
STA	11/13/89	2 sets of 4ea. "D" batteries(Sunny's...receipt ret. for rebate)	\$ 9.43
SP	11/14/89	2-copies of Astro League letter for remailing (JHU)	\$ 0.10
STA	11/14/89	typewriter ribbon	\$3.10
FOOD	11/17/89	supper between sessions at Gimmy's restaurant, Fells Pt.	\$6.70
SP	11/18/89	5-copies "Getting Started..." (JHU)	\$ 0.25
SP	11/22/89	8-copies Xmas telescope article(JHU)	\$ 0.40
SP	11/22/89	1000-copies HAV-A-LOOK handbill (Moore)	\$18.37
SP	11/24/89	15-copies "Want a Telescope for Xmas" article(JHU)	\$ 0.75
FOOD	11/24/89	supper between sessions in F.P. (Gimmy's)	\$ 2.66
TEL	11/25/89	889-0353 bill of 11/13/89	\$17.47
TEL	11/25/89	889-0460 bill of 11/13/89	\$ 9.94
SP	11/26/89	8-copies "Getting Started..."(JHU)	\$ 0.40
SP	11/26/89	8-copies "Want a Telescope...." article(JHU)	\$ 0.40
FOOD	11/26/89	supper at Gimmy's between sessions	\$5.75
SP	11/27/89	10-copies "Want a Telescope...." (JHU)	\$ 0.50
SP	11/28/89	6-copies " " " " (JHU)	\$ 0.30
SP	12/1/89	14-copies Star Maps (JHU)	\$ 0.70
FOOD	12/1/89	supper between sessions (Gimmy's)	\$4.00
SP	12/4/89	4-copies "Charles Villager" article(JHU)	\$ 0.20
SP	12/4/89	12-copies "Getting Started...."(JHU)	\$ 0.60
SP	12/4/89	29-copies star maps (JHU)	\$ 1.45
SP	12/5/89	HH's BAS article on telescopes 7-copies(JHU)	\$ 0.35
SP	12/5/89	stamps	\$ 5.00
SP	12/6/89	32-copies Xmas telescope material (JHU)	\$ 1.60
SP	12/7/89	3-copies "New Scientist" ice ages article (JHU)	\$ 0.15
SP	12/12/89	4-copies Xmas Telescopes + 2-Messenger article(Loyola)	\$ 0.60
SP	12/13/89	6-copies Messenger art.; 9-copies Asimov book (JHU)	\$ 0.75
SP	12/18/89	4-HAV-A-LOOK! buttons (Macemon)	\$ 1.00
SP	12/20/89	20-copies Eve. Sun telescope art. (Moore)	\$1.10
SP	12/20/89	2-prints UMa photo published in Asimov book(Service Photo)	\$ 1.68
EE	12/22/89	tel. bill of 12/13 (889-0460)	\$ 1.14
TEL.	12/22/89	bill of 12/13/89 (889-0353)	\$17.47
TEL	12/22/89	deduct C&P chgs. from earlier bills(889-0460)	(\$9160)
SUBS	12/22/89	Membership in BAS for 1990 (ck#2328)	\$30.00
SP	12/26/89	52-copies of articles + maps + telescopes handout (Moore)	\$ 2.60
P	12/26/89	letter and articlesto Bob Kousoulos	\$ 0.45
BOOKS	12/29/89	"Discover the Stars" (2nd Story)	\$ 1.19

↑ on chart
 \$ 79.80
 Year # 929.17
 + Auto # 299.52

1990

Not for Distribution

- 253) 1/2/90(Tue) Rotunda 4-8:20PM. Mild temp., great sky! Venus (27.8 million miles--very crescent), 5-d-moon(impressive!), Jupiter(4 moons on one side--nice!). Moderate to sometimes heavy traffic. Good interest. One woman went home and brought back five Vietnamese friends and her husband. They contributed \$6.00. Visited by Marc Steiner, Andre Papantonio. \$67.00 + \$10.30 = \$77.30 (\$17.84/hr.) Sold 1-TE T-shirt.**
1/2/90(Tue) Space Telescope Inst. 9:20-10:20PM. Good sky. Jupiter + M-42. Enthusiastic lookers, among them +/-4 Spark people. No hat out. Eric Chaisson said a national mtg. of the Space Grant Consortium will occur next week. He seemed favorable toward involving me in some aspect of the educational program, eventually.
**Also visited by Wayne Taylor and son, Ben, plus Irish dancers, Susi and Richard.
- 4 254) 1/3/90(Wed) Rotunda 4:15-8:30PM. Mild + slightly hazy. Venus (couldn't find it myself and was helped by a passerby), 5-d-moon(impressive+!), Jupiter(2x2 + Red Spot--very palid), M-42, Pleiades. Moderate traffic; some enthusiastic lookers. Gave out alot of literature. Visited by Dan Lowenthal and Elaine! Visited by Mike Brand, who went home and returned with son, Sam. \$33.00 + \$10.09 = \$43.09 (\$10.14/hr.) Learned the following mnemonic devices for remembering planet's names:
Many Viscious Elephants Make Jelly Sandwiches Using No Peanut butter!
Mary's Velvet Eyes Make John Stay Up Nights Panting!
- 4 255) 1/6/90(Sat) Rotunda 4-8:00PM. Mild, good sky. 8-d-moon(Jura Mts. on terminator and noticed by alot of lookers), Venus(great!), Jupiter(4 then 3 moons + background stars). Moderate traffic with some enthusiastic lookers. Visited by Jim Cusick, Dr. Pembroke, Sherry(dancer). \$45.00 + \$20.64 = \$65.64 (\$16.41/hr.)
9 1/14/90(Sun) Drove to Fells Pt. but did not set up because of clouds.
- 5 256) 1/15/90(Mon) 31st & St. Paul(!)(First went to Rotunda, but it looked too quiet.) 6-9:15PM Jupiter(cleared building at 6PM and tree 1/2-hr. later); M-42. Moderate traffic but some enthusiastic lookers. Gave star maps to several children. Visited by Laura Malick, Mike Potter, Peter. Sold 1-TE to Chuck Weiss, Messenger photographer. \$27.00 + \$9.79 = \$36.79 (\$11.32/hr.) (incl. \$5.00 contrib. from L.M.)
- 2 257) 1/16/90(Tue) 31st & St.P. 5:50-6:40PM. Jupiter(4 moons on one side!). Session cut short by sudden arrival of thick clouds. Light traffic, anyway.\$3.00 + \$3.77 = \$6.77(\$8.12/)
- 2 258) 1/22/90(Mon) 31st & St.P. 5:50-9:50PM. Moderate traffic. Jupiter(40% clouds for first 2 hrs. GRS visible but vague.); M-42(nice!); M-35(impressive!). Long visit by Brian(David's friend). \$27.00 + \$13.67 = \$40.67 (\$10.17/hr.)
- 19 259) 1/23/90(Tue) Glenmar Sailing Assoc.(c/o Carl Gluckert, 9421A Old Harford Rd., 21234; 665-7828). Talk and slide show at Essex C.C. +/-40 people. Gave star maps to all. Good event; received good comments. \$50.00. Sold 15 star wheels(!) and 2-TE T-shirts.
- 9 260) 1/27/90(Sat) Fells Pt.(!)5:30-2:00AM Moderate to heavy traffic. Jupiter(4 moons, then 3, then 4; GRS--vaguely). Visited by Myra & Buzzy Hettleman, and later by Jeff & Shelly. Tried for M-42 but no luck--probably because finder was off center. About midnight I had to move from Adm. Fell corner to square to hold Jupiter in view. Hazy to nice sky;37°F. Gave out alot of literature. \$131.00 + \$41.32 = \$172.32 (\$20.27/hr.)Best hat ever!
ALOT OF PEOPLE REPORTED SEEING A VERY BRIGHT, LONG-LASTING METEOR IN THE WEST AFTER DARK. IT SEEMS IT MIGHT HAVE BEEN VISIBLE 10 OR 15 SECONDS, AND IT GAVE OFF ALOT OF GOLD AND GREEN SPARKS. IT WAS HEADING WEST, SOMEWHERE ABOUT 6:30PM. Also visited by Nancy O'Connor; also by David Satosky of Gala Concepts, who said he'd mail me stiltman photo I want.
- 5 261) 1/31/90(Wed) St.P.&31st.5:10-9:10PM. 5-d moon(64,67 & 68 prominent), Jupiter(great!), M 42(impressive). Intended to do Rotunda but decided it didn't look auspicious. Moderate but enthusiastic traffic. Very clear sky, 43°F.Visited by RickSchoonover(With oculars + nebula filter. 9MM did ok on moon, but I was unimpressed with filter on M 42--w/o filter was better, I think) His daughter, Ruthie, with him. Also, Jim Nickel, Mike Bardoff. \$34.00(incl. a \$5 contrib.) + \$10.53 = \$44.53 (\$11.13/hr)

page total = \$537.11 + 4 T-shirts (+15 star wheels)

- 2 262) 2/5/90(Mon) St.P. & 31st. 5:10-8:40PM. 9-d Moon, Jupiter, M-42. Nice sky, 41°F. Slow to moderate traffic. Dog got sick on sidewalk near scope, but his owner did a good job cleaning it up. Visited by Mike & Peggy Potter, by a woman from Hampden and her two teenaged daughters who heard me on Dan Roderick's radio show last week. One daughter saw an occultation of star by moon. \$25 + \$10.26 = \$35.26 (\$10.07/hr.) Moon--Tyco, Jura Mts. both good. Received contribs.from several derelicts!
- 5 263) 2/6/90(Tue) St. P. & 31st. 5:15-8:45PM. Jupiter(3, then 4, then 3 moons!), 10-d moon(Tyco, Aristarcus). Nice sky between intermittent high, thin clouds, Moderate traffic. Visited by Peter. Some people responded, "Still?", after asking what's to see and I said, Jupiter. \$24.00 + \$13.32 = \$37.32 (\$10.66/hr.)
- 2/6/90(Tue) Space Telescope Inst. 9:10-10PM. Good crowd with good enthusiasm.
- 5 264) 2/7/90(Wed) St.P. & 31st. 6:05-8:45PM. Nice sky; mild. Jupiter + 11-d moon(Tyco, Aristarcus, nice terminator). I did some good work with kids. Visited by Brian. \$16.00 + \$6.97 = \$22.97 (\$8.62/hr--incl. a \$5.00 contrib.!) L. Turbyville.
- 2/7/90(Wed) Baltimore Folk Music Society Wed. night dance at Lovely Lane. Set-up on front walk. Moon, Jupiter + great sky. Alot of enthusiastic lookers. No hat. Moon occulted +/- 2nd mag. star around 11:00PM.
- 2 265) 2/8/90(Thu) St.P. & 31st. 5:15-9:15PM. No clouds but just fair seeing. Jupiter, 12-d. moon(Tyco, terminator--lookers more impressed than I with view), M-42. Moderate traffic; small or no contribs. Maybe I've spent enough time on this corner for a while! Visited by Pam, Karl & son Jonathan; Peter. \$21.00 + \$11.92 = \$32.92(\$8.23)
- 2 266) 2/12/90(Mon) St.P.& 31st.5:35-9:15PM. Jupiter(3 moons then 4--all on same side),M-42. Mild; nice sky. Moderate traffic and enthusiasm. Visited by Sandy Sparks. \$26.00 + \$7.60 = \$33.60 (\$9.16/hr.) SOLD 1 CAT T-shirt! One looked brough his son back, who named the planets for me in Urdu; After looking at J with 80X, an elderly gentleman in utility worker garb took a look thru the finder and excitedly announced that he had seen a "shooting star". I looked toward J but didn't see anything. The man walked away quite happy about the whole thing, but I thought either he was imagining something or playing a game. However, ten minutes someone else came along and asked, "Did you see the meteor a few minutes ago?" He said it was very bright and indicated it was in the SW. Now I'm thinking that the gaderly gentleman really did see a meteor!
- 9 2/17/90(Sat) Fells Pt. Arrived at 5:30PM, but it was very windy and didn't set-up. Waited it out till 9PM, then went home.(Why? Because it was too cold, or because my image of myself didn't see me setting up under those circumstances? Why? Because I am looking for excuses not to set-up? On the good side: 1) Steve Bunker has a lawyer interested in challenging the Inner Harbor situation, I learned. I must send Steve my stuff! 2) Met some young men who are making a video on buskers and gave them my tel.#.)
- 9 2/18/90 Delivered Inner Harbor documents and cover letter to Steve Bunker in Fells Pt. Met Yvonne on street and asked her to get me scheduled for a F.P. Sail Club talk.
- 2 267) 2/19/90(Mon) St.P.& 31st.5:45-8:30PM. Jupiter(four, then three, then shadow of Io on disk), M-42. Light traffic. Visits by Peter and Rick; also a woman who is a fan of Johnny Heyn's movies. \$14.00 + \$8.78 = \$22.78 (\$8.28/hr.)
- 2 268) 2/20/90(Tue) St.P.&31st. 5:45-9:15PM. 34°F(fingers too numb to loosen diagonal screw). Very clear sky. Jupiter(3, then 4 moons), M-42(impressive!). Moderate traffic--better than last couple of nights. Good enthusiasm. Visited by Peter, with computer displaying Jupiter's GRS. \$32.00 (incl. a \$5 contrib.) + \$4.92 = \$36.92 (\$10.55/hr.) Visited by Leslie Harris.
- 2 268) 2/21/90(Wed) St.P.&31st. 6-8:55PM. Jupiter(4 moons--nice!). 38°F(but fingers ok). Light traffic. Visits by Ellen, the husband Rick & daughter, Ruthie; David Geiger. High, thin clouds early, then clear. \$19.00 + \$9.83 = \$28.83 (\$9.88/hr.)

page total = \$250.60 + zero T-shirts + zero S.W.'s
total to date = \$787.71 + 4 T-shirts + 15 S.W.'s

- 2 262) 3/1/90(Thu) St.P.&31st.5:10-9:15PM. 5-d. moon(breathtaking), J.(2 moons on each side, all at near max. limits--nice!), M-35(briefly), M-42(excellent!), Sirius(by request). Great seeing! 32°F. Visited by Peter. We went to my hse. and unloaded, and then to his apt. and looked thru his 8" F/10 Newtonian. Nice view, but GRS very vague on C.L. Scope didn't split Castor. Why? Seeing or optics? Peter will do airbrush total eclipse for me! Moderate traffic. Should go to Rotunda! \$22.00 + \$13.02 = \$35.02 (\$8.58/hr.)
- 9 263) 3/3/90(Sat) Fells Pt. 6-11:30PM. 7-d. moon(impressive!), J.(3, than 4 moons), M-42 (once). Clouds problem 1st hr., then clear, then cold wind (had lookers, even so, but it was hard to keep everything organized!), Finally put out of business by clouds(mercifully!). Many enthusiastic--even grateful lookers. Some good family groups. Visited by Lisa and Jerry, Karl(old dancer-juggler now living in Panama), a couple from Glenmar Sailing club who said my talk was great and that club wants me back soon(!). I was in very good form--not depressed; articulate. Visits: Jill the Juggler, Jeff Turner(Nat. Inst. Co.), Stan(ex. Irish dancer) & wife, who bought me cup of soup. \$96.00 + \$29.18 = \$125.18 (\$22.76/hr.)
- 9 264) 3/4/90(Sun) Fells Pt. 5:15-8:15PM. 8-d.moon 10° NW of Jupiter(moons all on west side--breathtaking!). Great sky--moon fairly sharp 45-mins. before sunset. Moderate but enthusiastic traffic. GR Spot reasonably visible at 7:55PM. Traffic way down by 8PM, so after some looking for myself, packed-up. \$41.00 + \$10.83 = \$51.83 (\$17.28/hr.)
- 3 265) 3/6/90(Tue) Space Telescope 8:40-10:15PM. J (3 moons, GRS at 9:27PM), 10-d.moon, Castor-split easily at all powers w/baffle on scope. Put baffle on in hope of getting good view of GRS. It sharpened up image noticeably, but Spot was still difficult. Moderate traffic. Weather rpt. said clouds, tonight. I headed for lecture on my bike, got 1/2-way there and noticed Sirius & Jupiter. Went home, loaded scope in car and set-up in front of Space Tel. bldg. Mark & George also w.scopes. Split Castor @ 160X pretty well w/no baffle.
- 2 266) 3/7/90(Wed) St. P.&31st.5:30-8:30PM. 11-d-moon(Tyco, Copernicus), Jupiter(3 then 4 moons) 30°F. Moderate traffic. An unusual number of parents w/children. Gave out all the star maps I xeroxed today. Had a looker w/five dogs on leashes.\$18.00 + \$8.73 = \$26.73(\$8.91/1
- 9 267) 3/10/90(Sat) Fells Pt. 6-12 Midnight. Jupiter(4 moon, then transit of Ganymede, then 4 again--briefly, till clouds); near full moon. Hazy sky, then OK, then hazy. Quit when high clouds in combination w/full moon made it too difficult to tell people about what they were seeing--also, because crowd was becoming a bit obnoxious. Early in evening was badgered by and had some peanuts thrown at me by a group of middle-aged, mail Irish celebrants from Phila. Swing dance at Rec. Pier; visited by many dancer friends. Good traffic, mild weather. Visited early-on by Isabel at my invitation. However, she left in huff after seeing me put my arm around one of the female dancers. This relationship is just NOT going to work--no way. \$103.00 + \$22.04 = \$125.04 (\$20.84/hr) Found Soviet coin in hat. Good moonrise from my corner by Lee's I.C. Visited by Dan Mendelson.
- 3 268) 3/12/90(Mon) St.P.&31st.6-9:00PM. Record warm temperture--T-shirt weather! Jupiter(moons 2 and 2--nice!), M 42. Light traffic. Visits by Dave Eberhardt, Linda Turbyville. At LP's invitation, set-up scope behind her house after reg. session to show her the moon. Also saw Mizar, Gamma Leo, Castor. \$19 + \$10.90 = \$29.90 (\$9.97/hr.)
- 9 269) 3/13/90(Tue) Fells Pt.!(Incredible summer-like weather. Took a chance that a good number of people would be out and around in F.P., and it was so.) Jupiter(4 then 3 moons), M42 (once) Moderate to good traffic. Nice sky till 10PM, then out out of business by cloud. 6-10PM Lee's corner. Visit by Leora. \$45 + \$11.16 = \$56.16 (\$14.04/hr.)
- 9 270) 3/14/90(Wed) F.Pt. Still almost T-shirt weather. Ok sky--except was overcast when I left home, but rpt. was for clear, which it became. 6:15-11:30PM Jupiter(3, then 4, then 3, then 4 moons--nice, all in close) Moderate to heavy traffic. Visit by Lou Glazer. Started packing-up three different times before I finally got off corner! Visit by Mike Potter, Pete, and other Space Tel. folks. \$61 + \$12.83 = \$73.83 (\$14.06/hr.) Visit by Pat Flanigan, Bill Whitman & wife. Sold 1-CAT T-shirt.

PAGE TOTAL = \$523.69 + 1 T-shirt + zero S.W.
TOTAL TO DATE = \$1,311.40 + 5 T-shirts + 15S.W.'s

- 9 271) 3/15/90(Thu)F.Pt.6:15-8:15PM. Put out of action by heavy clouds. Mild, light jacket weather. J (3, then 4 moons--nice). Light to mod. traffic. (Arrived hour earlier than usual to photo tugs and street sign for poss. T-shirt.) Visit by Deborah of old Tues. pot luck. \$17.00 + \$4.01 = \$21.01 (\$10.51/hr.)
- 9 272) 3/18/90(Sun)F.Pt.6:10-10:10PM. Mild but windy(wore overcoat). Ok sky. J + M42(once). Moderate but enthusiastic traffic. I was in very good form! Visited by Charlene(bought a Gandy TS) and her friend, Harriet. \$45.00 + \$9.12 = \$54.12(\$13.53/) Sold 1-GD + 1-TE
- 11 273) 3/22/90(Thu)St.P.&31st.6:40-8:20PM(First went to F.P., but it was too windy!) Jupiter; Sirius & Betelgeuse on request. Moderate but enthusiastic lookers. Visited by Judy(of Judy & Jack), Rick, Peter. \$12.00 + \$5.14 = \$17.14(\$10.28/) SOLD 1-TE + 1-GD T-shirts.
- 2 274) 3/26/90(Mon)St.P.&31st.6:35-8:45PM. Jupiter(moons 2 & 2 classic). Few clouds early-on, then clear. Light traffic. Visit by Gren. \$8.00 + \$6.67 = \$14.67 (\$6.77/hr.) I felt a bit bored and unmotivated, tonight. I hustled very little. Am tired of that corner. GRS in view at set-up time and noticed by a looker, without prompting!
- 9 275) 3/27/90(Tue)F.Pt.6:35-9:00PM.40°F.(Decided to try F.Pt. because tired of St.P.&, and because weather was nice, albeit cool.) Light-moderate traffic. Jupiter(3-moons),M 42 (several times). Visits by Sara (of Something Else), Mike Potter and his friend, Peter. \$15.00 + \$1.45 = \$16.45(\$6.81/hr.) Sold 1-TE
- 11 276) 4/5/90(Thu)F.Pt.6:40-11:40PM.Mild temp.,great sky early on(started on 10-d.moon 54-mins. before sunset!). 10-d. moon(Tyco, Copernicus, Jura Mts--all great!), J. w/4 moons. Moderate but enthusiastic traffic.\$47.00 + \$12.31 = \$59.31 (\$11.86/hr.)
- 4 277) 4/7/90(Sat) JHU Spring Fair, 1:30-2:30PM. Breezy, cool, intermittent clouds then all clouds. 3" refractor--projection. Ok interest. No hat. Maybe tmw. will be better day. Today, just a scattering of small spots. Not too impressive.
- 4 278) 4/8/90(Sun) JHU Spring Fair, 1-5PM. Nice day & sky. Intermt. clouds early, then clear. Sun w/four minor spot groups, but lookers seemed pleased. Used 3" refractor "Sunscope". Visited by Steve Cunningham & family, Dr. Richard Henry & fam. First lookers were Frank Claude & fam. Hard work but very good experience. Tom Wach, photographer craftsman, gave me his nice circumpolar print; earlier I had given him my TE poster. Showed S&T photos of 3/89 aurora, often. \$19.00 + \$5.14 = \$24.14 (\$6.04/) Sold 1-TE T-shirt.
- 9 279) 4/8/90(Sun)F.Pt., 7:35-11:10PM. Session began w/very cold wind but settled down into nice, mild evening. Super-clear sky! Jupiter(3 in triangle on W, 1 on E side. Great. Also could see moon shadow for a while--first noticed by a looker), 13-d. moon (by about 9PM). Good, enthusiastic lookers! \$51.00 + \$12.76 = \$63.76 (\$17.80/hr.)
- 9 280) 4/11/90(Wed)F.Pt. 8:40-10:40PM.(Late start due to weather uncertainty, but sky ok.) Jupiter(1 on L + 3 on R + background star making 4th "moon" on R.) M 42 (once, on req.) Cold breeze. Visited Cats Eye Pub after stint to hear "Dogs Among the Bushes". More background stars than I've ever seen w/J. \$15.00 + \$6.29 = \$21.29 (\$10.65/hr.)
- 9 281) 4/13/90(Fri)F.Pt. 7:45-11:45PM. Jupiter(More background stars than ever before. The one which was at the right end of the line seemed to be at the left end, tonight.) Good traffic. \$70.00 + \$11.41 = \$81.41 (\$20.35/hr). Sold 1-TE T-shirt. Was set-up on Lee's corner and lost Jupiter to street light at 11:45PM.
- 9 282) 4/15/90(Easter Sun)F.Pt.7:45-10:20PM. Mild temp., light-mod. traffic, ok sky. Jupiter (3 than 4 moons). Visited by woman from Brazil who wanted to see Big Dipper. I walked w/her into the square, where we saw it high in east. She was very pleased, and so was I. \$16.00 + \$12.35 = \$28.35 (\$13.61/hr.) Sold 1-CAT T-shirt. Has some lookers who had also looked at Jupiter thru Bob Kousulus' telescope in NYC.
- 9 283) 4/16/90(Mon)F.Pt. 7:40-9:55PM. Cool, blustery wind. Could have used my long johns! Jupiter (2 & 2). Light, but enthusiastic traffic. \$23.00 + \$4.15 = \$27.15 (\$12.07/hr.)
- 9 284) 4/18/90(Wed)F.Pt. 7:45-10PM. Nice night & sky. Jupiter(2 and 2).Light traffic. Used different hat(black). \$14.00 + \$9.09 = \$23.09 (\$10.26/hr.) Sold 2-CAT T-shirts!

PAGE TOTAL = \$451.89 + 10 T-shirts
TOTAL TO DATE = \$1,763.29 + 15 T-shirts

- 9 285) 4/22/90(Sun)F.P., 8-11:15PM. Nice sky, mild temp. Wasted ten mins. finding Jupiter because looking too high in sky! Alot of Sun. strollers before sunset, but crowd dropped significantly after 8PM. J situated among 4-5 background stars, making it extra work to identify moons for lookers. \$47 + \$6.90 = \$53.90 (\$16.58/) Sold 1-TE. Met Judy Meyers for walk and a beer before session. She helped me set-up.
- 9 286) 4/23/90(Mon)F.P., 7:40-11:10PM. Mild temp. and great sky! Jupiter--Io on right and the others on left along with two bright Gemini stars. Breathtaking array! (How I found Jupiter, tonight! Was watched while setting up by several young boys, who asked questions all along the way. Got scope together, pointed it skyward and then began trying to find J naked eye. One of the kids looked thru finder and said, "I don't see anything--no, I see a little dot." I looked, and it was J! The kid was very pleased with himself, and I was pleased to have found J so easily!) Moderate to light, but enthusiastic lookers. Visited by daughter of Ann Fallon! Had lookers from Turkey and N.Z. \$43.00 + \$4.77 = \$47.77 (\$13.65/hr.)
- 9 287) 4/24/90(Tue)F.P., 8:15-9:20PM. High clouds, cold wind. Trouble finding Jupiter, because of clouds. All 4 moons on left, but yukky picture because of clouds. F.P. very quiet. Quit early because of wind. \$9.00 + \$5.78 = \$14.78 (\$13.64/hr.)
- 9 288) 4/25/90(Wed)F.Pt.(Lee's corner, still), 8-11PM. Mild, nice sky. Jupiter. Began evening setting up in square and having picture taken by Bruff Schamp, who is working on some kind of Kodak contest. Then moved to corner. Good night in F.Pt. Moderate to sometimes heavy traffic! Visit by Linda Shopes & Ken. \$39.00 + \$9.70 = \$48.70 (\$16.23/hr.)
- 9 289) 4/26/90(Thu)F.Pt. 8-11PM. Warm, ok sky. Jupiter(one and three--nice!), 2-d. moon(nice, but brief!). Visited by photographer and reporter from Jewish Times. Both saw alot of action! Seem to be feeling tired, even after only 3 hrs. Is this because I'm more and more seeing my act as a job? \$32.00 + \$4.50 = \$36.50 (\$12.17/) Sold 2-Gandy D. T-shirts.
- 9 290) 4/27/90(Fri)F.Pt. 8-10:40PM. 3-d. moon (awesome!!), Jupiter(1 + 3). Set up in square to hold moon as long as possible. Clouds, w/ok sky between. Moon set at 10:30PM and J was clouded out 10mins. later. Incredible number of people out tonight in F.Pt.! Visited by Dan & Diane Alquist. Alot of enthusiastic lookers--esp. for moon. \$36 + \$12.59 = \$48.59(18.
- 2 1) 5/1/90(Tue) St. Paul School for Girls (auspices Roz Rottenberg, 823-6323). MATHEMATICS SCIENCE SEMINAR DAY. I gave two 45-min. presentations, introducing astronomy and telescopes, giving out star maps and other lit., and culminating in looking at the sun (w/ a few small spots) with projection and welders lens. I feel the first session went very well and the second a little less so, but ok. \$50.00. Visited by Steve McDaniel.
- 2 292) 5/6/90(Sun) Sherwood Gardens, 2-3PM Sun (+/-10 small spots) projection w/3" refractor. Nice, then hazy, then clouds. Visited by Donna K. and Jeff. Light traffic--tulips had all gone; asalea bushes very nice. No hat.
- 9 293) 5/7/90(Mon) F.Pt. 7:45-12midnight. 13-d. moon (scattering of craters on terminator), Jupiter (3 moons). Mild weather, nice sky, but only fair seeing. Visited by student of Dr. Mello. He said she's a good teacher and has mentioned my case several times in class. He noticed my button and asked if it contradicted my stand on I.H. I replied that I was turned down way before I had button. \$46 + \$8.35 = \$54.35(\$12.79/) 1-CAT
- 10 294) 5/8/90(Tue)F.Pt. 8-11:30PM Jupiter(4 moons on one side!), 14-d. moon. Mild weather, fair seeing. Practically no contribs for 1st hr. Visited by Kay and Jerry Donahoe. Fun time w/them. Gave K a CAT for Mandy. They bought F.Pt. shirts for themselves. \$23.00 + \$6.36 = \$29.36 (\$8.39/hr.) Had an incredibly young looker--a babe in arms--who, when asked by his mother, "what is the smallest planet?", replied in baby talk, "Pluto". Surprised me. Mother said they live in Hamilton. Sold 2 F.Pt. T's.
- 9 295) 5/11/90(Fri)F.Pt. 8:15-11:15PM. Jupiter...and just as it set the rising 17-d. moon came up over the Rec. Pier. (However, I left after 1/2-hr. of the moon for the Gandy Dancer.) Telescope drive did not work at all. Battery OK, I'm sure. Problem in battery plug, I'm guessing. Moderate traffic. \$38.00 + \$12.74 = \$50.74 (\$16.91/hr.)

PAGE TOTAL = \$434.69 + 6 T-shirts
TOTAL TO DATE = \$2,197.98 + 21 T-shirts

- 9 296) 5/14/90(Mon)F.Pt. 8:15-10:45PM. Jupiter(3 then 4 then 3), plus Sirius, Vega and Arcturus. Started with flags and steeple w/cross in S. Balto. A looker insisted on contributing \$1.00 after looking at cross, saying he was a Christian. Jupiter looked kind of murky because of heat from bldgs. Visited by Kay and Mandy. Mandy, wearing CAT T-shirt to great effect. The Hubble Space Tel. was scheduled to pass over Balto. at 8:46PM. I and others searched for it but no confirmed sightings. Goodyear blimp passed in front of J mid-evening. We tracked it w/scope. Visited by Denny Honeman and Lynda Turbyville and went for beer with them after session. \$18 + \$7.12 = \$25.12 (\$10.05/hr). Tracker worked tonight, tho it took a bit of jiggling of battery plug to start it.
- 9 297) 5/17/90(Thu)F.Pt.8:20-10:10PM. (Could have held Jupiter another 20-mins. but quit because of clouds + boredom.) Jupiter (2 and 2). Very clear night, except that due to its position over buildings, Jupiter was very murky. Visited by Joyce's ex., Rich. A lot of people out and about, as is Preakness week-end coming. Strong, aggravating, intermittend, warm wind. \$16 + \$9.79 = \$25.79 (\$14.07/hr.)
- 9 298) 5/18/90(Fri)F.Pt.8:20-10:40PM. Jupiter(held it to very end!) This was night before the Pimlico Preakness race. A lot of people out, and a slightly different bunch, somehow. Fire engines parked nearby w/fireman collecting for burn fund. Messed up seeing, somewhat. \$32.00 + \$16.70 = \$48.70 (\$20.87/hr.)
- 21 299) 5/19/90(Sat) Balto. Area Boy Scouts Expo '90, Timonium Fairgrounds., 11am-2:30PM. Sun w/3" "sunscope". Two impressive, widely spaced naked-eye sunspot groups. Many lookers. A lot of enthusiasm, from both adults and children. Welders filters a hit, as always! No hat. (Attn: Karen Ludwig, 521-3808)
- 9 300) 5/30/90(Wed) F.Pt. 7:25-11:25PM. 6-d. moon, Jupiter, Arcturus, Mizar. Nice sky till last 1/2-hr. Was able to start on moon an hr. before sunset. Electric drive NOT working! Good enthusiasm. Visit by Bob Cotter. \$48.00 + \$7.49 = \$55.49 (\$13.87/hr) Sold 1-CAT.
- 9 301) 5/31/90(Thu) F.Pt.7:10-12:10AM. T-e-r-r-i-f-i-c sky! 7-d. moon (I pointed out the Alpine Valley to lots of lookers); Jupiter(2 & 2--good); Arcturus; Spica. Thanks to my jiggling the plug wire last night at home, clock drive worked tonight. Visit by Bob Pollard, who stayed around and picked-up on my patter, a bit. Spotted Saturn by eye at 12:15AM. Could have done it from SW corner of square by 12:30AM. \$56.00 + \$11.83 = \$67.83 (\$13.57/hr) Visit by Rienhart and Betty (Irish dancers); also participants in American Geophysical Union Convention. Discovered Beta Sco to be a nice double for future use(while collimating)
- 9 302) 6/1/90(Fri)F.Pt.7:20-12:35AM. Hazy sky. 8-d. moon (pointed out straight wall); Jupiter (briefly, and yukky in haze). Excellent lookers early on, then younger and more inebriated crowd. Revisited by Bob Pollard with son, Andrew. My moon patter was excellent, I feel, having done some reading, today. Woody stood by while I packed up. \$67.00 + \$16.46 = \$83.46 (\$15.90/hr.) Sold 3 CAT. Visits Turkey Joe Trabert; Mike Bardoff & friend.
- 9 303) 6/5/90(Tue)F.Pt.8:15-11:30PM. 12-d.moon(Tyco good), Jupiter(very briefly), Arcturus (once). Intermittent high, thin clouds which degraded lunar image, but not fatally so. Visited by Meagan Green; Meagan and Larry of F.Pt., who are leaving on a 6-mo. European trip. Noticed Saturn rising over Rec. Pier fence at 11:40PM. \$35 + \$8.94 = \$43.94(\$13.52/hr)
- 9 304) 6/7/90(Thu)F.Pt.11:15-2:15AM. Moon, hours before full(great w/40mm Kelner); Antares(requested by guy who heard about it tonight on "Star Date"; Saturn!(First time this year! Began looking for it at 11:30PM but didn't see it until +/-12:30AM. Had to move scope from W side to center of square to avoid street light.) Looked great w/20mm Erfle. I arrived so late because early in the evening, between an iffy weather rpt. and my own ambivalence, I hesitated. Invited Isabel for a walk. As we walked the moon looked better and better, and by time we got back it was inspiring enough to get me to pack-up and go. Again, for the umpteenth time, I saw that no matter how fearful I am about going out, once I'm there I feel good, plus people love what I'm doing! When will I ever learn?? Visited by a guy who recently had a photo of plane passing moon published in S&T. \$30.00 + \$7.78 = \$37.78 (\$12.59/hr.)

PAGE TOTAL = \$388.11 + 4 T-shirts
 TOTAL TO DATE = \$2,586.09 + 25 T-shirts

- 9 305) 6/10/90(Sun/Mon)Fpt. 12:00-1:00AM. Moon and Saturn accessible by about 11:30PM, but I hesitated to set-up because the place didn't feel all that right--very young kids, windy, festival stands cluttering square. After setting up had ok traffic briefly, but then lookers not making contributions. Visited by Jill and Ian Kendal, both of who I gave rides home. \$6.00 + \$3.10 = \$9.10 (\$9.10/hr.) "UFO"! My first looker excitedly proclaimed that something was moving in front of the moon. I looked and saw a small, insect-like object slowly drifting to the left (which would probably be from NE to SW in real sky, as we were looking thru scope w/o star diagonal). My looker said it looked round, whereas I saw it with protuberances. My look was very brief. Moon was rising in east.
- 9 306) 6/12/90(Tue)Fpt. 10-1:00AM. Albireo(10-11:20). Nice! Lookers liked it. Saturn(11:20-1:00). Also nice! Few passersby by 1:00AM. Packed up--even tho nice moon rising. \$25.00 + \$7.50 = \$32.50 (\$10.83/) Alot of non-contribs. Got to hustle more! 1-CAT. Visit by a guy who said he once worked for Tuthill and who is now a chem. major at U of Md. and who said Meade is going out of business!
- 9 307) 6/15/90(Fri)Fpt. 9:05-1:25AM. Arcturus, Antares, and Vega (all briefly), then Albireo (slightly dimmed by haze, but ok); Saturn--11:15PM till clouds came. Alot of young people in Fpt., tonight. Alot looked but didn't contrib. Am beginning to suspect that claims that Saturn is fake is a way to avoid contributing! \$49 + \$19.90 = \$68.90 (\$15.90/)
- 9 308) 6/16/90(Sat)Fpt. 9:00-2:30AM. Arcturus, Albireo, Saturn. Again, alot of young people, and alot of no contribs. A high level of inebriation. When dismantling scope, I discovered that someone had dropped some food matter into dew cap. This is very first time for this to happen. Visited by Pat Tracy. W/Sat., used 80mm when it first appeared but gradually worked up to 133X. Revisited by woman from last night who brought her cerebral palsied +/-30 yr. old son. \$58.00 + \$18.65 = \$76.65 (\$13.94/). Alot of work and discomfort for no great return! Sold 2 L'OPERA! nightshirts.
- 9 309) 6/17/90(Sun)Fpt. 9:00-12:20AM. Arcturus, Vega, Albireo, Saturn(11:05PM from W side of square). Light traffic. Was badgered by a particularly unfortunate derelict for about 1/2-hr. Am getting tired of this kind of thing. \$23.00 + \$14.14 = \$37.14 (\$11.14/)
- 9 310) 6/21/90(Thu)Fpt. 8:55-2:10AM. Arcturus, Vega, Albireo, Saturn(11PM, but could have done +/-10-15 mins. sooner.), Mizar. Nice sky. However, a big ship, the State of Maine, tied up at foot of B'way., caused considerable air turbulence. Moderate but steady traffic. Some enthusiastic lookers and not too many inebriates. \$60.00 + \$13.03 = \$73.03 (\$13.91/)
- 9 311) 6/23/90(Sat)Fpt. 9:15-2:20AM. Antares! (From sunset until Sat. came into view, almost the only star visible was Antares, hovering over the State of Maine!) Saturn (Acquired about 10:45PM. in very clear sky, then intermitted but not fatal clouds.) Albireo (viewed for a short period when Sat. was totally obliterated by clouds!). Fpt. really buzzing with people. Visit by Ross, who was missing for many months. Alot of enthusiastic lookers. Inebriates less obnoxious than usual! Good night, all things considered. \$51.00 + \$28.78 = \$79.78 (\$15.70/hr.) Sold 2-CAT.
- 9 312) 6/25/90(Mon)Fpt. 9-12:00. Supper with Kay D. at Jimmies before setting up. 3-d. moon. Nice!(Crises, Cleomedes). Behind bldg. by about 9:45PM, so I moved across sq. to await Saturn. Showed Albireo till acquiring Sat. at 10:35PM. Light traffic but some enthusiastic lookers. \$23.00 + \$1.76 = \$24.76 (\$8.25/hr.)
- 5 313) 6/27/90(Wed) Camp Notre Dame (attn: Colleen Webster, 679-0704), 9:00-12Noon. Three sunspot projections and slide shows to three groups of campers, ages +/-5-7, 8-10, 11-12. For two of the gps. we looked thru the scope at a cross on a roof before doing the sun. Good kids; no unruliness; good questions. They presented me with two scrolls of astro pictures they painted. Per our agreement, I left 130 star maps for distribution to the campers. \$70.00. I was in good form, I thought.

PAGE TOTAL = \$471.86 + 4 T-shirts
 TOTAL TO DATE = \$3,057.95 + 29 T-shirts

- 44 314) 6/27/90(Wed) Chesapeake Bay Fdn. camp out at Gunpowder St. Pk.(Hammerman)(Attn: Linda Block, 527-1879). I arrived at 6PM for supper. Starting at 8:45PM, I gave a 30-min. talk. Early in evening the sky looked very bad, but by 9:15PM could see 5-d. moon pretty well. Set-up scope and from 9:30 till 11:00PM showed moon, Albireo, Mizar, Saturn(which I had alot of trouble finding--never saw it by eye!). Gave out 15 "Getting started..." and 20 star maps. Because front gate was locked at 9:30PM had to park my car outside the gate and have Linda drive me back to it in their truck after session.\$50.00
- 9 315) 6/28/90(Thu) Fpt., 8:45-10:20PM. 6-d. moon. Sky alternately clear/murky, then finally all clouds. Moderate, but enthusiastic traffic. \$16.00 + \$3.97 = \$19.97 (\$12.61/hr.)
- 9 316) 7/2/90(Mon) Fpt., 7:40-12:20AM. 11-d. moon; Saturn by 10:10PM. Clear sky, but for first several hours alot of clouds. Moderate traffic. Visited by Colleen and Kelley, counselors at Camp Notre Dame. \$37.00 + \$9.35 = \$46.35 (\$9.93/hr.) Among lookers was a couple from Phila. who had just bought a 60mm refr. We talked alot, they stayed for Sat., and I gave them literature.
- 9 317) 7/4/90(Wed) Fpt. 8:10-1:35AM. 4th of July night in Fpt. Alot of people out for Harborplace fireworks. Most positioned on pier, but when display began they discovered it was not viewable from there. They scattered to other locations, incl. sq., where display could be seen down Shakesphere St. Great fireworks! 13-d. moon. (Used 40mm K. alot, as it showed whole moon.) Saturn. Alot of no-pays. Also some very good, enthusiastic lookers! Visited by David Franks; also by a family w/kids at Notre Dame Camp.\$64 + \$80.79 (\$14.92/hr.) Antares just 1/2° N. of moon in mid evening. Had both in same view w/Kelner! As was setting-up discovered bubble level missing! Why? Len, the hotdog man got a level from his truck for me.
- 9 318) 7/17/90(Tue) Fpt. 8:50-1:05AM. First usable sky in 13-days! Arcturus, Saturn(found w/ binocs 9:15PM from mid square, lost it in haze, found w/scope at 9:30PM), Albireo(briefly). Visited by Rebecca V., also David and Jerry Seton. Early sky hazy, then clear, but with poor seeing. Alot of enthusiastic lookers. First time ever in Fells Pt.--a couple on motorcycle circling area, woman bare breasted! \$37.00 + \$8.24 = \$45.24 (\$10.64/hr.)
- 9 7/18/90(Wed) Fpt. 9-12m.n. Arcturus, Vega, Albireo, Saturn(not aquired till 10PM, because I was searching too low in sky!) Hazy sky. Alot of nocontribs., plus light traffic. Visit by Mike Potter. At same time Fells Pt. was quiet, one looker reported that Harborplace was "loaded" with people. Must renew effort to find a spot there! \$17.00 + \$5.70 = \$22.70(\$7.57/hr.)
- 9 320) 7/19/90(Thu) Fpt. 9-10:30PM. Arcturus, Vega, Saturn. Night of Balto. Folk Music Soc. concert. A nice crowd on hand. I set up in mid-square, expecting to get Sat. ok from there. However, hazy night, making it hard to find Sat., even w/binocs. Then, when I finally found it, it was behind tree till 10PM. Very frustrating! Unable to find Albireo, also, maybe due to haze. At conclusion of concert, since I could not see Sat. by eye, I packed up. I think I would have received good contribs. had I found Sat., or even Albireo, while concert was taking place.\$11.00 + \$5.36 = \$16.36 (\$10.91/hr.)
- 9 321) 7/24/90(Tue) Fpt. 8:55-12:35AM. Saturn. Good sky, finally. Moderate traffic. Lots of no contribs. Visit by Isabel, in a huff. Large group of Morrocan lookers, only one of whom spoke any English. End of scope grabbed by a woman and pulled down. \$37.00 + \$11.01 = \$48.01 (\$13.09/hr.) Sold 1-CAT T-shirt.
- 9 322) 7/25/90(Wed) Fpt. 8:45-12:40AM. Saturn. Ok sky. Steady traffic. Felt discouraged at set-up time because of City trucks unloading stage infront of my spot (on sidewalk, mid-square). Set-up anyway. They were out of the way by +/-9PM. \$37 + \$9.15 = \$46.15 (\$11.78/) Sold 4-CAT (to a guy who said he just won the lottery and got them for 3 women and himself!).
- 9 323) 7/26/90(Thu) Fpt. 8:15-12:05AM. BFMS concert night. 4-d. moon. Viewed thru intermittent clouds from E. side of mid-square. With moonset moved to mid. sq. for Saturn. Clouds, then very clear. Enthusiastic lookers! \$35 + \$11.59 + \$46.59 (\$12.15/hr) Sold 11'OPERA nightshir

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PAGE TOTAL = \$422.16 + 6 T-shirts
TOTAL TO DATE = \$3480.11 + 35 T-shirts

- 9 324) 7/27/90(Fri) Fpt. 7:15-12:05AM. 5-d. moon, then Sat. Exhilarating night! Intermittend clouds, so back-and-forthed between setting moon and Sat. Alot of enthusiastic lookers. Visited by Manny Richman, Will Werley(who helped me pack-up), Terry (Irish dancer). By midnight more clouds than clear, so closed-up and went to Gandy Dancer. Got into arguement with a born again, who said people who don't believe will go to hell. I countered that god is like Hitler: either you believe in me or off with your head! \$51.00 + \$20.98 = \$71.98 (\$14.89/hr.) Was reminded by looker of Stevie Wonder's "Saturn". Also visited by Malcom Willette of BAS with his wife, Pat.
- 9 325) 7/28/90(Sat) Fpt. 8:30-12:30AM. 6-d. moon, Sat., Albireo(once). Sky started quite cloudy but then cleared nicely, till about 12:15AM. Good traffic. Enthusiasm! Visited by David Kendall most of eve. Later, we had beer, then I drove him home. Given watch by hotdog man, Len. Will give T-shirt in exchg. Gave out lots of maps. David very impressed with enthusiasm of some lookers. I am thinking I am "preaching" back-to-basics! \$62 + \$18.59 = \$80.59 (\$20.15/hr.). Mainly used 100X. Everyone seemed satisfied with it.
- 9 326) 7/29/90(Sun) Fpt. 9-11:20PM. Started late due to early eve. party. 7-d. moon (rugged!), Saturn(beautiful), Albireo (once). Nice sky. Moderate but enthusiastic lookers. Quit when clouds rolled in, but traffic was getting slow, anyhow. \$22 + \$6.95 = \$28.95 (\$12.42/)
- 9 327) 7/31/90(Tue)Fpt. 7:40-12:00MN. Great sky! 9-d. moon, Sat.(Titan + Rhea), Albireo(once). Good traffic, and alot of enthusiastic lookers. Gave out alot of literature. Collected "I love opera" in Portugese and Japanese! \$59 + \$12.12 = \$71.12 (\$16.42/) 1-L'OP! + 2-CAT
- 9 328) 8/1/90(Wed)Fpt. 7:30-11:55PM. Another great sky. 10-d. moon, Sat.(Rhea easy!), Albireo (once...for daughter of Mark Fiken + her mother(?) who was VERY enthusiastic). Moderate traffic. \$47 + \$11.98 = \$59.98 (\$13.58/hr.) Her name Rhea, same as Saturn's moon.
- 9 329) 8/2/90(Thu)Fpt. 7:25-12:25AM. Great sky between scattered high clouds. 11-d. moon, Sat., Albireo(once). 3rd and last BFMS concert. Visits by BFMS friends, as well as David & Jan, 1 Robbin Bullock (bought CAT). Alot of enthusiastic lookers! \$61 + \$11.19 = \$72.19(\$14.44)CAT
- 5 330) 8/3/90(Fri)Fpt. 8:00PM-1:00AM. Good sky, then some high haze. 12-d. moon, Sat.(Titan and sometimes Rhea). OK traffic; some enthusiasm. Visit by Dick Ochs & friend. Visit by David K. who taped 1-hr. of my patter for me. \$70.00 + \$20.60 = \$90.60 (\$18.12) 1-CAT
- 8 331) 8/4/90(Sat) FAMILYCON 1, Space Science-Science Fiction and Fantasy for the Whole Family. Ref.: Dale Arnold. Holiday Inn, Timonium, Md. Ref.: Dale Arnold. Sunspot viewing and slide show. Audience of one! NC
- 7 332) 8/4/90(Sat)Fpt. 8:20-9:40PM. 13-d. moon, Sat. Sky murky for first hr., then bad haze. Closed up. \$21.78 (\$14.52/) 2-CAT (David Franks, in Mikes Bar)
- 7 333) 8/7/90(Tue)Fpt. 8:30-12:40AM. 16-d.moon(nice!), Sat., Albireo(once). Bad cloud interference w/Sat. early-on, but then very nice sky. Visit by Sandy Dalsheimer and son. Good traffic + enthusiasm. \$53 + \$12.34 = \$65.34 (\$15.68/hr.)
- 9 8/12/90(Sun) Fpt., but didn't set-up because of haze.Saw Sat.w/binocs but barely by eye.
- 9 334) 8/14/90(Tue)Fpt. 8:45-12:45AM. Saturn(star nr. Titan nearly same mag.) Light to moderate traffic. Ok sky. A few enthusiastic lookers. \$38 + \$9.32 = \$47.32 (\$11.83/) 1-L'OP! NS
- 9 335) 8/16/90(Thu)Fpt. 8:30-12:00MN. Vega, Saturn(nice thru hazy but steady sky), Albireo(once). Moderate traffic, but alot of young, skeptical no-contribs. A drag! Visited by Susan Rudy, as well as Wed. night dancer. \$33 + \$7.37 = \$40.37 (\$11.53/) Sold 1-L'OP NS.
- 336) 8/17/90(Fri)Fpt. 8:30-12:45AM. Vega, Saturn(ibid.). Moderate to heavy traffic, but alot of no-contribs. Had a looker named Martin J. Saturn (he showed me a credit card w/name) who was ecstatic over his first look at his namesake planet. He said he had only big bills and would return w/contrib., but he never did. Visited by Frank Heyn and Elsbeth! Visit by Christine and Al of BFMS. Alot of doubters, tonight. Am getting tired of crowd in Fpt. and wish I could be in the family scene at Inner Harbor. In Fpt. I'm sort of like a school teacher with an out-of-control class! Visited again by CAT customer, who said she's been offer \$50 for her black CAT in Bermuda. \$48.00 + \$14.71 = \$62.71 (\$14.76/)

PAGE TOTAL = \$712.93 + 9 T-shirts
TOTAL TO DATE = \$4193.04 + 44 T-shirts

- 9 337) 8/18/90(Sat)Fpt. 8:20-11:50PM. Saturn. Nice, then haze, then clouds. Adjourned to Cat's Eye for Irish Music(Peter and Dan); raining when I left at 1:45AM. Good traffic. Visited by Ross. Alot of genuinely enthusiastic lookers--alot better than last night! \$60.00 + \$19.31 = \$79.31 (\$22.66/hr)
- 9 338) 8/25/90(Sat)Fpt. 9:50-1:25AM. First ok night in a week, tho it was very humid and hazy. Set-up late because of early evening rain storm. Saturn. Alot of skeptics, especially because no background stars--not even Titan--visible in field. (Sat out storm in Warf Rat with Jan Shipley.) \$60.00 + \$14.72 = \$74.72 (\$20.85/hr.) Sold 2-Nightshirts.
- 9 339) 8/26/90(Sun)Fpt. 7:50-11:50PM. Hazy sky, but ok. 6-day moon(terrific at 50X; Catherina nice); Saturn(no moons or background stars). Slow traffic but enthusiastic lookers. I was in good shape; did alot of talking. \$34.00 + \$15.14 = \$49.14 (\$12.29/hr.)
- 9 340) 8/27/90(Mon)Fpt. 7:55-11:25PM. Yukky sky at sunset, but very good a little later. 7-day moon(picture perfect view!); Saturn + Titan(magnificent). Slow traffic but a number of enthusiastic lookers; some doubters. Visit by Dorris Gugel's grandson, Derek, and family. \$28.00 + \$8.63 = \$36.63 (\$10.47/hr.) 1-CAT.
- 9 341) 8/28/90(Tue)Fpt. 7:15-8:30PM. Great sky starting out, but it turned to yuk--just the opposite of last night! 8-day moon(super!); Saturn. \$10.00 + 0.91 = \$10.91 (\$8.73/)
- 0 342) 8/30/90(Thu)Fpt. 6:50-12:20AM. Perfect sky. What a difference it makes in my outlook and in my looker's enthusiasm! 10-d. moon(Breathtaking! Sinus Iridum and the Jura Mts. just entering daylight and noticed as a "hook" by many lookers.) Saturn (Titan and, w/little effort, Rhea.) Visits by Elsie of Something Else, Charlene, Pat. Alot of enthusiastic lookers. Visit by Ethan Schreier of STScI who said center 15% of HST mirror is performing well and yielding spectacular images! \$76 + \$5.93 = \$81.93 (\$14.90/hr.)
- 10 343) 8/31/90(Fri)Fpt. 7:05-12:05AM. Nice sky, but not like last night when I used 160X often. Tonight stayed w/100X. Air turbulence very noticeable. 11-d. moon and Sat. Sat. directly above moon at start. Picked it up about 7:30PM by moving N from moon. Sat. looks kind of washed out by daylight. Was first time I've seen it before sunset. Good traffic, incl. many enthusiastic children. Traf. dropped precipitously at 11:30PM; packed-up shortly after. \$79.00 + \$7.99 = \$86.99 (\$17.40/hr.)
- 10 344) 9/1/90(Sat)Fpt. 7:25-11:30PM. Nice sky, then intermittent clouds--more clouds than intermittent. 12-d. moon(great craters on terminator!); Saturn. Real good interest! Visits by Joyce Y., Ellen (Irish dancer). Alot of street performers--Cajun music(Will Sakina, Gene), chain saw juggler, rock & roll group, one-man-band. Lost everything to clouds at 10:45PM, but then was visited by family from Towson who came especially to see Saturn! Set up again. Could see moon, but neve4 found Sat. They contrib. \$5. \$83 + \$ 7.37 = \$90.37 (\$22.13/hr) Packed up and visited with Cajun musicians; ended evening at Cat's Eye Pub.
- 0 345) 9/2/90(Sun)Fpt. 7:40-9:40PM. Hazy to cloudy sky. 13-d. moon(nice!), behind clouds 25% of time. Never found Saturn. Finally, gave up. Visit by Joyce & friend. \$16 + \$8.16 = \$24.16. (\$12.08/hr.) Sold 1-L'OP. Nightshirt. Visit by young woman who brought her mother to see Sat, but it was not visible. Fpt. very nice, tonight. Crowd was very mature, eager. Many families w/young children. I had to turn away scores of people because of clouds!
- 0 346) 9/3/90(Mon)Fpt. 7:30-12:00MN. Pristine sky early on, then intermittent clouds. However, could switch from Sat. to moon, as necessary. 14-d. moon(Very bright--should have had filter. Breathtaking w/high clouds streaming past it!) Sat.(Great--Rhea easy!). Quiet in Fpt., but people seemed to come out of nowhere, so I was fairly busy. Visit by Isabel. Many enthusiastic lookers. \$57.00 + \$17.57 = \$74.57 (\$16.57/hr.) Acquired Sat. 5-mins before sunset! Also showed Albireo to some especially interested viewers!
- 10 347) 9/4/90(Tue)Fpt. 7:45-11:05PM. Another transparent sky! Sat.(but did not find till 15-min. after sunset); Full moon (used 50X w/filter). Quiet night in Fpt.(easy parking!). Visit by Cliff Durant & friend. Some obnoxious derelicts. \$43.00 + \$8.78 = \$51.78 (\$15.54/hr.)

PAGE TOTAL = \$660.51 + 4 T-shirts
TOTAL TO DATE = \$4,853.55 + 48 T-shirts

9 348) 9/8/90(Sat)Fpt. 7:30-8:15PM. Nice sky all day, but then alot of clouds moved in from SE at sunset. Set-up anyway, and managed to show SATURN through breaks in clouds to enthusiastic lookers for 45 mins. By 8:30PM became discouraged, and thinking about two dances to choose from, tonight, I packed-up and headed home. By the time I got there the sky had become very nice, but, given the parking situation, I didn't have the momentum to return to Fpt. Unpacked and went to L. Lane. After dance I visited with Denny Bliss and Dorothy Honemann. Upon returning home I found the following message on my telephone answering machine.

MAN (alot of noise in background) Herman, we're down in Fells Point, and we miss you, dearly! We want to know where you are, Herman.

WOMAN (shouting) HERMAN! HERMAN!

MAN We came here to see the splendors you have to offer us.

2ND MAN We want to see Saturn, Herman!

WOMAN (shouting) HERMAN!

MAN We want Saturn, Herm!

2ND MAN SATURN!

WOMAN WE LOVE YOU, HERMAN, WHERE IN THE HELL ARE YOU?

MAN SATURN, HERMAN, WE WANT SATURN! (noisy hang-up)

I feel bad about not being there, last night. I guess I should reorientate my priorities so I give the weather and all the other contingencies all the benefit of the doubt I can before ducking out. This was 2nd usable night in a row I've missed for dancing. Beside some kind of obligation to the public to be there, I should remember that the telescope, for better or for worse, is my main income source, right now. It's a killer for my social life, though. Despite being surrounded by people, I am in near total social isolation when I'm there. I wish I could find a woman who would be willing to take part in this with me, who would like to run the telescope with me! \$14.00 + \$1.90 = \$15.90 (\$21.20/hr.)

9 349) 9/10/90(Mon)Fpt. 7:40-11:20PM. Thick clouds, which dissolved at sunset. Sky was as good as I've ever seen at Fpt. Could see UMA right down to horizon. Saturn (incredible at 160X. Could see Cassini Div. + Rhea with no trouble at all.) Few people around when setting up, but had moderate traffic. Visits by Kate Laseur (married, living in Scotland), Josh (Rhumba Club), Cathy (nightshirt customer). \$39 + \$7.34 = \$46.34 (\$13.24/) 1-NIGHTSHIRT

7 350) 9/15/90(Sat)Fpt. 10:20-12:40AM. Arrived late, having called Virginia Reel at Greek women's dance. Saturn. Low, in lights for last 45mins. Mars! Briefly, because I was cold and Mars was suffering from bad atmospheric. Needs to be higher up, plus scope will need baffle. Visits by Isabel, Ross. Mixture of skeptics and enthusiasts. \$35 + \$17.84 = \$52.84 (\$22.68/)

9 351) 9/17/90(Mon)Fpt. 7:20-10:20PM. Saturn, Albireo, M 31(!). Fpt. appeared very quiet, but as usual people seemed to come out of the woodwork for a look. First looker of evening was a Bob Oliver & family, from Arbutus. Subscribes to S&T and has a Jason. M 31 looked like a misty blob. Cold! +/-50°. \$28.00 + \$7.21 = \$35.21 (\$11.74/hr.) Sold 1 CAT T-shirt.

9 352) 9/22/90(Sat)Fpt. 7:10-12:20AM. 4-d. moon (nice); Saturn (nice); Albireo. Great night. Heavy traffic; interesting and interested lookers up till about 11PM. Then a few inebriates. Then a guy came who saw Albireo a few months ago, was thrilled, and wanted to see it again. Acquired it and then had a long line of lookers who were very impressed and made good contribs. Quit as Sat. dissolved into a blur, tho lookers were still impressed! Decided not to do Mars this time. Enough was enough! Visits by Bruff's brother, Ross, music person, Peter. \$83 + \$31.47 = \$114.47 (\$22.16/hr.)

9 353) 9/23/90(Sun)Fpt. 6:50-10:15PM. 5-d. moon (incredible, as it set down Thames St!), Sat., M 57 Ring Nebula in Lyra (Just to see if it could be seen--which it was...a largish, grey spot!). Clear but turbulent sky. Cold! Some enthusiastic lookers. \$40 + \$7.22 = \$47.22 (13.8/)

PAGE TOTAL = \$311.98 + 2 T-shirts
TOTAL TO DATE = \$5,165.53 + 50 T-shirts

- 10 354) 9/24/90(Mon) St. Paul & 31st! Went to Fpt. but there was to be a memorial service in square at 7:30PM for Harry Reynolds of Harry's Bar. Decided to evacuate to Charles Village. 6:40-9:45PM. 6-d. moon (pointed out Catherina to women lookers). Moon was in Sco, near Antares, and very low. Just as it hit roof on W side of street, Sat. cleared roof on E. side! Nice sky; Sat. very good. Visit by Jenny Keith, author of recent City Paper article on "FAMILICON". \$18 + \$12.69 = \$30.69 (\$9.95/hr.)
- 24 355) 9/25/90(Tue) Glenmore Sailing Assoc. (attn: Carl Gluckert, 301-956-6902). Return performance! Showed slides (mine, plus HST photos); set-up scope after meeting and showed Saturn, Albireo, Gamma AND, M 31. Good interest. \$100.00. Sold 5 star wheels + 1-CAT. Had alot of trouble finding M 31. (Why?) Event held at Essex C.C. Gave Autumn '90 star maps to all.
- 9 356) 9/27/90(Thu) Fpt. 6:45-11:15PM. 9-d. moon (sunrise on Tyco, Clavius, Copernicus, Plato on sunrise line--great!); Saturn (Cassini D. often clear). Moderate, enthusiastic lookers. \$55 + \$13.19 = \$68.19 (\$15.15/hr.) Visit by two Cambodian couples.
- 0 357) 9/28/90(Fri) Fpt. 6:45-11:30PM. 10-d. moon (sunrise on Copernicus); Sat. Hazy, then put out of action by clouds. Packed-up and went to Gandy Dancer. Alot of enthusiastic lookers. Visited by Suzi Nichol, Ross, Jerry (Pikesville Sr. High teacher). \$79.00 + \$13.76 = \$92.76 (\$19.53/hr.) Sold 2-CAT + 1-GD T-shirts. Revisit by Gambodian men. A number of people were impressed by Magellan-Venus photos on TV and aksed if I'd seen them. (No.)
- 9 358) 9/29/90(Sat) Fpt. 6:55-10:25PM. 11-d. moon (lots of craters); Sat. (hazy--Titan barely viz.). Packed-up early because of clouds, but 10-mins. after equipment in car, sky was ok. However, did not set-up again. I would have last year, but now my momentum has slackened. Maybe would have had sky been better. Supper w/ Isabel before stint. Good traffic; some enthusiastic lookers. \$52.00 + \$9.62 = \$61.62 (\$17.61/hr.) 1-CAT T-shirt.
- 9 359) 10/1/90(Mon) Fpt. 6:45-10:55PM. Magnificent sky. Fpt. very empty when I arrived. Parking spaces galore. Felt discouraged and contemplated heading for Chas. Vil. But remembering that when I set up my telescope in Fpt., people started coming out of the woodwork, I stayed--and good thing, because I had a terrific night. Moderate traffic, but everybody was enthusiastic, and nearly everybody contributed. Even had a couple who came with family especially to have a look. Said they lived in N. Balto. Again, had especially enthusiastic lookers! 12-d. moon (Tyco, Schickard, Aristarchus, + lots of craters on terminator); Saturn (I believe I obsv'd. a large white cloud a little below equator for hour or (\$12.72) so before it went around limb!); Albireo (several times); Gamma AND. \$47 + \$6.01 = \$53.01.
- 9 360) 10/2/90(Tue) Fpt. 6:40-11:10PM. Another superlative night--great sky and enthusiastic lookers! 13-d. moon; Saturn. Used 9mm eyepiece several times on Sat. Visited by Mike and Peter, who confirmed my last night's obsv. of cloud on Sat. Took photos of moon thru 40mm and 25mm eyepieces. \$58 + \$8.01 = \$66.01 (\$14.67/hr.)
- 10 361) 10/5/90(Fri) Fpt. (Festival eve!) 6:45-1:50AM. Alot of trucks and stalls in streets, but I lucked out w/parking! Great sky. Saturn, 16-d. moon (awesome!), Mars (scope needs collimation for Mars). Heavy traffic; alot of enthusiastic lookers. Visit by John & Sally (!), Robbin Bullock--who helped me pack-up, Mike & Peggy Potter. \$100 + \$19.56 = \$119.56 (\$16.88)
- 10/6/90(Sat) Despite a nice sky, did not go to Fpt. tonight because of 1) was tired from being at Festival all day w/T-shirt, 2) was afraid place would be too roudy, 3) Ken was in town with some of his NYC friends. Set-up scope on Stadium parking lot for them.
- 10/7/90(Sun) An OK sky but did not go to Fpt. because of fatigue from all day w/T-shirts.
- 7 362) 10/9/90(Tue) Fpt. 6:40-11:35PM. Place seemed deserted and still dirty from Festival. Very quiet at start, but pace slowly picked-up. Great sky! Sat. (saw Rhea in twilight!); Albireo Gamma AND; M 31, Mars (Would have been fine had I had baffle!) Followed Sat. down to the wire, tho was murky at end. \$36.00 + \$2.97 + \$38.97 (\$7.93/hr.)

PAGE TOTAL = \$630.81 + 5 T-shirts
 TOTAL TO DATE = \$5,796.34 + 55 T-shirts

- 9 363) 10/14/90(Sun) Fpt.(6:45-11:10PM) Nice sky! Sat., Albireo, Pleiades(thru finder), Mars (w/mask, but still indistinct). Visited by Isabel. Light to mod. traffic. Some enthusiastic lookers, including an astronomer (Douglas?) from STSci. \$49 + \$11.07 = \$60.07(\$13.60/hr.) Held Sat. till +/-10:40PM.
- 9 364) 10/15/90(Mon) Fpt.(6:40-10:50PM) Fine sky. Sat.(Its atmospheric disturbance visible as intense white band during mid-evening. Albireo, Gamma And, M 31, Pleiades. Visit by Jeanie Pickett and daughters Jennifer and Juliana and friend. Slow traffic; some non-contribs. Maybe should have gone to Chas. Vil. \$26 + \$9.33 = \$35.33 (\$8.48/hr.)
- 10 365) 10/16/90(Tue) Fpt.(6:40-10:30PM) Excellent sky. Sat.(several lookers noticed shadow of planet on rings). Very quiet (bleak) for first hour or so, than traffic picked-up a bit. \$35.00 + \$14.41 = \$49.41 (\$12.89/hr.) My enthusiasm flagged badly, tonight!
- 9 366) 10/17/90(Wed) Fpt.(6:40-9:30PM) A lot more lively in Fpt. than last two nights! Hide and seek w/clouds; finally the big one came. Saturn. Never a really good view. Closed up and went to Bertha's w/Mike P., Peter, Terry, Mike, Bill from STSci. \$34.82 (\$12.29/)
- 9 367) 10/19/90(Fri) Fpt.(6:30-10:15PM) Saturn(fine!); Albireo. Very slow early-on. Very cold, too, with steady wind. Some enthusiastic lookers. Visit by Teresa? \$48.44(\$12.92/hr.) Saturn hit lamppost at 10:15PM. Rather than deal w/ Mars and cold, I went to Gandy Dancer.
- 9 368) 10/24/90(Wed) Fpt. (5:40-9:40PM) 6-d. moon(35-min. before sunset); Saturn(Great! Storm in view early-on, but it was a lot more diffuse than 2-wks. ago.) A lot of enthusiastic lookers. Mars rose just as I lost Sat., but it wasn't interesting enough to stay with. \$56.43 (\$14.11/hr.)
- 10 369) 10/25/90(Thu) Fpt. (6:15-7:30PM) 7-d. moon; Sat. All day the weather rpt. was for rain, tonight. But at 5:30PM the sky was nice, so I headed for Fpt. Clouds began collecting a little after sunset, and I was soon clouded out.(Anticipating rain, I neglected to rechg. battery from last night. Substituted old D batteries pack from last year. It worked fine!) Visit by Jane Shipley and her son, Trevor. \$8.68 (\$6.94/hr.)
- 9 370) 10/26/90(Fri) Fpt. (6:30-11PM) 8-d. moon (Archimedes!), Sat. Very cold(long Johns weather!) Visit by Myra & Peter. Ok traffic. \$46 + \$4.96 = \$50.96 (\$11.11/hr.)
- 9 371) 10/27/90(Sat) Fpt. (5:30-11:45PM) 9-d. moon. (Clavius-Tyco-Straight Wall-Copernicus-Alpine Valley-Plato--all great! Terminator on Copernicus all evening. Often used 160X on it.) Saturn(nice! Lost by 9:45PM.) Preliminary Halloween in Fpt. A number of people in good costume. Many enthusiastic lookers! \$89 + \$21.12 = \$110.12 (\$17.62/hr.) Visit by Louise Zamoiski; by 6 or so Morris dancers(enthusiastic lookers!).
- 9 372) 10/28/90(Sun) Fpt. (END OF DST! 4:30-9:05PM.) Quiet scene, but enough lookers to keep me from getting bored or feeling isolated. 10-d. moon (Copernicus-Bullialdus-Jura Mts.); Sat.(Titan & Rhea). \$42 + \$13.76 = \$55.76 (\$12.17/hr.) Visited by my little, short boy looker. He took a star map. Gave out a lot of maps tonight. Set-up near "Mr. Kiosk" for protection from strong wind.
- 3 373) 10/29/90(Mon) St.Paul & 31st.(4:55-8:55PM) 11-d. moon (Outstanding feature was crater Gassendi, 55-mi., which was not on my map but which I'll put on.); Sat.(Lost behind roof at 7:55PM. Not as steady as from Fpt.) \$35 + \$18.43 = \$53.43!(\$13.36/hr)
- 2 374) 10/30/90(Tue) St.P. & 31st.(4:40-9:00PM) 12-d. moon (Aristarchus w/Schroter's Valley), Sat.(Rhea easy!). Visits by Mark Steiner, Patricia, Sharon, Andy (JHU astro. student); the guy(a lawyer) who gave me the Mayhew ref. \$25 + \$16.87 = \$41.87 (\$9.66/hr.)
- 2 375) 10/31/90(Wed) St.P.&31st.(5:35-6:25PM) Clouds all day, clearing at sunset, then clouds again. 13d. moon (Great craters on terminator); Sat. Had dew cap decorated w/little pumpkin reflectors; gave peanuts to T&T'ers. \$9 + \$3.89 = \$12.89 (\$15.49/hr.)
- 9 376) 11/1/90(Thu) Fpt.(5:30-10:30PM) Nice sky but dewy. Everything wet! Sat.(took 25-min. to find! Why?); 14d. moon (Tyco; scattering of craters on terminator. Very slow at start, but traffic picked up mid-evening. Ok enthusiasm. \$56 + \$15.49 = \$71.49 (\$14.30/hr.)

PAGE TOTAL = \$689.70 + 0 T-shirts
 TOTAL TO DATE = \$6,486.04 + 55 T-shirts

- 9 377) 11/2/90(Fri) Fpt.(4:45-12:30AM) High, thin clouds early, but then nice sky. I first set up at trolley stop to catch the rising full moon, but it never came into view-- maybe because of clouds, or maybe because of my location--or both. Moved across street to square and had Sat. by 5:30PM. After loosing it concentrated on 15 d. moon (full at 4:48PM). Was very painful for me to show this moon with so few craters in view, knowing what it looks like when not full. I concentrated on traces of craters on the limb and Tyco. Most lookers seemed impressed, despite my anguish! \$126 + \$18.94 = \$144.94(\$18.70/)
- 9 378) 11/3/90(Sat) Fpt. (5PM-2:10AM!) Ok sky with intermittent high clouds which, around midnight, produced a spectacular ring around the moon which was noticed by almost everybody in Fpt.! I became the resident expert on the ring, describing it as a very high cloud of ice crystals, with each crystal acting as a little lens and refracting the light of the moon into a ring-like rainbow. That explanation was well accepted. Sat. (nice for a little while at 100X); 16 $\frac{1}{2}$ moon--Mare Crisium, Langrenus both awesome; Mars(a few times, but only vague shading visible); Jupiter!(spotted it a little after 1AM. As always, great! Two moons on each side, very symmetrically arranged.) Dropped star diagonal(it fell out of scope); no damage. Moon occulting many bright stars for several hours--Pleiades. Visits by Isabel, Lou Glazer, Andy. \$192 + \$38.12 = \$230.12 (\$25.10/hr.) 1-CAT T-shirt
- 4 379) 11/5/90(Mon) Rotunda! (5-7PM) Sat. Ok sky at sunset, but anticipated clouds arrived suddenly at 7PM. Good interest; alot of no contribs. Alot of school-aged kids, to whom I gave star maps. \$24.00 + \$9.35 = \$33.35 (\$17.68/hr.)
- 4 380) 11/8/90(Thu) Rotunda. (5-7:45PM) Sat. Moderate sky. Some enthusiastic lookers. Alot of no contribs. Quit because of intermittent clouds, + Sat. getting low.\$39 + \$12.61 = \$51.61 (\$18.77/hr.) Could have switched to Mars but decided it wouldn't be interesting.
- 9 381) 11/11/90(Sun) Fpt.(4:50-6:20PM) Sat. Acquired on first try 5-mins. before sunset. W/my increasing ability to find things in the daytime, I should think more about going to Fpt. in mid-afternoon on week-ends. Closed down by clouds. \$14 + \$5.36 = \$19.36 (\$12.91/)
- 4 382) 11/14/90(Wed) Rotunda(4:50-8:20PM.) First outting of my 4 $\frac{1}{2}$ year! Sat.(easy acquisition; followed it right down to housetops...about 8:15PM.); Mars (briefly...thru filters at 100X, but no detail). Used 133X on Sat., mostly. Alot of enthusiastic lookers, plus I was feeling fairly upbeat. Had two very curious local teenage boys on bikes. Gave them maps. \$56 + \$14.65 = \$70.65 (\$20.19/hr!)
- 4 383) 11/15/90(Thu) Rotunda(4:40-8:10PM) Fine sky; balmy temp. Sat.(Acq. 12-min. before sunset); Albireo (once); Mars (w/mask at 133X w/red filter could seen some feature. Will do in Fpt. tmw. night.) Visits by F. Claude and John the Dancer from Irish scene. One of last night's teenagers returned. \$39.00 + \$15.45 = \$54.45 (\$15.56/hr.) Visit by Bill...Learning Ctr. teacher. Gave up on Sat. at 8PM.
- 7 384) 11/17/90(Sat) Fpt. (5:15-7:45PM) Sat.(ok for first hr., than intermittent boiling. Hit light +/-7:30PM.); Mars (uninteresting, even tho I tried mask and red filter). Visited by a tug boat worker, Bill Parker, from Outer Banks, NC, who is an active amateur astronomer w/8" Bausch & Lomb SCT. \$20 + \$10.50 = \$30.50 (\$12.20/hr.)
- 9 385) 11/18/90(Sun) Fpt.(4:20-7:40PM) Sat.(Acquired $\frac{1}{2}$ -hr. before sunset, with dancing friends Al and Christine looking on in amazement!)Used Kiosk for windbreak, tonight. Mars(briefly, while Sat. behind corner of Adm's. Cup) Visited Cat's Eye after stint, where I was seranaded by a great improvised Saturn song by patron w/guitar! Gave a stranded women, Sandra, a ride home to Towson. \$35 + \$6.82 = \$41.82 (\$12.55/hr.) $\frac{1}{2}$ -hr. before sunset, at 80X, Sat. was very pale and, to me, very uninteresting. However, lookers were impressed Visits by Irish dancers, Patrick and Kenny.
- 4 386) 11/19/90(Mon) Rotunda(4:45-8:35PM) Sat.(V. nice!); 2 $\frac{1}{2}$ -d. moon(twice); MARS!(Night of its closest approach till 2001. Not bad, especially because it was +/- $\frac{1}{4}$ degree W. of a bright (2nd mag.?) Tauri, making a beautiful pairing that made me feel good about Mars! Visitor Matt Lallo thought he saw Sirtis Maj. at 80X. Despite front page E. Sun article on Mars, me, etc., no one showed up especially to see it at its closest, tho some had read art.) Accompanied by Tom Keyser of E. Sun. He got alot of good material, I'm sure! Visits by Buzzy H., Ashley, Stacy(L. Roland dog walker). \$47 + \$16.65 = \$63.65 (\$16.61/). Just a sunset in SW noticed what looked like a plane w/contrail passing by a bright star(-3 or -4 mag.). Thru finder "star" remained starlike. Did not think to observe "plane". Both faded out like satellites after 1-min or so. Mike Potter also saw. Was it the Shuttle?

- 4 387) 11/20/90(Tue) Rotunda(4:45-8PM) Sat.(2 moons); 3½-d. moon(all lookers impressed!); Mars(not as nice as last night because bright star no longer in field). Heavy traffic at times. Visit by Sue Spellman. \$59 + \$13.28 = \$72.38 (\$22.27/hr.)
- 4 388) 11/21/90(Wed) Rotunda(5:15-7:30PM) Opening delayed by clouds. Sat.; 4½-d. moon. Lost moon & Sat. in clouds +/-7:15PM. Turned to Mars but shortly closed down as it was uninspiring. Good enthusiasm; alot of no-contribs. \$28 + \$10.35 = \$38.35 (\$17.04/) Visit by Dan Rodricks.
- 9 389) 11/21/90(Wed) Fpt.(10-1:00AM) Hazy but good sky. Mars(better than earlier); M 42 (everybody impressed by it!); Jupiter(acquired +/-11:15PM? 4 moons, then 3. Great!) Visit by Isabel. Packed up as inebriation level rose. Visit by Mike Potter. \$35 + \$6.84 = \$41.84 (\$13.95/hr.) Visit by Mark Feiken and family.
- 4 390) 11/26/90(Mon) Rotunda(4:25-9:10PM) Late afternoon sky very clear! 9½-d. moon(Clavius-Tyco-Bullialdus-Straight Wall-Copernicus-Plato); Sat.(nice); Mars (alot of interest due to morning Sun art.). Visit by Joe Balkofsky and Beth. \$59 + \$16.58 = \$75.58 (\$15.91/)
- 4 391) 11/27/90(Tue) Rotunda(5:15-8:30PM) Late start because of clouds. 10½-d. moon (good--same as last night's features, plus Jura Mts.), Sat.; MARS! (Best opposition till 2001. Considerable Mars consciousness among passersby. Call from Cindy Lee on TAM saying she wanted to see Mars and would drive around to find me--which she did!) Visits by Cindy/Jennifer, Linda Baer, Andre Papitonio. \$40.37 (\$12.42/)
- 4 392) 11/30/90(Fri) Rotunda(4:30-7:45PM) Sat., 13½-d. moon(Tyco's rays outstanding!); Mars. Moderate traffic, but with some very intrigued young people. Visits by several Irish dancers, Laura Laura Kaufman(Wed. dance). \$34 + \$4.92 = \$38.92 (\$11.98/)(Included two \$5.00 contribs.) Was brought yougurt by one looker and coffee by another. My energy was good, but I have mild bronchitis. Resistance to cold was low. No Fpt. tonight!
- 9 394) 12/1/90(Sat) Fpt.(5-11PM) Fells Pt. Xmas night. Alot of people walking around at supper time. Lots of families with kids. Gave out many star maps. Sat.(very nice till doused by clouds); 14½-d. moon (+/-6hrs. to full; few craters on terminator, plus Tyco; low contrast compounded by haze. Talked alot about tmw. morning's closest perigee since 1912); Mars (on request; no detail). Heavy traffic! \$136 + \$34.48 = \$170.48 (\$28.41/!) As with last month's full moon, there was a widely noticed halo around the moon, about which I became resident expert. Mars was close to moon and therefore well within halo.
- 4 395) 12/6/90(Thu) Rotunda.(5:10-6:10PM). Sat. Spend 25-mins trying to find it. When I did, it was at 67% on my dec. dial, rather than the usual 66.5. Why? Kate Charles stood by for 10-mins. while I searched. Shut down by clouds. Decided against doing Mars, which was still in the clear. Bill Fulton asked me to move tripod leg off ramp next time. \$16.80 (\$16.80/)
- 3 396) 12/7/90(Fri) Space Grant Consortium(8:30-2:00PM) Took 3" refractor, set it up, and greeted students arriving to view the live classroom presentation by astronomers and astronauts riding in the orbiting Space Shuttle with the Astro-1 UV and X-Ray telescopes. I also lead a Q & A session from the dias. Auspices Anne Anikis. After the show Anne, Janet, Skip and I lunched at the Hopkins Club compliments the Consortium. Anne seemed pleased with my work. \$75.00.
- 9 397) 12/8/90(Sat) Fpt.(4:50-11:50PM). Visited by Carl, a Eve. Sun photographer, who took alot of photos early evening for Tom Keyser's story about me. I think he got some interesting shots! Sat., then Albiero, Mar, Mars-Pleiades(together in finder!), M 42(alot!), and finally Jupiter (+/-10PM. 3 moons, then 2, then 3). After loosing Sat., and not feeling enthusiastic about Albiero, was ready to pack it up for a while, till I discovered Mars, Pleiades. A number of enthusiastic young people; gave out alot of star maps. Packed up because of cold wind. \$77 + \$15.27 = \$92.27 (\$13.18/hr.)

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PAGE TOTAL = \$661.99 + 0 T-shirts
TOTAL TO DATE = \$7,890.27 + 56 T-shirts

- 9 398) 12/9/90(Sun) Fpt.(4:45-8:30PM) Some enthusiastic lookers, but generally quite quiet. Sat.(nice, while it lasted!), Mars, Mars/Pleiades, Gamma AND(nice!), M 42(nice!). Visited by Robbin Bullock. Collimated scope. I hope it stays a while! \$31.14 (\$8.30/) Sold 3 T-shirts! Good sky, cool but windless night, Too bad not more people!
- 4 399) 12/10/90(Mon) Rotunda(5:10-5:45PM) Sat.(thru intermittent clouds). Surrendered to clouds and gusty winds after 35-mins. Mars(for Emily & Mike Franch). A lot of enthusiastic wellwishers! Met Kevin(?) McKnight, an assist. ed. of E. Sun. He's an amateur and was enthusiastic. Said he'd look into story Tom Keyser is writing. \$5.00 + \$4.81 = \$10.81 (\$18.54/hr.) Lost +/-20 mins. looking for Sat. When found was again on +/-68, rather than 66.5. Checked level after removing scope and found it considerably off. I suspect tripod leg is slipping down sloped sidewalk ramp.
- 4 400) 12/12/90(Wed) Rotunda(4:45-5:50PM) Sat.(found ok but intermittent clouds). Discovered scope in need of collimating. Should have left it alone the other night! When cloud blocked Sat., I recollimated on Fomalhaut. Packed it up! \$5.52 (\$5.10/hr.) Sat. sets about 7:05PM tonight. I had very little enthusiasm tonight!
- 4 401) 12/14/90 Rotunda(4:45-7:15PM) Sat. Great sky. Followed it to within 1/2-hr. of setting! Albireo. Visited by a woman who reported sub to ODYSSEY for granddaughter, thanks to my handout, and a man who is now into astronomy, for same reason! Very cold! \$40.20(\$16.08/) Scope collimated ok! Tonight, I was in a very good head, maybe because both the sky and my telescope were in good form!
- 4 402) 12/19/90(Wed) Rotunda(4:40-6:45PM) 2nd-d. moon(impressive); Sat.(nice, a few degrees W. of moon) Some enthusiastic lookers. Mars(briefly). \$27 + \$4.81 = \$31.81 (\$15.27/hr.)
- 9 403) 12/31/90(Tue) Fpt.(7:15-12:45AM) New Years Eve, Blue Moon, and my picture w/article on front page of Evening Sun! My usual problem w/full moon, except I placed blue filter in 40mm K eyepiece. A few lookers believed moon actually was blue, but I explained situation to them! Some acknowledgement of article. Also showed M 42 and Jupiter (3 moons, then 2, then 3, then 4!). Gave out a lot of maps. I arrived around 4:30PM and had no trouble parking. Place was kind of empty. Had some soup and pie at Jimmies, talked w/Cathy of Great Bears to pass time. Beautiful moonrise. Set up at 7PM but did not have first lookers till 7:15PM. Traffic picked up steadily from then, and was good by 8:45PM. Kiosk opened around 8PM. Visited by Isabel, who arrived about 9:30PM. She hung around but did not participate. We had big tiff around 12:30AM because she wanted to go out to eat, and I was still busy with lookers. Had a lull around midnight while pointgoers watched Inner Harbor fireworks, visible down Shakesphere and Lancaster Sts. Actually, because of the rising inebriation level, 12:45AM was a good time to pack up. Had had some very nice, enthusiastic lookers (I wish I were so nice in real life!). \$95.00 + \$12.59 = \$107.59 (\$19.56/hr.) (Included 2 \$5 contribs.) Sold 2-TE T-shirts.

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PAGE TOTAL = \$227.07 + 2 T-shirts
 YEAR TOTAL = \$8,117.34 + 58 T-shirts

	SP 1/2/90 34-copies star map (Moore) (both sides)	\$ 1.70
	BOOKS 1/3/90 8-books from Sky Publishing (ck.#2329)	\$44.70
	SP 1/3/90 20-copies(both sides) star maps (Moore)	\$ 2.00
	SP 1/5/90 17-copies "Getting Started..." (JHU)	\$ 0.85
	SP 1/5/90 24-copies star maps (JHU)	\$ 1.20
	LP 1/5/90 20-copies of Inner Harbor material for Mello (JHU)	\$ 1.00
	LP 1/7/90 4-copies of "Goals of Inner Harbor Suit" (Loyola)	\$ 0.40
	LP 1/9/90 2-copies attachments to above (JHU)	\$ 0.10
	STA 1/10/90 white out + typewriter ribbin (Northway)	\$ 5.34
	SP 1/10/90 16 star maps (both sides) (Moore)	\$ 1.60
	EQUIP 1/10/90 sale of Barlow purchased from Parks 12/30/87	(\$26.00)
	TEL 1/12/90 chg. missed on last month's bill(12/13/89 889-0460)	\$ 1.46
	SP 1/15/90 copy of Evening Sun with Jacki Zeun letter on telescopes	\$ 0.20
	SP 1/16/90 4-copies Zeun Evening Sun letter (Moore)	\$ 0.20
	SP 1/16/90 15 copies(both sides) star maps (Moore)	\$ 1.50
	SP 1/17/90 postage for TE poster to Florence Wayman	\$ 0.85
	STA 1/20/90 3x5 file cards (Rite Aid)	\$ 0.60
	SP 1/20/90 3-copies of stock photo info (Loyola)	\$ 0.30
	SP 1/22/90 50-copies(both sides) star maps for Glenmar sailing talk(Moore)	\$5.00
RESEARCH	1/23/90 9-copies items fro, Jack Newton book (JHU)	\$ 0.45
	TEL 1/26/90 Bill of 1/13/90 (889-0353)	\$17.47
	TEL 1/26/90 bill of 1/13/90 (889-0460) L.D. calls	\$ 8.51
	SP 1/30/90 15-copies "How to..." + 42-copies star maps(Moore)	\$ 2.85
	PHOTO 2/2/90 slides from diamond ring negs.;dup slides Orion; dup.TE(Service)	\$29.51
	PHOTO 2/2/90 postage for slides to Milon	\$ 0.65
	PHOTO 2/2/90 refund from Service Photo on above chg. (per Bill Seim & Dan)	(\$15.00)
	7 2/3/90 drive to Roland Park School Summer Camp Fair	
	→ SP 2/4/90 Voyager at Neptune Slides (Observers Guide--ck#2335)	\$ 9.50
	PHOTO 2/6/90 camera cable release (Service)	\$ 4.94
	LP 2/6/90 4-copies Bureau of Rec. permit form(Moore)	\$ 0.20
	SP 2/6/90 40-copies star maps (Moore)	\$ 2.00
	SP 2/8/90 56-copies star maps (Moore)	\$ 2.80
	FOOD 2/17/90 Jimmy's Restaurant, Fells Pt. before set-up \$2.37 + .30 tip	\$ 2.67
	RES 2/18/90 3-copies of pages from 3/90 ASTRONOMY (Loyola)	\$ 0.30
	LP 2/18/90 8-copies of Inner Harbor documents for Steve Bunker (JHU)	\$ 0.40
	SP 2/22/90 20-copies star map; 5 copies "Getting Started.."(Moore)	\$1.25
	SP 2/25/90 3-copies Saturn's ring aspects (Loyola)	\$ 0.30
	PHOTO 2/26/90 Fujichrome 400 D film-36 (Service Photo)	\$10.90
	43 2/26/90 to Carmel Rd. & return to photograph Orion	
	TEL 2/27/90 Bill of 2/13/90 (889-0353)	\$17.47
	TEL 2/27/90 Bill of 2/13/90 (889-0460)	\$ 2.79
	PHOTO 3/2/90 36 slides of Orion, etc. (Service Photo) processed	\$ 5.21
	SP 3/4/90 12-maps + 5-"Getting started..." (JHU)	\$ 0.85
	FOOD 3/4/90 supper at Jimmy's after telescope session	\$ 5.73
	LP 3/5/90 8-copies of documents for ACLU (JHU)	\$ 0.40
	LP 3/5/90 postage for documents to ACLU w/letter	\$ 0.65
	SP 3/7/90 12-maps + 5 "Getting Started..." (JHU)	\$ 0.85
	SP 3/7/90 print for Rick Foster of his house w/Sirius (Service Photo)	\$ 0.84
	SP 3/8/90 35-star maps (Moore)	\$ 1.75
	SP 3/9/90 postage for photo to Rick Foster	\$ 0.45
31m	AUTO 3/9/90 tire/tube for bike (Waverly Bike Shop)	\$ 7.80
	SP 3/12/90 28-handouts (Moore)	\$ 1.40

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\$161.09

P	3/13/90	Court cost to file Inner Harbor complaint(receipted by Beaman)	\$125.00
IP	3/14/90	26-copies of handouts (JHU)	\$ 1.50
SP	3/15/90	4 postcards	\$ 0.60
PHOTO	3/15/90	6-Sanfard slide dups. (Service)	\$ 3.15
SP	3/19/90	10-stamps (no receipt)	\$2.50
SP	3/19/90	12-Getting Started... + 24 star maps (JHU)	\$1.80
PHOTO	3/19/90	mail slides to Dennis Milon (postage)	\$ 0.65
LP	3/22/90	reproduce complaint; serve three defendants (paid to Beaman)	\$83.00
EL	3/23/90	Bill of 3/13/90 (889-0353)	\$17.47
TEL	3/23/90	Bill of 3/13/90 (889-0460)	\$ 1.67
SP	3/27/90	5-copies of HST orbit diagram for BAS Newsletter (Moore)	\$ 0.25
SP	3/29/90	8-copies new version of moon map for SCT's(Moore)	\$ 0.40
SP	4/1/90	8-copies article & graphics for Chas. Villager article (JHU)	\$ 0.40
SP	4/2/90	1-copy of HST article for Gene Lonak (JHU)	\$ 0.05
FRANT	4/4/90	1-copy article for SGC on early childhood ed. (JHU)	\$ 0.05
SP	4/5/90	3-copies moon map (JHU)	\$ 0.15
SP	4/5/90	5-copies moon map (Moore)	\$ 0.25
SP	4/6/90	30-copies star maps (JHU)	\$ 1.50
FOOD	4/8/90	supper at Jimmies in Fells Pt. before session w/ telescope	\$ 6.23
SP	4/10/90	book of stamps	\$ 5.00
SP	4/11/90	\$1.00/each tip to "Dogs Among the Bushes" and "The Hawk"	\$ 2.00
9	4/12/90	dry run to Fells Pt.--too cold and windy to set-up. Returned home.	
SP	4/13/90	1-moon map (JHU)	\$ 0.05
SP	4/16/90	15-copies How to get started.... (Moore)	\$ 0.75
SP	4/16/90	40-copies star maps (Moore)	\$ 2.00
IP	4/16/90	3-copies Charles Villager article (Moore)	\$ 0.15
FOOD	4/16/90	food at Jimmies in F.P. before telescope session	\$ 1.51
JBS	4/17/90	Membership in American Lunar Society	\$10.00
SP	4/18/90	3-copies (1-Chas. Vil. art.) + (2-Moon at Jupiter art.) JHU	\$ 0.15
PHOTO	4/18/90	1-roll Ektach-400-36 for carnival (Service)	\$10.34
PHOTO	4/23/90	1-roll slides processed--Carnival (Service)	\$ 5.21
SP	4/24/90	10-copies handbill (JHU)	\$ 0.50
TEL	4/25/90	Bill of 4/13/90 (889-0353)	\$17.47
TEL	4/25/90	Bill of 4/13/90 (889-0460)	\$ 1.92
SP	4/25/90	5-copies of material for St. Pauls School talk (Moore)	\$ 0.25
FOOD	4/25/90	supper at Jimmies in F.Pt. before session	\$ 4.72
SP	4/26/90	15 star maps + 13 handbills (Moore)	\$ 1.40
SP	4/30/90	3-copies "How Big Is Big???" article (JHU)	\$ 0.15
SP	5/2/90	1-copy of S&T art. on Youth Enrichment Services (Moore)	\$ 0.05
FRANT	5/6/90	2-copies USIA addresses (Loyola)	\$ 0.20
FRANT	5/8/90	interneg + 5-copies HH w/telescope photo (Service)	\$ 5.99
FOOD	5/8/90	supper at Jimmies before Fells Pt. stint	\$ 5.00
SP	5/9/90	7-copies "How to...." (JHU)	\$ 0.35
SP	5/9/90	9-copies handbill (JHU)	\$ 0.45
STA	5/11	1-box of envelopes (Rite Aid)	\$ 1.04
IP	5/10/90	3-copies of "How Big is Big?" article (Moore)	\$ 0.15
IP	5/10/90	6-copies of "The Big One..." article for Carolyn & Kelly (Moore)	\$ 0.30
SP	5/10/90	14-copies of press write-ups (JHU)	\$ 0.70
FOOD	5/11/90	supper at Jimmies in F. Pt. before telescope session	\$ 3.75
SP	5/12/90	2-copies of "How Big Is..." (Loyola)	\$ 0.20
	5/14/90	I called tel. co. (537-8895, ref. Queen Laney) and gave order to disconnect 889-0353. (order #D-5198728) will be done on 5/16/90.	

Page = \$328.37

	SP 5/16/90 20-copies star maps (JHU)	\$ 1.00
	SP 5/16/90 3-copies "How Big is Big?" (JHU)	\$ 0.15
	SP 5/16/90 10-copies handbill (JHU)	\$ 0.50
	SP 5/16/90 8-copies "Heavens Above" (all bad copies...must try again)(JHU)	\$ 0.40
	FOOD 5/19/90 Hotdog & soda at Boy Scout Expo '90.	\$ 1.75
	TEL 5/22/90 tel. bill of 5/13/90 (889-0353)	\$ 17.47
	TEL 5/22/90 tel. bill of 5/13/90 (889-0460)	\$ 3.17
	SP 5/31/90 10-copies hand out (Moore)	\$ 0.50
	SP 5/31/90 10-copies "Getting Started" (Moore)	\$ 0.50
	SP 5/31/90 20-copies star maps (Moore)	\$ 1.00
	FOOD 5/31/90 Jimmies before F.Pt. stint	\$ 1.35
	TEL 6/3/90 tel. bill of 5/30/90 FINAL BILL (889-0353)	\$ 2.67
	SP 6/4/90 10-copies handout (Moore)	\$ 0.50
	SP 6/7/90 22-copies satr map (Moore)	\$ 1.10
	SP 6/8/90 5-copies "How to get started..." (Moore)	\$ 0.25
	SP 6/8/90 15-copies City Paper articles for L. Turbyville (Moore)	\$ 0.75
	SP 6/15/90 10-handbills (JHU)	\$ 0.50
	SP 6/15/90 8-star maps (JHU)	\$ 0.40
	PHOTO 6/15/90 1-copy of STOCK PILE contract (Moore)	\$ 0.05
	SP 6/15/90 10-copies star map (Moore)	\$ 0.50
	SP 6/15/90 5-copies of "Getting started...." (Moore)	\$ 0.25
	SP 6/16/90 15-copies star maps (JHU)	\$ 0.75
	SP 6/16/90 10-copies Turbyville articles (JHU)	\$ 0.50
	SP 6/19/90 copies(Moore): 10-maps, 10 "Getting started", 10 Albireo art., 10-handouts	\$ 2.00
	9 6/19/90 drove to Fpt. but didn't set-up. I didn't feel good, it didn't feel good, or both--plus it got windy.	
P	6/21/90 250-copies star maps (Moore)	\$12.50
SP	6/24/90 6-copies handbill; 25-copies "Getting started..." (JHU)	\$ 1.55
FOOD	6/27/90 lunch after Camp Notre Dame job (Eddies)	\$ 3.23
TEL	6/28/90 tel. bill of 6/13/90 (889-0460)	\$ 1.92
TEL	6/29/90 REFUND (889-0353)	(\$17.47)
	9 6/29/90 drove to F.Pt. but didn't set-up because of clouds.	
SP	7/1/90 9-copies J. Times article (JHU)	\$ 0.45
SP	7/1/90 6-copies Albireo article (JHU)	\$ 0.30
STA	7/3/90 typewriter ribbon	\$ 3.10
STA	7/5/90 1-bubble level replacement (Hechinger)	\$ 2.03
SP	7/5/90 7-copies Getting started; 10-handbill (Moore)	\$ 0.85
	9 7/6/90 dry run to Fells Point--clouds	
	9 7/7/90 dry run to Fells Point--clouds	
FOOD	7/7/90 Jimmy's supper while waiting for clouds to dissolve	\$ 5.16
SP	7/14/90 5-copies Albireo art.; 5-copies S&T art. (JHU)	\$ 0.50
SP	7/15/90 3-copies Albireo; 1-copy S&T letter (JHU)	\$ 0.20
2-stage	7/17/90 postage letter to T. Kellogg + 3 post cards	\$ 0.90
SP	7/18/90 1-copy "Reader Exchg." page from Astronomy mag. (Loyola)	\$ 0.10
SP	7/20/90 5-copies "Getting started..."; 10-copies handbill (Moore)	\$ 0.75
	7 7/20/90 dry run to Fells Pt.--clouds	
BOOKS	7/23/90 catalogue Lorraine Prec. Optics	\$ 2.00
TEL	7/23/90 bill of 7/13/90 (889-0460)	\$ 5.19
SP	7/27/90 10-handbill; 10 "Getting started..." (Moore)	\$ 2.00
SP	7/28/90 12-handbill (JHU)	\$ 0.60
SP	7/28/90 1-moon map (JHU)	\$ 0.05
SP	7/30/90 40-copies handouts (Moore)	\$ 2.00
SP	8/1/90 1-XR-120 recording cassette tape (Radio Shack)	\$ 2.93
P	8/1/90 10-Getting started; 3-moon map; 11-handbill (JHU)	\$ 1.20
SP	8/2/90 10-Getting started; 10-star maps; 10-handbill (Moore)	\$ 1.50
SP	8/3/90 10-Getting started; 30-star maps; 10-handbill (Moore)	\$ 2.50
FOOD	8/3/90 supper at Jimmies before telescope stint	\$ 7.30

page Total = \$ 81.35

STREET CORNER EXPENSES -1990

page 4 of

POSTAGE	8/6/90	1-book of stamps	\$ 5.00
SP	8/8/90	15-star maps (JHU)	\$ 0.75
SP	8/12/90	4-copies sunspot graphs; 4-copies Comet Levy art.(JHU)	\$ 0.40
FOOD	8/12/90	supper at Jimmies in FPT. before stint w/telescope	\$ 6.35
SP	8/15/90	12-How to...13 map...15 handbill copies (JHU)	\$ 2.00
SP	8/17/90	4-copies Handbill (JHU)	\$ 0.20
SP	8/19/90	20-Star map; 13 How to; 7 Handbill (JHU)	\$ 2.00
TEL	8/25/90	bill of 8/13/90 (889-0460)	\$ 1.69
FOOD	8/26/90	supper at Jimmies before telescope stint	\$ 5.00
SP	8/27/90	11-copies handbill (Moore)	\$ 0.55
SP	8/28/90	20-copies map; 15 copies handbill (Moore)	\$ 1.75
FOOD	8/28/90	pie at Jimmies before telescope stint	\$ 1.46
SP	8/31/90	copies: 8-star map; 6-How to; 5-handbill (JHU)	\$ 0.95
SP	9/1/90	copies: 17-map; 6-How to; 5-Handbill (JHU)	\$ 1.40
SP	9/1/90	5-copies SATURN info sheet (JHU)	\$ 0.25
SP	9/2/90	22 copies: 16-map; 4-Getting started (JHU)	\$ 1.00
SP	9/4/90	2-moon maps (JHU)	\$ 0.10
FOOD	9/4/90	pie at Jimmies before stint	\$ 1.41
STATIONERY	9/5/90	battery for wrist watch (Jewelers Ser. Co.)	\$ 4.95
SP	9/6/90	copies: 10-handbill; 15-map; 5-Getting started (JHU)	\$ 1.50
SP	9/6/90	layout for Constellations of Autumn '90 (JHU 40 copies)	\$ 2.00
SP	9/7/90	layout for Constellations 2-copies (JHU)	\$ 0.10
FOOD	9/10/90	Jimmies before stint in FPT.	\$ 1.40
FOOD	9/10/90	McDonalds after stint in FPT.	\$ 1.24
FOOD	9/17/90	Jimmies before FPT. stint.	\$ 2.72
SP	9/18/90	15-copies handbill (JHU)	\$ 0.75
9	9/20/90	dry run to Falls Pt.--clouds	
OOD	9/22/90	Jimmies before FPT. telescope evening	\$ 6.48
OOD	9/23/90	Jimmies before FPT. telescope evening	\$ 5.37
SP	9/27/90	15-handbills (JHU)	\$ 0.75
FOOD	9/27/90	Jimmies before stint	\$ 1.45
TEL	9/28/90	bill of 9/13/90 (889-0460)	\$ 1.69
OOD	9/28/90	Jimmies	\$ 1.46
FOOD	9/29/90	Jimmies	\$ 5.00
SP	10/1/90	10-copies handbill (JHU)	\$ 0.50
OOD	10/1/90	Jimmies	\$ 1.35
SP	10/2/90	1-roll Tri-X film (Service Photo)	\$ 3.10
FOOD	10/2/90	Jimmies	\$ 2.87
SP	10/3/90	10-copies handbill (JHU)	\$ 0.50
5	10/3/90	dry run toward FPT. Turned back because of clouds	
SP	10/5/90	developed film--moon photos (Service)	\$ 1.47
SP	10/10/90	15-handbills (JHU)	\$ 0.75
FOOD	10/14/90	Jimmies	\$ 6.74
SP	10/16/90	2-copies Heron letter; 1-copy "Southern Surprise" article (JHU)	\$ 0.15
FOOD	10/16/90	Jimmies	\$ 1.51
SP	10/18/90	12-copies handbill (JHU)	\$ 0.60
OOD	10/18/90	Jimmies	\$ 1.88
TEL	10/22/90	bill of 10/13/90 (889-0460)	\$ 0.33
SP	10/24/90	9-handbills + 4-articles (JHU)	\$ 0.65
FOOD	10/27/90	Jimmies	\$ 3.00
SP	10/27/90	Jill, to watch equipment while I packed-up	\$ 1.00
SP	10/31/90	Richard, for good will in Chas. Village	\$ 1.00
FOOD	11/1/90	Jimmies	\$ 1.51
FOOD	11/2/90	Jimmies	\$ 1.46
P	11/5/90	6-copies winter '90-91 star map materials (JHU)	\$ 0.30
P	11/6/90	2-copies Getting started materials (JHU)	\$ 0.10
SP	11/7/90	2-copies " " " "	\$ 0.10

\$99.99

Postage	11/8/90	2-post cards	\$.30
SP	11/15/90	5-copies "Getting started"paragraph(JHU)	\$.25
FOOD	11/17/90	Jimmies	\$ 2.25
PHOTO	11/19/90	1-roll film for sunspot photos (Service) and Geminids	\$ 8.95
SP	11/20/90	6-copies SPACE GRANT CONSORTIUM announcement of 11/21(JHU)	\$ 0.25
TEL	11/23/90	Bill of 11/13/90 (889-0460)	\$ 1.24
7	11/24/90	dry run to Fells Pt. -- clouds	
SP	11/26/90	3-copies eclipse art. for the Shocks (JHU)	\$ 0.15
LP	12/4/90	rt. bus fare to Federal Ct. Hse to see case records	\$ 2.00
LP	12/4/90	20-copies of court case (Positive Image)	\$ 2.10
LP	12/5/90	2-copies form for Lawyers Grievance Committee (JHU)	\$ 0.10
3	12/4/90	r.t. to STScI for telescope session	
BOOKS	12/10/90	1-copy Stargazers Companion(Omibooks)	\$15.73
PHOTO	12/17/90	1-roll of film processed (Service)	\$ 4.12
SP	12/18/90	1-copy BAS minutes (JHU)	\$ 0.05
BOOKS	12/19/90	1-copy OBSERVER'S HANDBOOK 1991 (Sky Publishing)	\$13.50
SP	12/20/90	1-copy Kousoulos art. in Business Wk, 12/10/90. (Library)	\$ 0.15
LP	12/20/90	3-copies Mello letter of 12/19/20 (JHU)	\$0.15
TEL	12/23/90	Bill of 12/13/90 (889-0460)	\$2.78
LP	12/27/90	2-copies Beaman letter, new complaint (JHU)	\$ 0.10
BOOKS	12/27/90	1991 Wall Chart (Sky & Tel)	\$ 4.95
SP	12/31/90	BAS membership, 1991 (Science Center Md.)	\$33.00
SP	12/31/90	2-copies E. Sun art. "HAV-A-LOOK!"	\$ 0.70

12
\$9282

Rec. 12/26/90

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

HERMAN M. HEYN
721 East 36th Street
Baltimore, Maryland 21218

Plaintiff

v.

MAYOR AND CITY COUNCIL OF
BALTIMORE, A Municipal Corporation

Serve: Neal M. Janey, City Solicitor
City Hall
Baltimore, Maryland 21202

and

DIRECTOR, DEPARTMENT OF RECREATION AND
PARKS OF THE CITY OF BALTIMORE

Serve: Neal M. Janey, City Solicitor
City Hall
Baltimore, Maryland 21202

and

CENTER CITY INNER HARBOR DEVELOPMENT, INC.
formerly known as
CHARLES CENTER INNER HARBOR MANAGEMENT
14th Floor, World Trade Center
Baltimore, Maryland 21202

Serve: Al Copp
14th Floor, World Trade Center
Baltimore, Maryland 21202

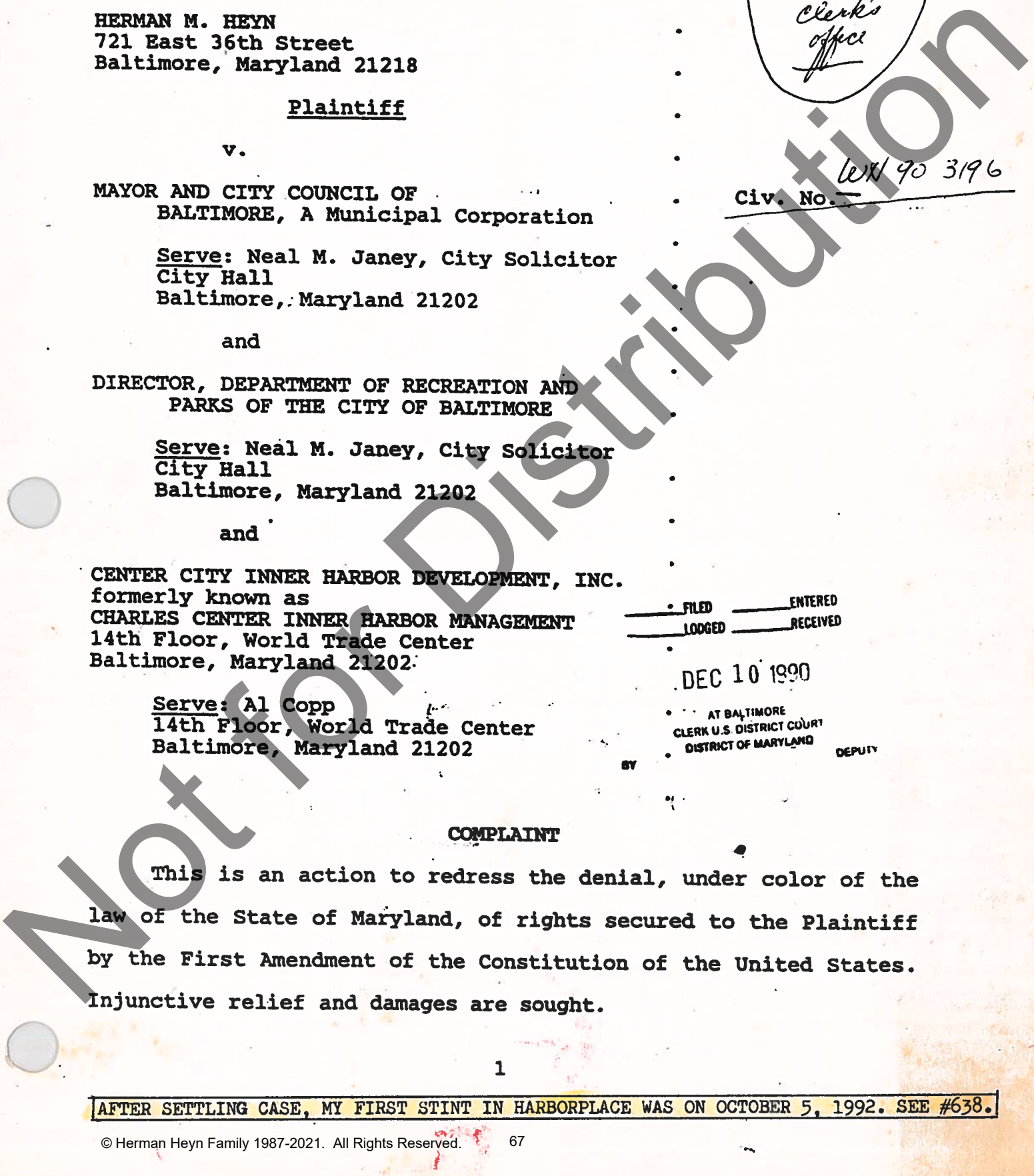
COMPLAINT

This is an action to redress the denial, under color of the law of the State of Maryland, of rights secured to the Plaintiff by the First Amendment of the Constitution of the United States. Injunctive relief and damages are sought.

AFTER SETTLING CASE, MY FIRST STINT IN HARBORPLACE WAS ON OCTOBER 5, 1992. SEE #638.

Hand f'd
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@
Clerk's
office
Civ. No. WN 90 3196

FILED _____ ENTERED _____
LODGED _____ RECEIVED _____
DEC 10 1990
AT BALTIMORE
CLERK U.S. DISTRICT COURT
DISTRICT OF MARYLAND
DEPUTY



H. Heyn

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

HERMAN M. HEYN
721 East 36th Street
Baltimore, Maryland 21218

Plaintiff

v.

MAYOR AND CITY COUNCIL OF
BALTIMORE, A Municipal Corporation

Civ. No. 90-824

Serve: Neal M. Janey, City Solicitor
City Hall
Baltimore, Maryland 21202

and

DIRECTOR, DEPARTMENT OF RECREATION AND
PARKS OF THE CITY OF BALTIMORE

Serve: Neal M. Janey, City Solicitor
City Hall
Baltimore, Maryland 21202

and

CENTER CITY INNER HARBOR DEVELOPMENT, INC.
formerly known as
CHARLES CENTER INNER HARBOR MANAGEMENT
14th Floor, World Trade Center
Baltimore, Maryland 21202.

Serve: Al Copp
14th Floor, World Trade Center
Baltimore, Maryland 21202

COMPLAINT

This is an action to redress the denial, under color of the law of the State of Maryland, of rights secured to the Plaintiff by the First Amendment of the Constitution of the United States. Injunctive relief and damages are sought.

PARTIES

1. Plaintiff Herman M. Heyn is a citizen of the United States and a resident of the State of Maryland.

2. Defendant Mayor and City Council of Baltimore is a municipal corporation of the State of Maryland.

3. Defendant Department of Recreation and Parks of the City of Baltimore is an division of the government of the City of Baltimore, Maryland.

4. Defendant Charles Center - Inner Harbor Management Company, now known as Center City - Inner Harbor Development, Inc., is a hybrid public and private corporation chartered by the State of Maryland and doing business in Baltimore City and exercising powers delegated to it by the Department of Recreation and Parks of the City of Baltimore.

5. All acts of all defendants complained of herein were committed in the exercise of official municipal authority and hence under color of the law of the State of Maryland.

JURISDICTION

6. The cause of action arises under 42 U.S.C. § 1983.

7. This court has jurisdiction under 28 U.S.C. § 1343.

8. All parties reside in the State of Maryland, and all acts complained of occurred in this state.

FACTUAL BACKGROUND

9. Plaintiff Herman M. Heyn has since late 1987 performed at various locations in Baltimore City as a "street-corner astronomer," setting up a portable telescope, inviting the public

to view stars and planets and delivering informal lectures on astronomy.

10. Plaintiff solicits voluntary contributions from his audiences by fixing a hat on the tripod that supports the telescope.

11. Plaintiff desires to conduct his street performance on the public park or promenade which connects the various buildings and facilities of Harborplace, a commercial development in Baltimore City.

12. Except for eating places and other commercial uses and the Maryland Science Center located therein, Harborplace is a public park called Inner Harbor Park, which was established by referendum to the voters of Baltimore City in November 1978.

13. As a public park Inner Harbor Park is controlled and administered by Defendant Department of Parks and Recreation of the City of Baltimore, Maryland, which has delegated some of its authority related to the granting of permits to street performers to Defendant Charles Center - Inner Harbor Management, Inc., now known as Center City Inner Harbor Development, Inc.

14. Defendants consider public performances within the city parks to be "regulated uses," for which a permit is required; performance without a permit is a criminal offense punishable by fine.

15. Beginning in the summer of 1988 Plaintiff Heyn sought a permit from Defendant Department of Parks and Recreation, on forms provided by it and pursuant to regulations promulgated by

it, to conduct his street performance at Inner Harbor Park.

16. Though he expressed preferences for certain specific locations within the park, Mr. Heyn stated his willingness to negotiate with Defendants concerning the time and place of his performances.

17. Defendant Department of Parks and Recreation, on information and belief acting with the advice and consent of Defendant Charles Center - Inner Harbor Management, Inc., now known as Center City - Inner Harbor Development, Inc., denied Plaintiff's initial and numerous renewed applications, at first giving no reason and finally, by letter dated January 31, 1989, stating that it would not permit the performance because "the activity . . . is a private enterprise venture for personal gain."

18. Defendants routinely grant permits to perform in Inner Harbor Park to numerous street performers of various descriptions, including musicians, jugglers, acrobats, unicyclists and others.

19. On information and belief, Defendants, acting under color of law, denied to Plaintiff the permit he sought because they disapproved of the content of the speech in which he wished to engage in the public park.

20. Virtually all street performers granted permits to perform at Inner Harbor Park solicit contributions from the public in the same manner as Plaintiff wishes to do so, by placing a hat in proximity to the site of the performance.

21. Plaintiff has suffered monetary losses as a result of being denied permission to perform in Inner Harbor Park on the same basis as other street performers.

COUNT I.

42 U.S.C. § 1983

22. Paragraphs 1 through 19 are hereby incorporated by reference as though fully realleged herein.

23. By refusing to permit him to perform in a public park because of the content of the protected speech or expression in which he wishes to engage, Defendants, acting under color of state law, have denied Plaintiff, and continue to deny him, rights secured him by the First Amendment, made applicable to the State of Maryland by the Fourteenth Amendment.

WHEREFORE THE PLAINTIFF PRAYS:

a. That this court order Defendants to grant Plaintiff a permit to perform as a street astronomer in Inner Harbor Park on the same basis as other street performers;

b. That this court award against the Defendants, jointly and severally, damages in the amount of \$25,000;

c. That this court award Plaintiff counsel fees and the costs of this suit pursuant to 42 U.S.C. § 1988;

d. And for such other and further relief as the justice of his cause may require.

Respectfully submitted,

Robert L. Beaman

Robert L. Beaman
3001 St. Paul Street
Baltimore, Maryland 21218
(301) 467-1576

Barbara Mello

Barbara Mello
1420 North Charles Street
Baltimore, Maryland 21201
(301) 625-3427

Plaintiff prays that the above-captioned action be tried to a jury.

Barbara Mello

rec. 9/14/92

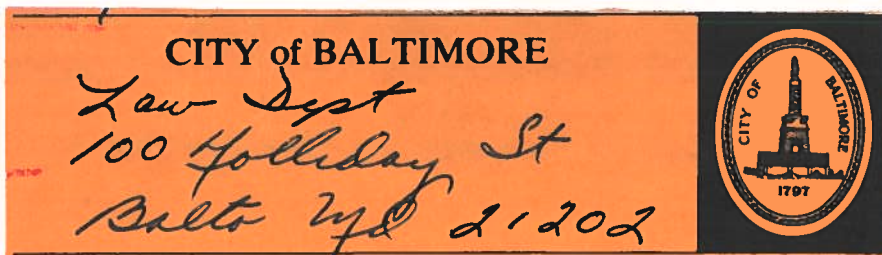
SETTLEMENT AGREEMENT AND GENERAL RELEASE

This SETTLEMENT AGREEMENT AND GENERAL RELEASE ("Settlement Agreement") is made this 22nd day of July, 1992, among and between: (1) Herman M. Heyn ("Heyn"); (2) The Mayor and City Council of Baltimore, Director, Department of Recreational Parks of the City of Baltimore and Center City Inner Harbor Development, Inc., and City of Baltimore Development Corp. (collectively "City"); and, (3) Harbor Place Associates Limited Partnership and Harborplace Merchants Association (collectively "Harborplace").

WHEREAS, Heyn has filed an action against the City in the United States District Court for the District of Maryland styled Heyn v. Mayor and City Council of Baltimore, et al., Civil Action No. WN-90-3196 ("pending action"); and

WHEREAS, Heyn previously has filed an action against the City in the United States District Court for the District of Maryland styled Heyn v. Mayor and City Council of Baltimore, et al., Civil Action No. JH-90-824 ("previous action"); and

WHEREAS, the gravamen of Heyn's pending action and his previous action is the City's refusal to grant Heyn a permit to set up a portable telescope at Inner Harbor Park and solicit contributions; and



WHEREAS, the City has granted Harborplace a permit for its Street Performers Program; and

WHEREAS, Harborplace has denied applications Heyn has made to be a part of the Street Performers Program, and

WHEREAS, the City has denied any liability to Heyn in the pending action or the previous action; and

WHEREAS, Heyn, the City and Harborplace desire to amicably settle the present action; and

WHEREAS, Harborplace is willing to permit Heyn to participate in its Street Performers Program under the terms stated below in order to facilitate an amicable settlement of the present action; and

WHEREAS, the parties to this Settlement Agreement have reached a full and final compromise and settlement of all matters and claims between them, both those asserted in the present action and those which could have been asserted otherwise.

NOW, THEREFORE, in consideration for the following mutual agreements and for other valuable consideration, Heyn, the City and Harborplace make the following agreements:

1. Heyn will execute a Stipulation of Dismissal with Prejudice in the form attached hereto as Exhibit A and return the same promptly to the Office of the City Solicitor for filing in the pending action.

2. Heyn, for himself, his heirs, agents, representatives, successors and assigns, hereby releases the City, its officers, employees, representatives, predecessors, successors and assigns; Harborplace, its shareholders, directors, officers, employees, subsidiaries, parents, affiliates, partners, agents, representatives, predecessors, successors and assigns; and all other persons, firms, corporations or entities from all claims of any kind, nature or description, known and unknown, which Heyn ever had, now has or which he can, shall or may have against them as of the date of this Settlement Agreement, by reason of any cause or matter whatsoever relating to: (A) Heyn's application for any permit from the City; (B) Heyn's application to participate in Harborplace's Street Performers Program; (C) any contact Heyn has had with the City relating to his desire to set up a telescope on City property; (D) any contact Heyn has had with Harborplace relating to his desire to participate in Harborplace's Street Performers Program or to set up a telescope on any property owned by, controlled by or covered by a permit issued to Harborplace; or (E) any action or statement made by the City or Harborplace referring or relating to Heyn's Applications or proposed activities.

3. Harborplace will allow Heyn to participate in its Street Performers Program, effective October 1, 1992, subject to the following terms and conditions:

(a) Heyn will abide the terms and conditions of the Street Performers Program as amended to accommodate the nature of Heyn's performance. A copy of the terms and conditions (with amendments) is attached hereto as Exhibit B;

(b) Heyn will be guaranteed at least one performance slot (5:00 p.m. to 8:00 p.m.) per week from October 1, 1992 until March 31, 1993. Harborplace recognizes that inclement weather may cause Heyn to cancel a performance on short notice. Harborplace will endeavor to find a substitute slot for a performance cancelled due to inclement weather. However, Harborplace will not change the scheduling of any prearranged event, including the scheduling of any other performers in the Street Performers Program;

(c) Heyn will not require a contribution or payment from any person who wants to look into his telescope; and

(d) Heyn will use no more than one telescope during his performance.

4. Heyn will not apply to the City for any permit to place his telescope in Inner Harbor Park while he is a participant in Harborplace's Street Performers Program.

5. Harborplace in the future may place coin-operated telescopes on the Harborplace pavilions or elsewhere on its property. Further, the Maryland Science

Center operates a telescope on its premises adjacent to Inner Harbor Park. The existence or operation of telescopes by persons other than Mr. Heyn in or about Inner Harbor Park shall not affect the parties' obligations under this Settlement Agreement in any respect.

6. The City and/or Harborplace may restructure the rules, regulations or programs relating to the use of Inner Harbor Park or the Street Performers Program. Neither the City nor Harborplace make any commitment to Heyn regarding the granting of permits to Heyn or allowing Heyn to participate in any Street Performers Program after March 31, 1993, except: the City and Harborplace agree that if the City issues Harborplace a permit for the Street Performers Program in 1993 and any contiguous, successive years which is substantially the same as the 1992 permit the City has issued to Harborplace (a copy of which is attached hereto as Exhibit C) and Harborplace continues to sponsor the Street Performers Program in 1993 and any contiguous, successive years in substantially the same form and subject to guidelines which are substantially similar to the present Street Performer Guidelines (a copy of which is attached hereto as Exhibit B), then City and/or Harborplace will allow Heyn to apply to be a participant in the Street Performers Program and will treat Heyn's application fairly in accordance with the Street Performer Guidelines then in

effect (The City and/or Harborplace reserve the right to require that a "performance" under the Street Performer Guidelines then in effect be an event suitable for simultaneously entertaining at least 200 people at one time. However, the City and Harborplace will fairly consider waiving the requirement with respect to Heyn based upon the reception by the public of Heyn's prior year performances.). Should the City make any significant change in the permit it issues to Harborplace or should Harborplace make any significant change in the Street Performers Program, the City and Harborplace make no commitment to Mr. Heyn except that no changes in City's and/or Harborplace's rules, regulations or programs shall affect the City's and/or Harborplace's obligations prior to March 31, 1993 to Heyn pursuant to Paragraph 3, above, and the City shall issue all required permits to Harborplace necessary for Harborplace's meeting its obligations to Mr. Heyn prior to March 31, 1993. The facts that Heyn and the City have engaged in the previous action and pending action and that the parties have entered into this Settlement Agreement shall have no bearing one way or the other on whether Heyn will be granted a permit or be allowed to participate in any Street Performers Program after March 31, 1993.

7. The City and/or Harborplace agree to pay Heyn a total of \$2,500.00 upon Heyn's execution of this Settlement Agreement and a Stipulation of Dismissal of the pending action.

8. Heyn agrees to hold every provision contained in this Settlement Agreement and the fact that the parties have entered into a settlement strictly confidential except as provided in Paragraph 9, below. Should Heyn violate this confidentiality requirement at any time before or after March 31, 1993, he shall: (A) pay immediately the sum of \$2,500.00 to the person or entity which paid the sum of \$2,500.00 pursuant to Paragraph 7, above; and, (B) immediately forfeit his right to participate in Harborplace's Street Performers Program pursuant to Paragraph 3, above.

9. In the event that Heyn is questioned directly regarding the disposition of the pending action, he shall state: "The case has been resolved." In the event that Heyn is questioned directly regarding the manner in which he has become a participant in the Street Performers Program, he shall state: "Harborplace has decided to give me a trial run as a participant in the program beginning on October 1, 1992." In the event that Heyn is questioned directly regarding the duration of his being a participant in the Street Performers Program, he shall state: "The trial period for my being a participant in the Street Performers Program runs through March 31, 1993. At that time both Harborplace and I will assess our respective positions."

10. Heyn's contact person regarding his participation in the Street Performers Program shall be Jeff Trueman, Events Coordinator, Harborplace, 200 East Pratt Street, Baltimore, Maryland 21202-6103 (telephone: 410-332-4191) ("designated contact"). Heyn shall direct all communication or correspondence regarding the Street Performers Program to the designated contact. Upon written notice to Heyn, Harborplace may substitute another Harborplace officer or employee for Mr. Trueman as the designated contact.

11. This Settlement Agreement constitutes the entire agreement of the parties hereto and supersedes all prior negotiations or agreements, oral or written, regarding the previous action, the pending action, Heyn's participation in Harborplace's Street Performers Program or Heyn's setting up a telescope at Inner Harbor Park. This Settlement Agreement may be modified only by a written document signed by the parties hereto.

12. If any provision within this Settlement Agreement shall be determined to be void, invalid or otherwise unenforceable by a court of competent jurisdiction, such finding shall not otherwise affect the validity or enforceability of any other provision of this Settlement Agreement.

13. This Settlement Agreement shall be governed by the laws of the State of Maryland and shall be enforceable solely in the courts of the State of Maryland or the United States District Court for the District of Maryland.

14. Heyn has read this Settlement Agreement, has had an opportunity to consult ex parte with the United States Magistrate Judge Catherine C. Blake regarding the meaning of the terms of this Settlement Agreement and signs this Settlement Agreement voluntarily and freely and with an understanding of its terms. All individuals signing this Settlement Agreement on behalf of the corporate and governmental parties hereto represent that they have actual authority to sign this Settlement Agreement and bind their respective principals.

WITNESS:

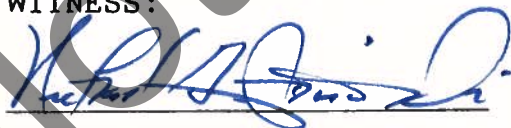


HERMAN M. HEYN


Herman M. Heyn.

Date: 7/22/92

WITNESS:



MAYOR & CITY COUNCIL OF BALTIMORE

By:  (____)

Date: 8/13/92

WITNESS:

Stephanie A Esworthy

DIRECTOR, DEPARTMENT OF
PARKS AND RECREATION

By: Marely J. Perrot (████)

Date: Sept 2, 1992

WITNESS:

Michael J. Di...

CITY OF BALTIMORE
DEVELOPMENT CORP.

By: Robert M. ... (████)

Date: Sept 1, 1992

WITNESS:

Michael J. Di...

CENTER CITY INNER
HARBOR DEVELOPMENT, INC.

By: Robert M. ... (████)

Date: Sept 1, 1992

WITNESS:

Jeffrey A. ...

HARBOR PLACE ASSOCIATES
LIMITED PARTNERSHIP

By: Harborplace, Inc., General
Partner

By: Mark Last (████)
J. Martin Lastner,
Vice-President

Date: July 22, 1992

WITNESS:

Jeffrey A. ...

HARBORPLACE MERCHANTS ASSOCIATION

By: Robert M. ... (████)

Date: July 22, 1992

Not for Distribution

EXHIBIT A

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

HERMAN M. HEYN,

Plaintiff,

v.

MAYOR AND CITY COUNCIL
OF BALTIMORE, et al.,

Defendants.

*
*
*
*
*
*

Civil Action No:
WN-90-3196

* * * *

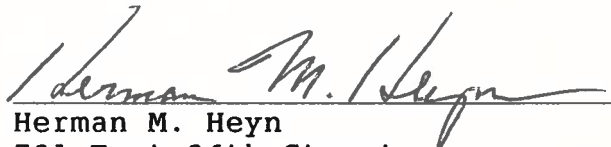
NOTICE OF DISMISSAL

Mr. Clerk:

Please take notice that pursuant to Rule 41(a) of the Federal Rules of Civil Procedure, Herman M. Heyn, Plaintiff, dismisses the present action with prejudice.

Date

7/22/92



Herman M. Heyn
721 East 36th Street
Baltimore, Maryland 21218
(410) 889-0460

Date

9/3/92



Michael G. Raimondi
Assistant Solicitor
Law Department
Lower Level
City Hall
100 North Holliday Street
Baltimore, Maryland 21202
(410) 396-3968

Attorney for Defendants

1991

Not for Distribution

- 9 404) 1/4/91(Fri) Fpt. (7:30-12:00MN)+/-38°F. M 42 (nice); Jupiter (impressive); 17-d. moon (very nice). Maybe should have set-up a little later, say 8-8:30PM, but I got there early to park (no trouble at all), ate, and then had nothing else to do. Some enthusiastic lookers, + I was in very good form. Two \$5 contribs. Scope seemed to be working well, tho I suspect I need a better star diagonal. \$55 + \$16.03 = \$71.03(\$15.78/)
- 70 405) 1/8/91(Tue) GODDARD ASTRONOMY CLUB(12:00-1:00PM) Talk to club. Was invited by Sue Bassett (792-2943-H; 301-731-8671-W), club member, who saw article on me in 12/31/90 E. Sun. Monthly mtg. +/-15 people. I described how, as a teenager, I became interested in astronomy and how, in 1966, reading about in the morning paper and then trying to photograph the 33-yr. Leonid shower revived my interest. I described how I street corner astronomy as a way to supplement my T-shirt income and to get out of parttime school teaching. I described the experience of street corner astronomy, mentioning some of the questions I'm asked, describing the light pollution situation, thermal pollution, "wrongenders", etc. I read paragraphs from Mayhew to show how street corner astronomy today is much as it was 150-yr. ago in London. \$50.00. Sold 1-TE T-shirt. (Was approached after mtg. by attendee Don Haxton (490-0029) who teaches astro. at Howard CC and told me to call Dr. Russ Poch (992-4891-W; 997-2247-H) about their need for a once-per-week astronomy lab instructor.
- 4 406) 1/25/91(Fri) Rotunda(4:40-7:15PM)+/-31°. 10-d. moon(Tyco, Copernicus, Jura Mts. luminescent on terminator), M 42 (briefly), Jupiter (arrived about 6:50PM; alot of heat distortion, but lookers still impressed; 3, than 4 moons). I had alot of doubts about going out, but once I got set-up I encountered enthusiastic lookers--despite the pall cast by the Mideast war. High clouds arrived about 7PM, and I quit 15-mins. later, but mostly because I was loosing my voice to bronchitis. \$36 + \$11.04 = \$47.04 (\$18.20/)
- 9 407) 2/2/91(Sat)F.Pt.(6-1:00AM). Great sky, mild temp.(no wind). Jupiter(2 & 2 moons; J was very fuzzy early-on but became full of bands near zenith. Lookers wowed at 100X!); M 42 (many times); 18-d. moon (ok). Evening started slow but gradually picked-up. Alot of very enthusiastic and interested lookers! Peak night in Fpt. Was very pleased with optical performance of scope. \$109 + \$21.67 + \$121.67 (\$17.38/hr.)
- 9 408) 2/3/91(Sun)Fpt.(5:30-8:30PM) Alot of people walking around during late afternoon, but crowd started thinning after sunset. By 7:30PM, place was very quiet, except for an occasional knots of people. Venus (for 15-min. Small, w/no features of interest.); Jupiter (Great! 3 moons, w/one easily seen silhouetted as it traversed planet. As it became visible beyond edge, could still see shadow on J. Alot of bands, incl. a big white cloud in N. hemi. Mild temp. and great sky! \$40 + \$12.08 = \$52.08 (\$17.36/)
- 9 409) 2/8/91(Fri)Fpt.(5:45-11:45PM) Was worried that Fpt. would be too quiet, early on, and that I should have gone to Rotunda or Chas. Vil. However, Fpt. was ok--at least adequate, early on. Jupiter (Very poor seeing for first 1/2-hrs. J very close to Beehive, which I moved to a number of times.) M 42. Left because of inebriation level. Early on there was a swarm of bothersome derelicts in square. In general, I felt very unenthusiastic, tonight. Didn't want to be there. \$67 + \$12.19 = \$79.19 (\$13.20/hr.)
- 9 410) 2/9/91(Sat)Fpt.(5:45-10PM) Quit early because of cold wind. Jupiter; M 42. Periods of heavy traffic interspersed with long periods of no traffic. Visit by Isabel. Felt somewhat bored, unenthusiastic. \$71 + \$17.25 = \$88.25 (\$20.76/hr.)
- 2 411) 2/21/91(Thu) St.P.&31st(5:30-9:15PM) 57°F weather; hazy clouds w/clear holes between. 7-d.moon(Tyco, Ptolemaeus); Jupiter (3 than 4 moons). Visted early-on by Beverly Graham of Md. Public Broadcasting, who is doing a story on me. She brought her son, Brad, and a photographer, who took alot of photos of Brad at scope and talking to me. Alot of enthusiastic lookers. \$33 + \$12.20 = \$45.20 (\$12.05/hr.)
- 2 412) 2/27/91(Wed)StP.&31st.(6-9PM) Ok sky w/intermittent clouds. J and almost full moon. Some enthusiastic lookers. I felt a little bored. Maybe boredom setting in, finally, is one of my main problems, now. J not fully clear of tree till +/-6:30PM. \$32 + \$7.20 = \$39.20 (\$13.07/hr.) +/-45°F.

TOTAL THIS PAGE = \$593.66 + 1 T-shirt
 TOTAL THIS YEAR = \$593.66 + 1 T-shirt

- 2 413) 2/28/91(Thu) St.P.&31st.(6:05-8:35PM) Mild temp, nice sky, but poor seeing. Sometimes had trouble seeing anything of J's cloud belts! J; full moon; M 42 (once). Slow night; alot of no-pays. Visit by the "Fiddle Man", who said he can make \$50/hr. at Harbor-place. \$11.00 + \$7.63 = \$18.63 (\$7.45/hr.). I should go back to the Rotunda!
- 9 414) 3/1/91(Fri) MESA (Mathematics, Engineering, Science Achievement Program) Annual Pre-College Career Fair, Baltimore Convention Ctr.; attn: Norma Boyd (792-5382). Talks at 10, 11, & 12 o'clock. Thrust was that astronomy/space exploration offers both great career opportunities and hobby possibilities. Took telescope and camera. Explained workings of both, gave out star maps, showed slides illustrating possibilities of night sky photography with camera on tripod. \$75.00
- 5 { 415) 3/5/91(Tue) Rotunda (6:05-8:30PM) Mild temp and very nice sky. J (3 on one side, joined by Europa +/-7:45PM); M 42. Moderate traffic. Was ok to be back there after so long away. Left home confused as to where to go, 31st & StP. or there. Drove past former, saw same old faces, felt bored and drove to R. \$27 + \$8.61 = \$35.61(\$14.73/)
- 416) 3/5/91(Tue) STScI (8:50-10:20PM). Set-up at front door for crowd leaving talk. Had some lookers, then had a good telescope session with George and Ed(guy from Harford Co.), who has a C-8. We compared views w/a number of different oculars. I could see little or no difference between my and his scope. Not only that, my scope split Castor (133x) like never before, as well as Gamma Leo. Sofar as I was concerned, neither scope showed more detail on Jupiter at higher mags. than mine at 100x.
- 2 417) 3/7/91(Thu) StP.&31st.(6:05-8:15PM) Chilly w/wind. Jupiter(4, than 3); M 42 (once). Light traffic. Some enthusiastic lookers. Would have gone to Rotunda if it had not been for the wind. \$13 + \$5.88 = \$18.88 (\$8.71/hr.)
- 15 418) 3/8/91(Fri) Fpt. (6:55-10:35PM) 36°F. Quit early due to combination of cold wind and that it was a Gandy Dancer night. Very slow traffic 1st hr. Should not have set-up before 8PM. I noticed that parking spaces were continually becoming available between 7-8PM. so parking would have been possible. J (3 and 1). Ephemeris indicated Red Spot would be facing at 8:30PM, but I saw no sign of it. M 42. \$36 + \$6.44 = \$42.44 (\$11.57/) Extra miles, part way there, I had to return home for eyepieces and battery.
- 9 419) 3/9/91(Sat) Fpt. (6:05-11:45PM). 45°F w/little wind. Weather rpt. was for increasing clouds and snow flurries, tonight. However, it was a very nice sky up till about 9:30PM. Clouds moved in and I prepared to leave, but as my to-be last looker was contemplating Jupiter, they moved away and I stayed. Intermittent clouds, thereafter. Good traffic from beginning. Jupiter magnificent early on; M 42 (once). Mature crowd till about 10:30PM, then slowly rising inebriation level, which drove me to pack-up, eventually. \$80.00 + \$20.30 = \$100.30 (\$17.70/hr.)
- 2 420) 3/12/91(Tue) JHU(Bloomberg #276) 4:30-8PM. "The Beauty of the Night Sky" (subtitled "Down To Earth Astronomy"). Talk and slide show for 9 teachers enrolled in the JH Space Grant Consortium Space Science Internship Program. Presentation from 4:30-5:30PM by Eric Chaisson, then box "lunch", then my presentation. My object was to bring them into amateur astronomy. Gave out star maps, S&T book catalogs, S&T 1991 Sky Guide, BAS 3/91 Newsletter, MMI catalog, Project STAR material, Otwell order form. Gave talk, showed constellation slides and explained astrophotography. Showed Jupiter thru 8" after talk (hazy, semi-poor image). I felt good about talk and got good comments from the teachers. Present was Dr. Anasuya Swamy, Morgan State U. mathematics and science ed. dept., who liked my talk alot and said she'd be back in touch w/me. \$61.19
- 9 421) 3/16/91(Sat) Fpt. (6:05-12:40AM) St. Patrick's Day eve. +/-4 bus loads of men in green jackets, early-on, but they were gone by 7PM. Otherwise, Fpt. was fairly serene till midnight. J.(2 & 2); M 42(several times). Ok sky. I was very energetic and articulate but was somewhat bored after +/-4hrs. Noticed mild tension pain in stomach in mid-evening. \$94 + \$15.62 = \$109.62 (\$16.65/hr.)

TOTAL THIS PAGE = \$461.67 + 0 T-shirt
 TOTAL THIS YEAR = \$1,055.33 + 1 T-shirt

3/18/91(6:45PM) Was rainy and cloudy all day, but when I got up from a late afternoon nap and looked outside, the sky had begun to clear, and in the west was a beautiful pairing of the crescent 3-day moon and Venus. I admired it for a moment and then went for supper and to prepare to go to English dancing. This time last year, even though it was ½-hr. past sunset, I would probably have excitedly packed my telescope into the car and headed for the Rotunda or Chas. Village, but tonight I had little urge to do so. Why? What has changed? My first thought was that, now, I am into street corner telescoping more for the money than for the love of it, and that since my money thing was ok last wk., I can lay off a bit this week--not go to work, so to speak. My next thought was that, also, I may have overcome my "show and tell" urge--the need to run out and share these beauties with others in order to feel good about myself. If so, I think that is a positive development, though maybe it is a bit of a loss for the general public! I know that a lot of people will notice the Venus-Moon pairing, and that I will hear about it next time I am out with my telescope.

- 9 422) 3/20/91(Wed) Fpt.(6:40-9PM) First weeknight in Fpt. this yr.! Went having noticed in my last yr.'s log that I was doing weeknight by now. Beforehand, I had to decide whether to go to country to photograph early eve. Pleiades occultation (last till 2005!) or do telescoping. Decision was made in late afternoon when UPS delivered my new 18mm Kellner. I wanted to try it out! (It did not seem like an immediate improvement over 20mm Erfle. Field of view constricted when wearing glasses, but it seemed very wide w/o them. Image dimmer than Erfle. Difference in magnification not immediately apparent.) Watched occultation from Fpt.(saw Alcyone go at about 6:59PM) and let some lookers see disappearances. Jupiter; 5-d. moon. Moderate but enthusiastic traffic. Bob and Carla Adams paid for my meatloaf in Jimmies! \$31 + \$5.38 = \$36.38 (\$15.61). Shut down at 9PM because of thickening clouds.
- 9 423) 3/21/91(Thu) Fpt.(6:05-6:40PM) A few clouds in sky at sunset and weather rpt. calling for rain, but moon coming thru ok, so I went out, figuring that if I didn't the sky would be nice and I'd be home agonizing. 6-d. moon(Theophilus, Cyrillus, Catharina); J. Intermittent clouds, then impenetrable clouds, so shut down. However, by time I got home clouds had thinned and moon was coming thru ok; Stayed home! \$3.00 + \$1.41 = \$4.41 (\$7.56/hr.)
- 10 424) 3/25/91(Mon) Fpt.(6:35-11:05PM) Was really hesitant to go out tonight. Tired from teaching; windy. Urged on by Isabel, who said you can just go for an hr. Fpt. bleak when I arrived. Parking slots all over the place. Started to go home, but I somehow decided to set-up at N. end of square, across from Bertha's, for the first time. What a great spot on a Mon. night! Constant traffic and enthusiastic lookers, many from out-of-town. 10-d. moon(great...Jura Mts.) J(3-4-3; shadow of Ganymede traversing most of evening--awesome!) Am more pleased with new 18mm Kellner, which I used on J most of night. \$46 + \$17.77 = \$63.77 (\$14.17/hr.)
- 9 425) 3/30/91(Sat) Fpt.(6:30-11:30PM) Nice sky but constant cold breeze. Quit because of cold. Felt I was getting hypothermic! J + Moon(just past full...not bad!). Very quiet for first 2 hrs, then moderate to heavy traffic. Visited by sons of Howard Berman and Buzzy Shulhoff. Treated to pizza by worker in BOP and to hot choc. by the Fiddle Man! Set up near Bertha's again. Had a young crowd, for the most part. \$63 + \$21.73 = \$84.73 (\$16.95/hr.)
- 9 426) 3/31/91(Sun) Fpt.(5:10-8:40PM) Easter night. Jimmies closed! Bertha's closed till 7PM. Very blue sky in afternoon, so I set-up 1h20m before ss to see if I could find Jupiter. Found it immediately! Was very pale (better at 50X than 80X). No moons; just barely saw stripes. Nevertheless, some passers-by groved on it and made contributions. Then tried for Venus, which I couldn't find. It took about 20 discouraging minutes to reacquire J, because I did not note settings before moving scope. At nightfall I exhibited J and Castor(once). Very light traffic. Became bored and closed up. \$24 + \$2.63 = \$26.63 (\$7.60/hr.)
- 3 427) 4/2/91(Tue) STScI(9:15-10:15PM) Jupiter, Gamma Leo. Several of us agreed that lecture goes show very little interest in looking thru the telescope!
- 9 428) 4/3/91(Wed) Fpt.(6:15-11:45PM) Nice sky. J(absolutely no signs of Red Spot, which was due 10:11PM); M 42; Regulus; Sirius. Visit by Mike Green; Bob Adams & son. \$48 + \$9.04 = \$57.04(\$10.37)

TOTAL THIS PAGE = \$272.96 + 0 T-shirt

TOTAL THIS YEAR = \$1,328.29 + 1 T-shirt

American Lunar Society
PO Box 209
East Pittsburgh PA 15112

May 1 1991

Dear Mr. Heyn -

Next issue, by your permission, I shall publish your map for diagonal-prism lunar views. I am computer re-lettering your names on it.


This issue was somewhat mathematical. Not all issues will be so, at least this extensively.

Best

Francis Gralyam

Dear Francis, Thanks for your interest in printing my mirror image moon map in the next issue. Permission is happily granted. Congratulations on first light at the Christine Alley Observatory. Here's to alot of good viewing sessions there! I'm going to copy the article for the Balto. Astronomical Society, which is contemplating a structure to house a 12" Newtonian. They'll find your specs. and refs. of interest. By the way, what size and make scope is it?

Regards!


Herman M. Heyn
721 E. 36th St.
Baltimore, MD 21218
301-889-0460

P.S. Enclosed is a copy of my latest revision of the moon map. This may be the

MOON AS SEEN THRU A SCHMIDT-CASSEGRAIN WITH DIAGONAL PRISM**

- A. Crisium (Crises)
- B. Spumans (Foaming Sea)
- C. Foecunditatis (Fertility)
- D. Tranquillitatis (Tranquility)
- Nectaris (Nectar)
- Serenitatis (Serenity)
- G. Vaporum (Vapors)
- H. Frigoris (Cold)
- I. Imbrium (Showers)
- J. Nubium (Clouds)
- K. Humorum (Moisture)
- L. Oceanus Procellarum (Storms)
- M. Humboltianum (Humbolt)
- N. Australe (Southern Sea)

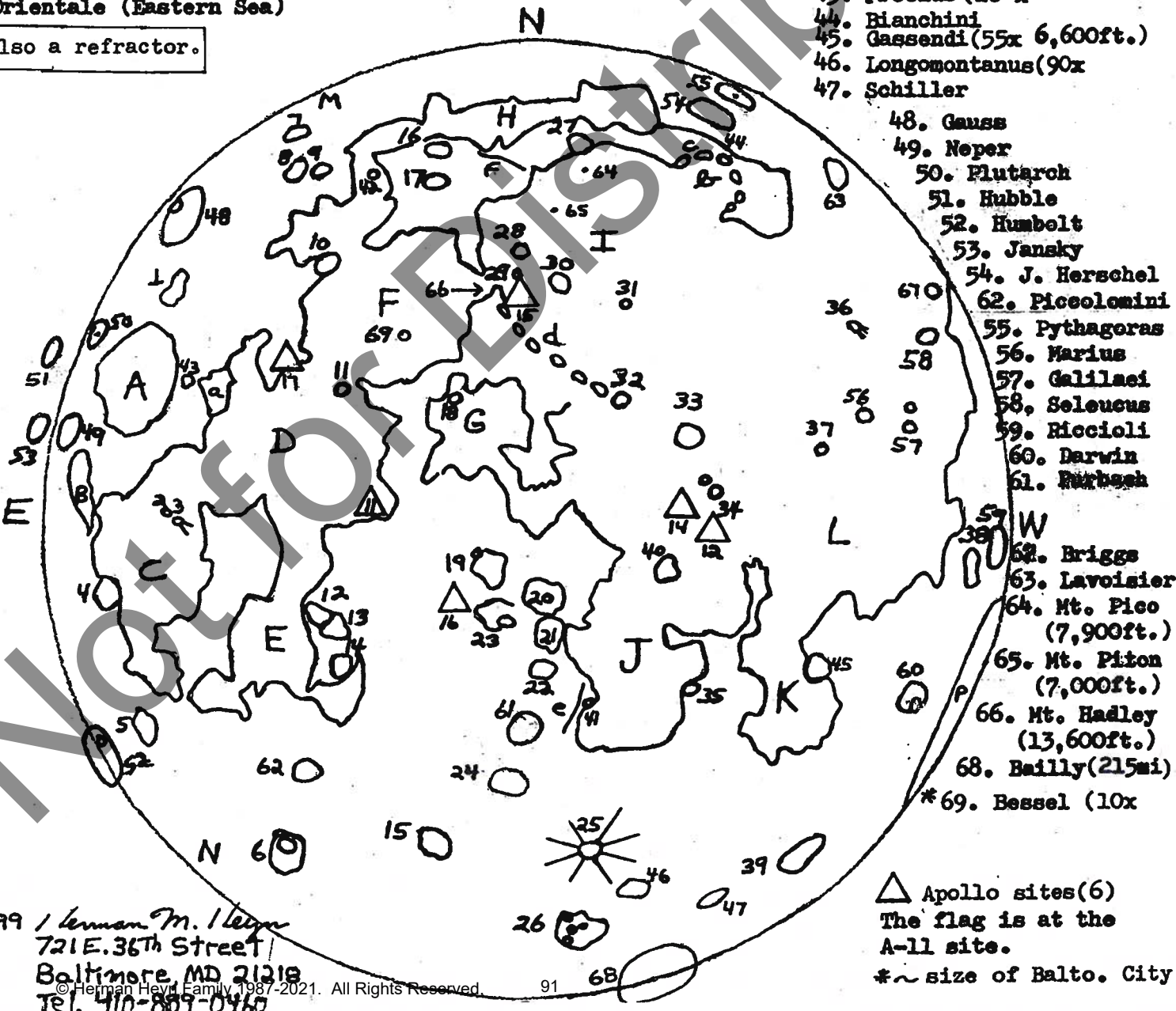
- a. Marsh of Sleep
- b. Sinus Iridum (Rainbow Bay)
- c. Jura Mountains (12,700ft.)
- d. Apennine Mts. (15-18,000')
- e. Straight Wall (800' x 60 mi.)
- f. Alpine Valley (83 miles)

- 1. Cleomedes (78mi. x 14,300ft.)
- 2. Messier
- 3. Pickering
- 4. Langrenus (82mi. x 16,200ft.)
- 5. Petavius (109 x
- 6. Janssen
- 7. Endymion
- 8. Atlas (55mi. x 10,000ft.)
- 9. Hercules (x 12,600ft.)
- 10. Posidonius (62mi. x
- 11. Pliny (32mi. dia. x
- 12. Theophilus (62 x 23,300ft.)
- 13. Cyrillus
- 14. Catharina (55x16,000)
- 15. Maurolycus (70x14,000)
- 16. Aristotle (50x
- 17. Eudoxus (35x 14,300ft. deep)
- 18. Manilius (24 x
- 19. Hipparchus
- 20. Ptolemaeus (115x 9,500ft.)
- 21. Alphonsus (74 x

- 22. Arzachel
- 23. Albategnius (80x14,000)
- 24. Walter (100mi. x 11,500ft)
- 25. Tycho (54 x 14,600ft.)
- 26. Clavius (140x12,000)
- 27. Plato (60x7,000)
- 28. Aristillus (35x11,000)
- 29. Autolycus (24x
- 30. Archimedes (50x7,000)
- 31. Timocharis (25x 9,400ft.)
- 32. Eratosthenes (37x 12,800ft)
- 33. Copernicus (56x 12,600ft.)
- 34. Reinhold
- 35. Bullialdus (38x 11,300ft.)
- 36. Aristarchus (30x11,900ft.)
- 37. Kepler (20 x 7,500ft.)
- 38. Grimaldi (150mi. x
- 39. Schickard (134x
- 40. Fra Mauro
- 41. Birt
- 42. Burg
- 43. Proclus (28 X
- 44. Bianchini
- 45. Cassendi (55x 6,600ft.)
- 46. Longomontanus (90x
- 47. Schiller

P. Orientale (Eastern Sea)

**Also a refractor.



△ Apollo sites (6)
 The flag is at the A-11 site.
 * ~ size of Balto. City

©1999 / Herman M. Legg
 721 E. 36th Street
 Baltimore, MD 21218
 Tel. 410-869-0460

- 9 429) 4/4/91(Thu) Fpt.(6:30-11:45PM) Late afternoon sky was cloudy and forecast was for increasing clouds. However, I figured it would clear up for a while after sunset, which it did. However, for a few hrs. there was a bitter wind which almost drove me off the square. J(Incredible array of 4 moons on one side early-on: X XXX J! Shadow of G. later on.) Gamma Leo, Very slow till about 9PM. \$32 + \$20.19 = \$52.19 (\$9.94/hr.)
- 9 430) 4/6/91(Sat) Fpt.(5:30-12MN) Mild weather; nice sky. Alot of people strolling late in afternoon, so I went for Jupiter in the daytime, found it quickly and had considerable interest. Had a young boy who looked early-on, discovered Europa appearing, and who returned later for Red Spot, which he thought he saw, but which I was not sure about. Was a terrific experience for several hours, but then the crowd got younger, more inebriated, and less inclined to contrib., so I packed up, even though I could have held Jupiter for another hour, at least. \$101.00 + \$23.26 = \$124.26 (\$19.12/hr.) 1-TE T-shirt.
- 10 431) 4/7/91(Sun) Fpt.(5:30-10PM DST...sunset at +/-7:37PM). Venus(Acquired in just a few mins. having noted that its dec. was nearly same as Jupiter's and that it transited at +/- 3:40 PM. Stayed with it till +/-6:30PM.) Jupiter(Acquired +/-1 hr. before ss. First notice of Ganymead +/-20 mins. before ss.) Visit by Phil and Judy Rotholtz and Judy's granddaughter. Mild weather, nice but unsteady sky. Enthusiastic lookers. Can probably do V in Daytime to great advantage when in crescent phase. \$47 + \$11.43 = \$59.43 (\$13.21/hr.)
- 9 432) 4/10/91(Wed) Fpt. (6:45-8PM) Venus (54min before ss)...found in finder on fourth sweep) Jupiter(40min before ss...found in finder. 5hr E of V) Cloudless sky but extremely windy. Wind did not subside with ss, as I had hoped. Seeing poor. \$low traffic; many no contribs. Decided to leave early. \$1.25 (\$1/hr.)
- 9 433) 4/11/91(Thu) Fpt. (6:15-11:45PM) Venus; Jupiter(3, then 4 moons on W); attempted but failed to find Procyon before sunset. Nice sky, then clouds, then nice again. Good traffic. \$45.00 + \$11.42 + \$56.42 (\$10.26/hr.)
- 9 434) 4/17/91(Tue) Fpt.(7-11:30PM) Jupiter(thru holes in clouds before sunset!); 2-day moon (noticed a fairly bright star appear from behind lighted edge); Venus. Collimated scope during lull(needed it!). Visit by Jackie Auger(Locked her keys in her car. Loyola John went home for coat hangers and helped her open door.) \$38 + \$9.92 = \$47.92 (\$10.65)
- 4 435) 4/23/91(Tue) Dept. of Earth & Planetary Sciences, Olin Hall, JHU.(7:15-7:45PM). Auspices Andy Wald, teaching asst.(366-6755). 9-day moon(Tyco, Copernicus, Plato); Jupiter. We'd been scheduling and rescheduling this demo around clouds for several weeks. Still, it was clouded out after 1/2-hr. tonight. Course title "Tour of the Planets". \$30.00
- 9 436) 4/26/91(Fri) Fpt.(7:30-9:15PM) Set-up at 6:30PM but was unable to locate either J or V. Why, I don't know. Was a very frustrating experience! Otherwise, 12-day moon, J, Venus. Ok sky, then thick clouds arrived. Decided to pack-up and go to the Gandy Dancer rather than wait to see if they would leave. By the time I got home, the sky was ok, again, but it would have been too difficult to park, had I returned. \$24.00 + \$2.41 = \$26.41(\$15.09/)
- 9 437) 4/30/91(Tue) Fpt.(8:20-9:15PM) Late start because of clouds. However, about 9PM clouds appeared and by 9:15PM there was very light rain. Closed up. 1/2-hr. late sky was clear, but I decided not to reset-up. J, V, Mizar. \$9.00 + \$3.01 = \$12.01 (\$13.05/hr.)
- 9 438) 5/3/91(Fri) Fpt.(6:51-12:00) Set-up at 6PM for J & V but didn't find either till 6:51PM, when J was on meridian. Why?? Jupiter(got kind of murky as it approached roof of Adm. Fell Inn); Venus(smallish); Mars(once); Mizar(once). Nice clientele till +/-10PM. Visits: 1) a female couple who bought a 4" StarFire after seeing Saturn thru my scope last summer!; 2) Mike, pres. of the Sydney, Australia astro. club(350 mems.); 3) a student of E. Kriesel who came to look on E.K.'s recommendation. \$66.00 + \$12.34 = \$78.34 (\$15.15)

86 TOTAL THIS PAGE = \$488.23 + 1 T-shirt

TOTAL THIS YEAR = \$1,816.52 + 2 T-shirts

- 9 439) 5/4/91(Sat)Fpt.(3:30PM-12:00) Venus(found on very first try!), Jupiter(waited for semi-twl. before acquiring). Could see Venus fairly well, thru periodic high, think clouds. V was a dec + 34° when on meridian at 3:51PM. Fairly good traffic mid-afternoon, a lull late afternoon, then good again as twl fell. Isabel visit. $\$103 + \$27.51 = \$130.51$ (\$15.35)
- 9 440) 5/7/91(Tue)Fpt.(8:45-11:30PM) Late start, because went to final session of Space Grant Internship Program. Jupiter(shadow of III and silhouette of IV in transit). Set up scope w/B-way as north as a test. Increased need to adjust dec. resulted. $\$24.30$ (\$8.84/hr.)
- 9 441) 5/10/91(Fri)Fpt.(8:05-10:55PM) Spent several hours before sunset(8:09PM) trying to find J & V without success. Why? Once I found them in twl. the dec. readings were almost right on and the RA readings were only off by 9m and 14m, respectively. Sky was hazy, but it looked ok enough, I thought, to spot these objects in daylight. Shortly after sunset a very strong wind developed. I was very cold. Became too cold to hawk, so packed it up and went to Gandy Dancer. $\$26.00 + \$6.42 = \$32.42$ (\$11.46/hr.) Sold 4 Fpt. T-shirts. Despite problems finding J & V in daylight, scope tracked exceedingly well, thanks to improvement in polar axis alignment (had been off by $\pm 10^{\circ}$ since 1987!). A lot of booths set-up in square for tomorrow's Preakness Festival. Visit Sharon Jenkins.
- 9 442) 5/11/91(Sat)Fpt.(5:45-11:05PM) Set up on corner adjacent to Kiosk, as Preakness Festival underway. A lot of young people in square. Working with carefully calculated figures, and having taken special care in leveling and aligning tripod, I acquired Venus on very first try. What a relief! I had been mortally afraid of again spending two hours in a futile search. About $1\frac{1}{2}$ hrs. later acquired Jupiter on first try. Once acquired, objects stayed in field with almost no corrections. A lot of no-contribs. early-on, but things changed for better as twilight arrived. Visit by Isabel and by Laura Kaufman. Did not use dew cap at all(because of balance problem). $\$61 + \$19.72 = \$80.72$ (\$15.14/) Received the news that someone who saw Saturn thru my scope last summer was so impressed with the sight that they named their new boat "Saturn".
- 9 443) 5/12/91(Sun)Fpt.(7:45-9:30PM) Was set-up at 5:15PM for Venus but couldn't find it, prob. due to haze. After my easy find, yesterday, I was feeling a bit invisible! Packed-up after $\frac{1}{2}$ -hr. and walked around visiting. Sold 2 Fpt. T-shirts during my perambulations, one to one of the walking tour clients of Zippy Larsen. Found Venus easily, by the numbers, on my second set-up, which suggests it really was a haze problem earlier. Visit by Deberah Diggs. Some enthusiastic lookers. $\$16.00 + \$4.01 = \$20.01$ (\$11.43/hr.) 2-T's.
- 9 444) 5/15/91(Wed)Fpt.(4:30-11:45PM) Very blue sky, finally! Hit Venus on first try; Jupiter on 2nd try 1-hr later. Searched carefully for Pollux and then Procyon without success, suggesting they are not to be seen in full daylight. Had many enthusiastic lookers over course of the evening who are in town for the Conference on Lasers & Electro Optics (CLEO). Visited by Frank DiMinno, V.P. of Edmund Scientific, who I recognized from his picture in catalog! 2-d. moon(briefly). Jupiter terrific; 3-moons close together on west, joined in mid-evening by 4th. (gave DiMinno copy of star map w/Edmund scope recommendation. Also visited by man from Kalbach publishing. $\$66.00 + \$17.02 = \$83.02$ (\$11.45/hr.)
- 9 445) 5/16/91(Thu)Fpt.(6:00-12:00...but watch may have been ± 11 min. slow!) Venus, Jupiter, 3-d. moon (as good a moon as I've ever seen!). Tried for Sirius in daylight several times w/o success. Late afternoon sky very clear, hazy cloudy at sunset, then extremely good after dark. Jupiter awesome with bright star just W of Ganymede. To my surprise and disappointment there were few CLEO visitors--not return visits. $\$55 + \$7.44 = \$62.44$ (\$10.41/
- 9 446) 5/20/91(Mon)Fpt. (5:55-8:10PM) Venus, 7-d moon(Aristotle, Eudoxus), Jupiter. Very slow, then most lookers non-contribs; Discouraging! Depressing!! $\$6.63$ (\$2.95/hr.)
- 9 447) 5/21/91(Tue)Fpt.(5:45-12:30AM) V & J (can now acquire them and switch back & forth at will in daylight!), 8-d moon(sunrise on Plato!). Moderate traffic; many enthusiastic lookers. J sensational w/4 moons on W! Worked real hard! ALBIRO acquired $\pm 11:30$ PM!! $\$77.17$ (\$11.43/hr.)

TOTAL THIS PAGE = $\$517.22 + 6$ T-shirts

TOTAL THIS YEAR = $\$2,333.74 + 8$ T-shirts

6/19/91

City Paper

Dear Editor,

I was greatly surprised and, after reading the article, highly honored to have discovered myself as oddity #18 (right after George Figg's wonderful Orpheum Cinema) in "Close Encounters with 18 Baltimore Oddities" (CP, 5/24). For the record, I and my telescope have been written about in numerous area publications, but NEVER have so many friends, acquaintances, and passers-by commented that they saw an article about me as with this one in City Paper!

Yours truly,



Herman M. Heyn
BALTIMORE'S STREET CORNER ASTRONOMER
721 E. 36th Street
Baltimore, MD 21218
tel.: 889-0460

FELL'S POINT

I Saw...

★



SATURN!

BALTIMORE, MARYLAND

Not for Distribution

- 9 448) 5/22/91(Wed)Fpt.(7:45-12:15AM) Late start because of clouds. Slightly hazy but ok sky for most of evening. Received alot of comments (good) on article mentioning me in new edition of City Paper. J & V; 9-d. moon (Clavius-Tyco-Straight Wall-Copernicus). Used 160X often. Ok crowd, except for one very obnoxious, large man shouting about civil liberties and police tyranny. \$54 + \$7.31 = \$61.31 (\$13.62/hr.) 1-T-SHIRT.
- 9 449) 5/23/91(Thu)Fpt.(7:45-11:30PM) Late start--clouds. V, 10-d moon(Tyco, Clavius, Jura Mts.) I mentioned Tyco and the 2001 monolith many times, but there seemed to be little recognition. Jupiter a little dull thru haze. Visit by Cindy Leahy. Also visit by guy from Cornell (biologist) who works summers in Balto. \$35 + \$5.75 = \$40.75 (\$10.87/hr.)
- 9 450) 5/25/91(Sat)Fpt. Mem. Day week-end. A(5-6:15PM) Venus. No trouble finding, but clouds came. Packed-up and went to Michele & Tom's wedding party at the G.D. Visited by one George Houst, who reported buying a Meade like mine from Nature Ctr., after having seen Saturn thru my scope. Seemed not to know how to use his scope. \$5.25. 1-T-shirt. Am thinking will do better when Venus looks bigger and is more crescent. B(9-12) 12-d moon(Tyco, Schicknard?, Aristarchus, Copernicus), Jupiter, Venus. Hazy sky, with intermittent clouds, causing some down time. Moderate to heavy traffic, occasionally. I felt oppressed by the wiseacres. Am getting very bored with street corner telescoping. I need a vacation, if not a semipermanent break. \$57.43 (\$19.14/) Sold 1-Welders Lens! Visited by Jack Eisenberg, who gave me a great photo in exchange for a T-shirt.
- 9 451) 5/27/91(Mon)Fpt.(I skipped last night, having been in DC at the Irish Fest., but I was told by locals that the place was packed!)(5:35-6:50PM) Venus. Had to quit because of clouds, but I was amazed at how solid-appearing a layer of clouds V could still be seen thru. Alot of parking spaces, and not many people around, but I had some enthusiastic lookers! \$10 + \$2.73 = \$12.73 (\$10.18/hr.)
- 9 452) 5/28/91(Tue)Fpt.(6:45-11PM) Venus; Jupiter(4 moons + several stars); 15-d moon(slight cratering on terminator). Bothered several times by a gagle of alcoholics. Really takes alot of the fun out of things! Visit by Isabel who wanted to see Venus. Sometimes great sky; sometimes hazy. Showed Mars to man in town for geophysical convention who works for NASA lab simulating conditions for early life on Mars. \$41 + \$19.48 = \$60.48 (\$12.73/hr.)
- 9 453) 5/29/91(Wed)Forest Park H.S.(9am-1pm.) Auspices Space Grant Consortium. I participated in videotaping of a series of 60-90 second features on astrophotography in Rosa Lee Hinton-Green's laboratory. Taping and interviews done by Fox 45 TV. I supplied information, 35mm slides, and my 3" refractor, with which we projected sunspots(many, several being naked eye). I was interviewed, too, by Fox 45. Ms. Green bought a #14 filter from me. I felt somewhat depressed, throughout, but performed ok. \$63.00 (JHU)
- 9 454) 5/31/91(Fri)Fpt.(7:15-11PM) Venus(easy thru high clouds; could have started sooner); Jupiter(3 moons, 2 very close and seen as 1 by many lookers; bad seeing, so was not sure when problem was seeing and when it was focus--hard work!)\$50 + \$9.25 = \$59.25 (\$15.80/hr.) Visit by Carol O'Keeffe. Sold 1-T.
- 9 455) 6/2/91(Sun)Fpt.(5:50-9PM) Latino Festival(groovey....I liked being there!). Venus; Jupiter(nice!); clouds. Visit by Jackie Auger. Joined her later at party on Belfast Rd., Baltimore Co. \$25 + \$2.24 = \$27.24 (\$8.59/hr.)
- 9 456) 6/4/91(Tue)Fpt.(6:35-9:25PM) Nip-and-tuck with clouds. Probably 50% down time. Venus; Jupiter. Venus-Mars-Jupiter now close enough to each other to stimulate a sense of excitement. Visit by group of men from Perkin Elmer Co., one of whom has a 10" Meade SCT which he said is too cumbersome to use very often. \$16.77 (\$5.92/) Sold 1-T-shirt.
- 9 457) 6/5/91(Wed)Fpt.(8:35-11PM) Late start due to clouds, then nip-and-tuck w/clouds, again. V, J, Mars, Albireo. A number of people asked if I was going to see the northern lights after midnight. Apparently, the TV news had announced there would be n. lights after midnight.(It sure is "sunspot weather"!) Lots of no-contribs. \$18 + \$4.91 = \$22.91 (\$9.47/)

93
TOTAL THIS PAGE = \$427.12 + 4 T-shirts

TOTAL THIS YEAR = \$2760.86 + 12 T-shirts

- 9 458) 6/6/91(Thu)Fpt.(9:05-11:10)Late start because of indecision over clouds. Venus, Jupiter, Mars, Lookers are beginning to appreciate their alignment, one asking if they are all in the same plain. Also Albireo. \$34 + \$2.41 = \$36.41 (\$17.42/hr.)
- 9 459) 6/7/91(Fri)Fpt.(6:20-11:50PM) Sunspot with #14 welders lens; Venus, Jupiter(lost at 10:50PM), Albireo(10:50-11:50PM). Slow traffic in early eve., but pretty busy mid evening. Nice sky. Took planet photos w/Richo. \$57 + \$7.42 = \$64.42 (\$11.71/)
- 1 460) 6/8/91(Sat)Waverly Farmers Mkt.(10:20-11:45AM) Large sunspot, the one that's been getting alot of mention in the media, including a 4-column spread in this morning's SUN. 3" refractor with eyepiece projection. Moderate interest. Moderate awareness of event. Good visit by Rick Schoonmaker. \$10 + \$4.19 = \$14.19 (\$9.99/hr.)
- 9 461) 6/8/91(Sat)Fpt.(5PM-12:10AM) Sunspot w/#14 lens; Venus(forgot my note, so had to do coordinates by memery, which took a few extra mins. to find it); Jupiter(very nice, w/1 + 3 moons); Albireo(gets positive response from most lookers...went to after loosing J at 10:50PM). Saturn(could see fairly high above the Rec. Pier at 12:30AM! Maybe will do late in eve. in another week or two! This was a peak night, finally! Alot of interested and interesting lookers. Many contribs. Had great conversation w/blind math prof. from Temple U. Gave out all my Venus sheets and many star maps. Visit by Gail and her family, Kate Charles and Alan Hodge. Excellent sky. \$105 + 8.58 = \$112.58 (\$15.70/hr. Sold 1-Welders Lens.
- 9 462) 6/10/91(Mon)Fpt.(6:45-10:37PM) Sunspot w/#14 filter. A group of photography students w/camera from Dundalk CC photographed the sun thru it! Venus(found easily thru considerable haze); Jupiter(due to haze it was a pale shade of its usual self! Moderate traffic. A good number of enthusiastic lookers. \$32 + \$3.49 = \$35.49 (\$9.17/hr.)
- 9 463) 6/12/91(Wed)Fpt.(7:20-9:53PM) Venus, Jupiter. Fpt. very quiet early on. No contribs for 1st hr., at least, then moderate traffic. Visit by Bob & Marilyn ? (draft counselors during anti-Viet. war movement.) Shut down by clouds. Joined Nancy S. and Gail at the Brewery to hear Darius' jazz group(nice!). \$22.15 (\$8.69/hr) 2-T-shirts.
- 9 464) 6/13/91(Thu)Fpt.(6:05-11:15PM) Started too early. 7:15PM would have been better. Venus (greatest elongation), Jupiter, 2-d moon, Mars, Albireo(after loosing planets). The gathering of Venus, Jupiter, and Mars in the western sky is daily getting more impressive. Alot of people curious about it. I felt very tired by mid-evening, maybe because I worked so hard earlier in the day on the I LOVE OPERA! design! Visit by Jacki A. \$61.00 + \$9.90 = \$70.90 (\$13.58/hr.)
- 9 465) 6/14/91(Fri)Fpt.(A)(5:53-10:50PM) 1st. evening of the 1st. Annual Fell's Pt. Maritime Festival. Slow start but then great traffic. Almost everybody contrib'd! V-J-M in a tight triangle; 3-d moon(fantabulous!). And the best may be yet to come--tmw. night! Visit by Jacki, Wally & Pricilla. (B) 12:03-12:30AM SATURN(!). Moved scope to SW corner of square. Sat for an hr., then set up again. S was low in sky, with alot of atmospheric--plus, scope needs collimating for that direction. Crowd getting younger; more no-contribs. Thinking about tmw., packed-up. \$120 + \$17.17 = \$137.17(\$25.40/!) 1-T.
- 9 466) 6/15/91(Sat)Fpt.(4:20-10:30PM) Absolutely incr4dible night! People dying to see the gathering of the planets. Venus in the daytime(slow!). Then 4-d. moon (fantastic); then Jupiter w/4 moons, but people wanted to see conjunction of the planets. Ended up doing thru my 3" finder, into which all three fit! Alot of contrib, then! Visited by one of my Chas. Village lookers with her camera. Ended up getting wasted at the Cat's Eye! \$127 + \$18.20 = \$145.20 (\$23.53./hr.) Visit by Rosa Green. This was second day of the Maritime Fest. Alot of people! Sold 1-filter.
- 9 467) 6/20/91(Thu)Fpt.(7:30-12:00MN) First ok sky since Sat. Venus; 9-d. moon (Plato, Eratos., Straight Wall; sunrise on Tyco); Jupiter. Visit by Doug Miller of the Columbia Flyer who, I think, got some good copy. I was feeling very depressed and not nearly as sharp as I want and need to be! Scope incredibly well aligned!! All three planets still fit in finder, which I used alot. Gave out Summer '91 star map for first time. \$68.35(\$15.19/)

TOTAL THIS PAGE = \$706.86 + 3 T-shirts

TOTAL THIS YEAR = \$3,467.72 + 15 T-shirts

- 12 468) 6/24/91(Mon)Fpt.(6:32-11:32PM) Surprisingly heavy traffic for a Mon. night. May the planets' alignment was still having an effect! Venus(thru alot of clouds, early-on); Venus-Mars(together in 80X and 50X eyepieces!); Jupiter(4 moons, but diminished by haze); 13-d. moon(Aristarchus, Tyco, Copernicus, Pythagoras?). A lot of mention of my letter in this morning's SUN announcing my Fpt. solar eclipse plans! Visit by Robert Hettleman and his friend, Dan. \$55 + \$12.83 = \$67.83 (\$13.57/hr)
- 9 469) 6/25/91(Tue)Fpt.(6:30-11:35PM) Ok to nice sky. Venus-Mars no longer in same field; Jupiter (3 & 1); 14-d. moon(Tyco, Copernicus, Aristarchus. Used 50X alot. Saturn-- could have acquired it from east side of sq. had I stayed 10 more mins.! First looker was Joe Trabert, who watched me find V(first try!) and who then bought a L'OPERA! nightshirt! Visit by Ann Gordon & friend, both of whom bought a filter! Hard work, but all-in-all, a good night. Kiosk closed early, again. \$52.00 + \$11.97 = \$63.97 (\$12.59/hr) Sold 1 T-shirt.
- 9 470) 6/26/91(Wed)Fpt.(6:45-12:05AM) Venus, Jupiter, Mars, Full Moon(50X), SATURN(acquired at 11:30PM by moving scope 2/3'rds way W. Alot of enthusiastic lookers. Gave out "I SAW SATURN" postits. What else can I say? I am wearing; my stamina seems to be flagging. I need a vacation--a break!! \$53 + \$16.22 = \$69.22 (\$12.99/hr.)
- 40 471) 6/27/91(Thu) Chesapeake Bay Fdn. encampment, Hammerman Area, Gunpowder St. Pk. Auspices Linda Block. Arrived around 5:30PM and set-up scope soon after for Venus. Used magnetic compass to align tripod, but could not find Venus. Ed advised that std. diviation has magnetic N 10° west of true N in this area. I shifted scope 10° eastward and immediately found Venus--a very gratifying experience! Ate, and began show folk objects around 9:15PM. Venus, Mars, Jupiter(4 moons nicely arrayed), Albireo, Mizar, 16-d moon, M 13(!), Antares, and finally, Saturn(murkey, but nonetheless itself). Hard work but good experience. Campers enthusiastic! \$50.00.
- 9 472) 6/28/91(Fri)Fpt.(7:20-9:50PM) Venus. Murky sky. Could barely see V in finder before sunset. Packed up when lost it in haze. Visit by Lise, local young lady who has befriended me. She looked great as always but was upset. She said she had been attacked and robbed in her apt. two weeks before. She had just spotted the guy she believed did it, had called the police and was very upset they hadn't arrived yet. They finally arrived but guy disappeared. This happened again 1/2-hr. later. After packing up, I joined Gail at the Orpheum for a Lon Chaney movie. I left at 12:30AM, before it ended. Moon was up, but Saturn was not to be seen. Crowd looked very young, so I came home \$19.00 + \$3.28 = \$22.28 (\$8.91/hr.)
- 9 473) 6/29/91(Sat)Fpt.(9:15-9:55PM) Late start due to procrastination over haze. Venus, till it was into the haze. Packed up. Found Jerry Bell at Cat's Eye. Sat w/her on bench for +/- 1-hr. Saw mello 18-d. moon come up over Rec. Pier. Procrastinated again, then went home. Did not feel I had the psychic energy to deal with the young folks there. GAVE OUT SEVEN "FELLS POINT SHOESHINE COMPANY" BADGES TO SHOESHINE KIDS. ALSO GAVE THEM "HELLO, MY NAME IS...." BADGES. THEY WERE PLEASED. Some had seen me on Channel 45. \$12.00 + \$0.74 = \$12.74 (\$19.10/hr.) Tonight, set up on Lee's Icecream corner!
- 9 474) 7/11/91(Thu)Fpt.(2:00-9:20PM...with supper break). ECLIPSE OF THE SUN with 3" refractor. 7% partial. Exciting, even though a minor eclipse. Maybe 30 or 40 lookers at peak. Visits by Dorothy H., Mollie, Pat Tracy & ? Jenkins, Rebecca Johnson & Fam., people who had read my letter in SUN. After supper had a 50 min. run on Venus before it went behind roof of Fpt. Inn. \$59.14. Sold 17 TE + 1 Fpt. T-shirts. Photographed eclipse and spectators, as well as Venus thru Meade.
- 4 475) 7/12/91(Fri) JHU Space Grant Consortium, Bloomberg, Governor's Math & Science Academy. 12-4PM(incl. loading/unloading a humongus quantity of stuff). 18 teachers. I gave out alot of resource materials(Astronomy Resources(compiled by HH), SCOOl Constellation Chart, Abrams Sky Calendar, Sky Pubs. Cat., Learning Tech., Inc. cat., Otwell order form, Astronomy Mag. sub. offers, Sky Maps(HH), Venus phases paper(HH). Did sun w/3", but sky too hazy for Venus attempt(too bad!). Showed slides. Felt depressed but managed to keep going for 2 hours. talked about and demonstrated astrophotography with still camera, Set up Meade inside and described workings. \$210.00

TOTAL THIS PAGE = \$555.18 + 19 T-shirts

TOTAL THIS YEAR = \$4,022.90 + 34 T-shirts

July 27, 1991

To Whom It May Concern:

I have known Mr. Herman Heyn, Baltimore's Street Corner Astronomer, for many years and can personally attest to his considerable knowledge and experience in the field of astronomy. Please be absolutely assured that whatever Mr. Heyn invites you to view through his telescope (the planet Saturn with its magnificent rings, for example) is the real thing and not a slide or other kind of contrived image.

Sincerely,

David G.S. Greene, PhD
Department of Physics
Towson State University

- 9 476) 7/13/91(Sat) Fpt.(8:30PM-2:50AM) Venus; 2-day moon(very briefly). Lost V at 9:25PM, having moved once to stay with it. Then moved from Lee's corner to Square. Started w/Albireo, and at 10:25PM acquired Saturn. Alot of doubters, and move wrong-enders than ever before. Also some enthusiastic lookers. Visited by Jeff and Lisa Malter and by Rob Kanigel and family. \$87 + \$10.21 = \$97.21 (\$15.36/hr. Sold 2 T-shirts.
- 9 477) 7/14/91(Sun) Fpt.(5:27-9:15PM) Venus(near middle of cross hairs on first try!) 3-days before greatest brilliancy. 3-day Moon (really impressed lookers!). Light traffic, plus alot of affluent looking no-contribs. Should not have set up till +/-7:30PM. Visit by Isabel. \$26 + \$7.83 = \$33.83 (\$8.90/hr.) Quit when V and Moon went below roof of Adm. Fell Inn. Refrained from pursuing Saturn thanks to thickening clouds!
- 9 478) 7/15/91(Mon)Fpt.(6:45-11:23PM) Venus, 4-d. Moon, Jupiter(murky, but 2 moons), Saturn (great!). Nice sky. Started on Lee's corner. Lost Moon at 9:50PM and moved to square. Quite quiet, tonight, in Fpt. Tried Polaroid shots of Moon. Got vague detail. Will take practice! \$33 + \$5.97 = \$38.97 (\$8.42/hr.)
- 9 479) 7/16/91(Tue)Fpt.(7:01-11:40PM) Venus, 5-d. Moon(Theophilus on terminator--awesome!), Mercury(found accidentally while looking for J!), Jupiter(briefly). Slow early-on, then some traffic, then slow again. However, some enthusiastic lookers, incl. one man who looked and returned w/his wife w/babe in arms. Mr. Wizzard, the tarrot card man, closed down by policeman who said residents were complaining about him. Lost moon at 10:40PM and acquired Sat.(from Lee's corner) at 10:55PM. Planned to try Polaroid shots of Moon, again, but somehow ruined film pack! \$42 + \$6.93 = \$48.93(\$10.53)
- 9 480) 7/17/91(Wed)Fpt.(7:15-11:45PM) Venus, 6-d. Moon(Aristotle & Eudoxus on terminator), gull on lamppost(by request), Saturn(by 10:48 from Lee's). Slow evening. Not very many enthusiastic lookers. Visit by Peter, back from the eclipse.\$36 + \$14.53 = \$50.53(\$11.23)
- 9 481) 7/19/91(Fri)Fpt.(8:50-11:10PM...late start due to fence-sitting!) 8-d. Moon(Apennines, Archimedes, Plato). Very hazy sky. Invited alot of lookers to come back for Saturn but could not find it thru haze. Alot of nice lookers. Closed up and went to Gandy Dancer when moon sank into haze and disappeared. \$37 + \$7.12 = \$44.12 (\$18.85/hr.) Visit by Lisa, John H.'s parttime secretary.
- 9 482) 7/24/91(Wed)Fpt.(8:25-12:45AM) Set up in square, but even from Lee's corner Venus gone by 8:45PM, or sooner. 13-d. moon(Tyco good, plus numerous craters on terminator.) Vega, when moon in clouds. Albireo(briefly). Saturn(lookers impressed!). On and off again haze and clouds throughout session. \$45 + \$9.22 = \$54.22 (\$12.52/hr.) Was asked excitedly by at least 1/2-dozen people if I'd heard the news rpt. about the planet discovered around a pulsar. I replied that I hadn't but was hoping it would be in the morning paper.
- 9 483) 7/27/91(Sat)Fpt.(8:55-2:10AM) Weather report was for clouds and 60% chance of thunder storms. We to Fpt. to eat and only took scope as an afterthought. Amazingly, upon leaving Jammies sky was half clear. Venus very low in W. Watched sky for a while and decided to set-up. Sky turned very clear! Alberio, then rising 16-d. moon, then Saturn (may have seen three moons!). Some enthusiastic lookers. Some inebriates. Showed Dave Greene's endorsement letter many times. It helped! \$85 + \$19.92 = \$104.92 (\$19.98/hr.)
- 9 484) 7/31/91(Wed)Fpt.(8:35-12:30AM) Fairly nice sky. Vega(briefly), Alberio, Saturn(by 9:15PM). As it approached meridian could see Casini Div., a brown band in N. hemi., several moons. Fpt. quiet; Kiosk closed. 20-d. moon(awesome!). \$40 + \$7.22 = \$47.22 (\$12.05/) 1-T-shirt. People still commenting on and inquiring about rpt. of discovery of planet around star. Had a looker who is working on the Cassini (to Saturn) space probe.
- 9 485) 8/1/91(Thu)Fpt.(8:45-12:50AM) Supper w/Helene. Felt depressed, for a change.Vega; Albireo; Saturn, lost in haze for most of first possible hour. Visit by Bunny Dadds & children. Visit by David Michael Etlin. 21-d. Moon. \$41 + \$8.75 = \$49.75 (\$12.19/hr... includes \$5.00 contribution for 60mm scope received from Cathy, the Bears lady, which I gave away. I watched helplessly as a young man kicked a wooden bench in sq. to bits!

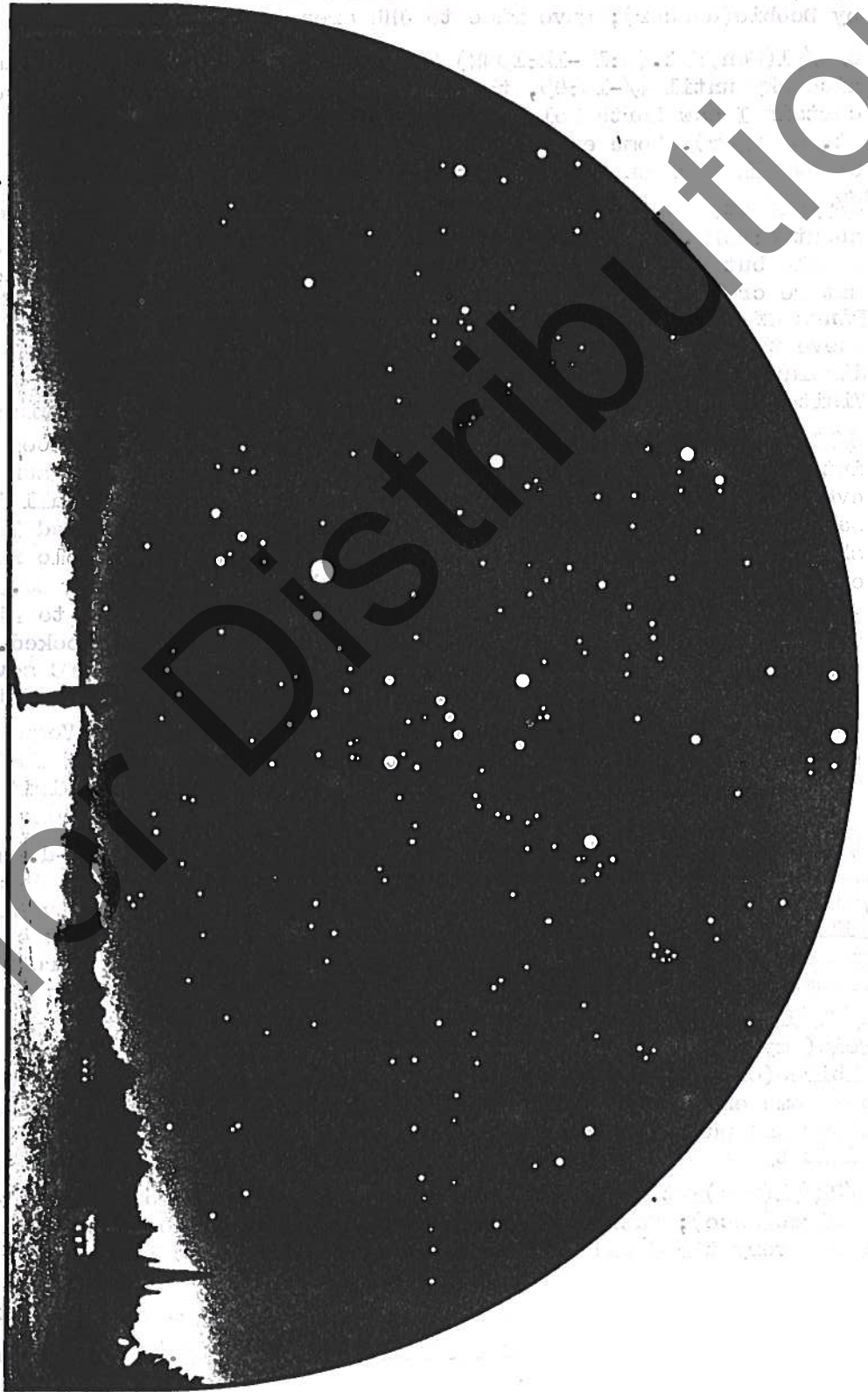
TOTAL THIS PAGE = \$569.70 + 3 T-shirts

TOTAL THIS YEAR = \$4,592.60 + 37 T-shirts

- 9 486) 8/2/91(Fri)Fpt.(8:25-11:45PM) Quit early because crowd was very young and not much interested in my "act". Vega, then immediately to Albireo--by the numbers(on the edge of visibility in finder). Saturn(by 9:05PM). \$35 + \$14.17 = \$49.17 (\$14.77/) 1-T.
- 1 37) 8/4/91(Sun)Fpt.(8:20-12MN) Nice sky. Quiet in Fpt. Vega(collimated on it); Albireo; Saturn(by +/-9PM. 3 moons!, FOR THE FIRST TIME THAT I CAN RECALL AS STREET CORNER ASTRONOMER COULD SEE THE SOUTH POLE OF THE PLANET PEEKING BEYOND RING! ONCE IN CLEAR VIEW, IT SHOULD GIVE LOOKERS A BETTER PERSPECTIVE AS TO WHAT THEY ARE SEEING.) Visit by Debbie(dancer); gave ride to JHU area to Richard(the strange one!). \$33.99(\$9.26/)
- 11 488) 8/5/91(Mon)Fpt.(8:10-11:15PM) Quiet night. Vega; Albireo; Saturn(by 8:45PM!). Very nice sky until +/-10:45, then intermittent high clouds. Three moons. Was not 100% certain I saw North Pole of Saturn buldge, tonight! Gave ride home to Edwin(St. Paul St. & Eager). Some enthusiastic lookers. This was first night with TONIGHT--THE RINGS OF SATURN sign on tripod. Not sure if it helped any! \$29 + \$4.17 = \$33.17(\$10.77/)
- 9 489) 8/10/91(Sat)Fpt.(8:05-1:30AM) Nice sky. Good traffic. Vega, then Albireo; Saturn(by about 8:55PM, but could have acquired at least 10-min. sooner). I thought I saw Sat.'s S pole but wasn't positive. Peter, asked by me to look for it, said he saw it. A nice mature crowd in early evening. \$111 + \$13.92 = \$124.92 (\$23.05/hr.) Used "Tonight--The Rings Of Saturn" sign but not sure how effective it was. There's a big crain boom rising above the pier which interferes with Saturn for about ten minutes. Extensive fireworks display, tonight, at Inner Harbor celebrating 10th anniversary of Nationa Aquarium. Visited by guy who is friend of writer of City Paper "Oddities" article.
- 9 490) 8/11/91(Sun)Fpt.(7:15-11:45PM) A truely remarkable sky!! Good traffic, with alot of interested lookers. Arcturus(at 7:15PM...52 mins. before sunset. This was my first ever daytime star observation. Note: could not see it at all in finder!); Albireo ; Saturn(8:30PM, but could have had it 10-15 mins sooner, had I looked for it. Razor sharp image w/15mm RKE. 4(!) moons!; Reemergence of S. pole noted by unprompted looker, a definite confirmation of my 8/4 observation!) \$58 + \$8.91 = \$66.91(\$14.87/) 1-T. Visit by David K. After stint picked up Isabel and drove to Rick Foster's farm to see Perseids(disappointing show, at least for the 1-hr. we looked.) Also visited by Susan(?), NYC friend of Keith, with whom Eve and I had supper in NYC several years ago. A guy reported wearing his SPIKE T-shirt to Saratoga Race Course and that it was a BIG hit!
- 11 491) 8/16/91(Fri)Fpt.(7:35-12:10AM) Bad start. Couldn't find Vega or Arcturus; next to no contribs. first hr. 6-d. moon; Saturn(nice). Hung sign TONIGHT--THE MOON & THE RINGS OF SATURN. Noticed no special reactions from passersby. Visit by Charlie & Paula Doble. Little interest in me after 11PM. \$45 + \$16.28 = \$61.28 (\$13.35/)
- 10 492) 8/17/91(Sat)Fpt.(7:45-1:05AM) Slightly hazy but ok sky. 7-d. moon(1st qt.); Saturn(1 moon); Albireo(once). Mature lookers early to mid evening. Packed-up when interest began to fade and when most lookers were hassling me. Early visit by Jan-David-Micki Killoran; later Isabel. \$98 + \$20.51 = \$118.51 (\$17.77/) Sometime during evening I began experiencing sharp pains in my right hip.(Hip still sore next morning. Should probably try better shoes, to star with)
- 9 493) 8/21/91(Wed)Fpt.(7:20-11:37PM) Nice sky early-on, but then 50% semi-opaque clouds. Tried my new polar alignment template. Seemed to work ok. Vega(not vis. in finder.); Albireo(once); 10-d. moon(Tyco region magnificent!); Saturn(two moons). Light traffic but some enthusiasts. For first time ever I hit (slapped on the arm) a guy who came along and pulled down end of scope! Visit by Isabel. \$43.73 (\$10.19/hr.) 1-T-Shirt. Visit by Ralph Levy and his friend Chris. No problem w/hip. McKiosk closed +/-9:30PM.
- 10 494) 8/22/91(Thu)Fpt.(7:48-12:45AM) Nice sky but air turbulence. 11-d. moon(Tyco, etc.); 1-Tee Albireo(once); Saturn. Moderate traffic, alot of no-contribs. Visit by Mark Steiner. I was very tired and bored. Some very enthusiastic lookers. \$63 + \$18.15 = \$81.15(\$16.39/)

TOTAL THIS PAGE = \$612.83 + 4 T-shirts

TOTAL THIS YEAR = \$5,205.43 + 41 T-shirts



THE SOUTHERN WINTER SKY AS SEEN ON:

- | | |
|------------------------|-----------------------|
| DECEMBER 15 AT 12 A.M. | FEBRUARY 1 AT 9 P.M. |
| JANUARY 1 AT 11 P.M. | FEBRUARY 15 AT 8 P.M. |
| JANUARY 15 AT 10 P.M. | MARCH 1 AT 7 P.M. |

- 10 494) 8/23/91(Fri)Fpt.(7:35-1:12AM) Vega; 12-d. moon(Tyco, + enough terminator craters to make it interesting); Saturn(as often as not couldn't see Titan, because of haze) Nice sky early, but increasing haze. Many enthusiastic lookers early. I felt tired and somewhat bored. Had to strain to keep up energy level. \$85 + \$13.53 = \$98.53 (\$17.53)
- 12 5) 8/27/91(Tue)Fpt.(8:02-11:55PM) Very quiet, almost mello scene. Nice sky! Saturn(2-moons); Moon(Tyco + the W. wall of Mare Crisium, which caught alot of attention); Albireo(once--for a family from NJ who saw Saturn last summer and returned again this summer!). Visit by Mike & Peggy Potter. \$53 + \$10.13 = \$63.13 (\$16.22/)
- 11 6) 8/28/91(Wed)Fpt.(8:22-8:36 + 9:16-12:57AM). Put out of action by clouds, packed up, but then sky cleared nicely. Saturn(1 moon); 17-d. moon; Albireo(once). Alot of enthusiastic lookers. Purposely left dew cap home; depending more on sign for attention getting. However, need modified dew cap for protection of lens. An especially enthusiastic looker--Don, the owner of a fleet of 4 limousines that ply Fpt. \$48 + \$9.56=\$57.56(14.72/)
- 11 497) 8/29/91(Thu)Fpt.(7:46-12:12AM) Hazy. Vega; Saturn(invisible by eye for 1st hr. Eventually ok). 18-d. moon. Moderate enthusiasm. Visited by a man friend from NYC of Joel and Eve. Connected w/Hal Kilberg about printing opera paper bags. \$36 + \$4.34 = \$40.34 (\$9.11/) Was a young crowd. Need protection from front end of scope!
- 11 498) 9/1/91(Sun)Fpt.(2:45-10:50PM) Great sky! Venus(10-days after IC. Crazy thing to try. Took +/-1 hr. and 4 tripod turns toward the E to acquire. Also took alot of energy, as I was constantly explaining to passersby what I was doing. Had alot of interest and would have received good contributions, had I acquired sooner. As it was, I received 1 \$5.00 contrib. Venus looked murky. It dissolved into a blob over the Adm. Fell Inn by 4:45PM. I was located on Lee's corner.) I moved to square and went for Arcturus, which I acq. at 5:25PM after 10-min. search. It looked fuzzy. Switched to Vega at 7:15PM. It looked alot sharper/brighter than Arc. Saturn at 7:40PM. Two moons. Cold wind came up in mid-evening which forced me to drop from 160X to 115X. By mid-evening the family type crowd was dissolving and the college crowd arriving. Contributions were becoming few and far between, so I packed up. \$74 + \$26.48 = \$100.48 (\$12.44/) 1-T-shirt. Visited by Jean Pierre, the "free advice" purveyor. Joined by a Bolivian pan pipe gp. Because of its greater proximity to the sun, Arc. was alot dimmer than Vega thru scope.
- 11 499) 9/2/91(Mon)Fpt.(3:02-8:05PM) Really slow day. Should have stayed home. Arcturus, then Vega 2h39m later. Spend a good bit of time sitting on bench talking with Stan, a visiting Russian med. student. Nice guy! I committed to waiting for Saturn. Then, when it arrived intermittent clouds interferred--plus, a cold wind started up. Packed up and went to visit Nancy and Gail. Next yr. I should probably stay away during the day--although driving down I noticed Harbor Place was very busy! \$15 + \$6.44 = \$21.44(\$4.25/!)
- 3 500) 9/3/91(Tue) Space Telescope Institute(8-10:30PM) Fantastic sky! Attended eclipse trip talk by Curtis Roelle. Kind of boring. Set up scope for Saturn. Could see 2 moons easily, and maybe three. Had perfect alignment by eying Polaris. Some enthusiastic lookers from audience leaving talk. Visited by Karen Wetmore's brother & father. No hat.
- 12 501) 9/5/91(Thu)Fpt.(7:02-12:07AM) Vega; couldn't find Albireo in daylight; Saturn(acq. +/-7 mins. before sunset. 2-moons.) Nice sky till near end. Light traffic but some interested lookers. I was fairly up and articulate! \$44.00 + \$9.82 = \$53.82 (\$10.57/) 1-T-shirt.
- 11 502) 9/7/91(Sat)Fpt.(6:50-1:37AM) Nice sky till last 1/3 of evening, then haze. Vega(hunted for 10 mins. w/o finding; then shifted tripod another degree or so E, and it was in view!); Sat.(from 7:27PM. Nice, w/2 moons.) A very mature crowd early-on; alot of OK young people after 11PM. Gave out many star maps. Visit by Pat. \$141 + \$29.56 = \$170.56 (\$25.12/hr.)
- 11 503) 9/8/91(Sun)Fpt.(6:50-10:30PM) Moderate, then slow traf. Vega; Sat.(7:37PM). Early on had a raucous gaggle of young boys--pushing, shoving, trying to snatch money. Somehow, I survived intact! Haze & clouds early, then nice sky. Got bored; quit. \$28 + \$13.93 = \$41.93 Showed an Australian woman her first look ever at Polaris.

TOTAL THIS PAGE = \$647.79 + 2 T-shirts

TOTAL THIS YEAR = \$5,853.22 + 43 T-shirts

- // 504) 9/12/91(Thu)Fpt.(7:15-12:05AM) Vega; 4-day moon(took me by surprise over Ledbetters); Saturn(2 moons). Nice sky. Some enthusiastic lookers. \$50 + \$11.46 = \$61.46 (\$12.72/) Fpt. was very quiet when I arrived but obviously picked up with time.
- 5) 9/14/91(Sat)Fpt.(8:27-11:30PM) This is the evening of the afternoon I made a definitive split w/Isabel. At home, before leaving for Fpt., I felt washed out and blue. Once set up and working, I felt very good. Late start due to, among other things, weather uncertainty. Started w/a very hazy 6-d moon; then lost it in haze. Switched to Vega and then Albireo(by the numbers). These were not inspiring me nor passers-by. Also, I had no sign posted. Decided to go for Saturn, tho I could not see it w/eye. Found it almost immediately, posted sign, and started to attract good interest. Nip and tuck w/clouds. Held Sat. till +/-11PM. Waited clouds out, to no avail for 1/2-hr., then packed up, which was correct decision for two reasons: 1) clouds stayed; 2) crowd became very roudy. \$40 + \$6.76 = \$46.76 (\$15.33/hr.) 2-CAT T-shirts.
- 9 506) 9/20/91(Fri)Fpt.(7:45-1:10AM) 13-d. moon(nice...Tyco, Aristarchus); Sat.(2 moons). Alot of enthusiastic viewers early-on, then a lull, then more enthusiasts. Visit by Mary Jo. Bought coffee by Carla Adams. \$80 + \$15.42 = \$95.42 (\$17.61/hr.) Cold--1st real fall eve.
- 3 507) 9/21/91(Sat) SPACE DAY WORKSHOP, JHU, SPACE GRANT CONSORTIUM. 11:45-12:30PM and 1:15-2:00PM. Talk titled "Telescopes, Constellations, and Astrophotography". Show sun w/3" refractor; slide show; gave out autumn and winter star maps + definitions of astronomy and scientific method sheet. Received some applause from second group. \$100.00
- 10 508) 9/21/91(Sat)Fpt.(6:55-1:03AM) Very nice sky. 14-d. moon(Remarkably white and crisp as it rose over north corner of Recreation Pier.); Sat.(2 moons). Heavy traffic through-out. Mature lookers in early to mid evening. A couple, David and Mary from DC (David a film maker; Mary a classical singer) hung around, fascinated for several hrs. Young crowd but not overly troublesome in late evening. \$100 + \$23.14 = \$123.14 (\$20.09/)
- // 509) 9/22/91(Sun)Fpt.(5:50-8:40PM) Shut down by clouds. Very few people in Fpt.(Maybe due to concert at Inner H.?) Vega(Acquired on very first try! I rechecked and reajusted level after mounting scope, which I'm sure improved alignment. Must do from now on!) Sat.(13 min. before sunset--looked pale white. After dark used 200X on. Looked great! Must use this mag. more!) \$22 + \$8.91 = \$30.91 (\$10.88/) Sold 1 T-shirt.
- 10 510) 9/26/91(Thu)Fpt.(6:40-9:10PM) Vega(quickly acquired; then tried for Albireo but was unsuccessful); Saturn(nice, early-on, but image then ruined by wind). Transparent sky but very poor seeing due to strong wind. Given light traffic and strong N. wind, I decided to pack-it-up early. \$16 + \$6.46 = \$22.46 (\$7.91/hr.)
- 12 511) 9/27/91(Fri)Fpt.(6:38-12:53AM) Saturn(Such a nice sky that I went for it without further ado, and acquired it in about 2-mins. of scanning. The technique of leveling the scope again after mounting scope has really improved alignment!) 20-d. moon (Nice!). Slow early on, but then a rush of young folks in latter evening. \$80 + \$20.48 = \$100.48(\$16.08/ Received several requests to comment on the Biosphere II experiment whcih began yesterday.
- 12 512) 9/28/91(Sat)Fpt.(6:20-12:25AM) Nice sky; mild. Saturn(Began looking for it at 6:20PM but did not find it until was visible in finder. Why? Was my alignment suddenly that far off?) 21-d. moon. Albireo(once). Alot of enthusiastic lookers. Quit when crowd became very young and interest in me was dropping off. \$98 + \$24.35 = \$122.35(\$20.09/) 1-T-shirt Delayed setting up for a few mins. because of a bus load of very energetic and roudy young bachelor party boys who were ranging around the square doing pranks!
- 9 513) 9/29/91(Sun)Fpt.(6:33-10PM) Delayed star due to clouds. Near perfect alignment--having this evening remembered that one of the bachelor party boys had fooled with my dec. fine adjustment knob last night and that it needed readjustment! Vega(first try!); Sat.(2nd try!) Much interest early-on, but interference from clouds cut my contrib. by probably 50%. Albireo(once). A \$10 contrib. later compensated a bit! \$40 + \$6.51 = \$46.51(\$13.48/)

TOTAL THIS PAGE = \$749.49 + 4 T-shirts
 TOTAL THIS YEAR = \$6,602.71 + 47-shirts

- 10 514) 10/1/91(Tue)Fpt.(6:30-11PM) Vega; Saturn(two moons); M 57!(for myself); Albireo (once). Hazy but ok sky. Quiet, but w/a good sprinkling of enthusiastic lookers. One looker, a young man talked about Mark Twain and Halley's Comet. Turns out he had seen someone wearing my T-shirt and has been fascinated by Twain's testament ever since! $\$34 + \$8.61 = \$42.61$ ($\$9.47/hr.$)
- 10 515) 10/3/91(Thu)Fpt.(7:08-10:30PM) Set up on Lee's corner as festival booth in my usual spot in square. Sky alternately clear & hazy. Saturn. Quiet night. I felt very tired, having spent day packing T-shirts for NYC Opera. $\$29 + \$8.75 = \$37.75$ ($\$11.20/hr$)
- 10/4/91(Fri) NIGHT BEFORE THE Fpt. FESTIVAL. Clear sky, but I decided not to try telescoping, even though this night last year was very good. I feel I don't quite have the physical stamina to do telescoping and then start selling T-shirts first thing in the AM. Was in Fpt. earlier in day to drop offshirt boxes at Barbara & Vernon's shop overnight. Alot of parking space blocked by booths, but I feel I could have easily parked at a meter, tonight, had I gotten there early and waited for an opening.
- 10 516) 10/8/91(Tue)Fpt.(6:38-9:46PM) Great sky. Sat. looked as good as I've ever seen it-- B Ring, Cassini, A Ring(best ever), Titan, Rhea. Slow night, so I explored, acquiring 57 Aql (nice double), Delta Cep (nearly as nice as Albireo!), Albireo, M 57, M 31(just a big haze). Visit by Brough Schamp. $\$20 + \$4.74 = \$24.74$ ($\$7.88/hr.$) Maybe should set up a little later, so I'm not so bored by the time the late night crowd is gathering.
- 12 517) 10/9/91(Wed)Fpt.(6:54-10:35PM) Good sky(but not as good as last night). Sat.(2 moons); 57 Aql(found another double--wider & dimmer) 12' to the W of 57!); Delta Cep; Albireo; Vega; M 57(found so Mike Potter could see it from Fpt!) Very light traffic, but some enthusiastic lookers. Pulled plug at 9:30, but then traffic picked up. $\$15 + \$11.70 = \$26.70$. (\$7.26/hr)
- 10 518) 10/10/91(Thu)Fpt.(6:37-10:48PM) Good sky till +/-10:30PM. Sat.(2 moons); 3-d. moon(nice!); Albireo(several times. Light traffic, but some enthusiastic lookers. Visits by Brough Schamp/Carol Newell, Chris Norman/wife & friends. $\$35 + \$6.14 = \$41.14$ ($\$9.84/hr.$)
- 10 519) 10/12/91(Sat)Fpt.(6:43-9:50) Good sky till the clouds came. Alot of enthusiastic lookers. Many adults; also a big gang of students from the Owings Mills area. 5-d. moon; Sat.(1 moon). Gamma And(by accident at end of run to focus scope). $\$52 + \$11.69 = \$63.69$ ($20.48/hr$)
- 10 520) 10/13/91(Sun)Fpt.(5:32-9:42PM) Vega(1st try); 6-d. moon; Sat.(lengthly daylight search w/o finding...why?) Good traffic early on. Alot of enthusiasm, including from a +/- 12 yr. old boy, for whom I found Albireo, as well. $\$32 + \$9.00 = \$41.00$ ($\$9.83/hr.$) 2-T's
- 10 521) 10/18/91(Fri)Fpt.(5:55-12:59AM) Good sky. Visit by Isabel. Sat.(Acq. 29 min. before sunset. Was very pale.) 11-d. moon. (Gassendi very prominent. Must put it on my map!) Alot of enthusiastic lookers. Adult crowd for 2/3's evening. Visited by people in town for a recreation & parks convention. $\$102 + 15.82 = \117.82 ($\$16.69/hr.$) Set up on Lee's corner because of platform in my spot on sq. Lost Sat. @ 11:15PM behind Admiral's Cup.
- 10 522) 10/20/91(Sun)Fpt.5:25-11:25PM Incredibly good session! One enthusiastic lookers after another, starting with Bobby, a local +/-11 yr.-old with his mother, who started w/a daytime look at Vega & moon and came back after dark for Saturn. Vega(acquired quickly. My alignment card is working well!); 13-d. moon(Tyco + great terminator. Occultation +/- 11:15PM of a +/-5th mag. reddish star, probably in Aqr. I was anticipating event for an hour, but missed it because a looker was at scope!) Sat.(Lost 50% of time because of clouds.); Albireo. I was in an especially great mood, which made the evening especially good. Still visited by Rec. & Parks conventioners. $\$52 + \$11.83 = \$63.83$ ($\$10.64/hr.$) Platform still in square. I set up just S. of Kiosk.
- 10 523) 10/22/91(Tue)Fpt.6:01-11:00PM. Had to scrape up dog-do from my spot in sq. before setting up. Slightly foggy but nice sky. Vega(collimated on it in daylight!); Sat.(sharp after collimating!); Albireo. Enthusiastic lookers. $\$48 + \$4.70 = \$52.70$ ($\$10.58/hr.$)

TOTAL THIS PAGE = \$ 511.98 + 2 T-shirts
 TOTAL THIS YEAR = \$7,114.69 + 49 T-shirts

- 10 524) 10/24/91(Thu)6:30-12:30AM (Took 1½ hrs to leave!) Had incredibly good alignment. Saturn(Good, then lost in haze, then located again by special req. at 10:30PM way down Thames St.); 17-d. moon (Tyco, M. Crisium, Langrenus, Petavius); Albireo; Gamma And. Light traffic but steady flow of enthusiastic lookers. Visit by my "recruit" Ray(bought a Meade 4" SCT) and his friend Myrna. Had almost packed up to leave +/-8:30PM, but then moon cut thru clouds. First night w/new BALTIMORE'S STREET CORNER ASTRONOMER sign on scope. Fpt. was bleak early in evening but got more lively in mid evening. \$50.00 + \$10.56 = \$60.56 (\$10.09/hr. Visit by David K's brother, Geo, and son.
- 10 525) 10/25/91(Fri)Fpt.(6:10-12MN) Vega(Immediately!); Sat.(Ibid!); 18-d. moon(Rim of M. Crisium attracted attention. Described as big bite out of edge of moon.) Ok sky. Slow early; then busy; then slowing. Packed up to save myself for rest of week-end. Visit by Joyce. Some enthusiastic lookers. \$73 + \$12.95 = \$85.95 (\$14.74)
- 10 526) 10/26/91(Sat)Fpt.(6:09-8:15PM)Grey sky started clearing at sunset, but quit when thick fog rolled in. Vega(immediately,without scanning!); Sat.(3rd. scan; looked great till fog did it in) Moderate traffic. Visit by Kimberly/Christopher. \$27.21(\$12.96/hr) Visited by a private cop who was one of those who evicted me from gallery. Was sympathetic.
- 10 527) 10/27/91(Sun)Fpt.(STD. TIME! 4:07-6:04PM. Ok sky, but then fog rolled in, so I quickly evacuated. Vega(For a change I had trouble locating, and didn't till I realigned!); Sat.; Albireo(once). SS at 5:10, so I did Vega for a while, which was fine. Steady traffic. Actually, place had become quite dead by the time I quit. I did a real effective job several times with kids and my "My Very Educated Mother..." handout. Visited by Chris Frost, Ken's highschool chum. \$26 + \$4.96 = \$30.96 (\$15.88/hr.)
- 4 528) 10/29/91(Tue)Rotunda!(4:58-8:40PM) Nice sky but poor seeing. Chilly...slightly stiff fingers. Alot of no-contribs early-on. Sat.(Took longer to find than expected, prob. due to misalignment. RA reading 10-min. ahead of calculation.); Albireo; M 15(per request of woman who wanted to see a galaxy but settled for glob. cluster.) Moderate traffic. Visit by Brad of Irish d. Gave out alot(too many?) star maps. \$41.88 (\$11.32/)
- 2 529) 10/30/91(Wed)St.P.&31st!(5:04-7:40PM) Slow traffic so quit to go to Irish dance class. Good alignment. Vega; Sat.(cleared roof at 5:16PM) Some enthusiasm. \$31.60 (\$12.15/hr.) Visit by Tom Turbyville, Linda's son, back from Arizona.
- 2 530) 10/31/91(Thu)St.P.&31st.(4:52-8:02PM) HALLOWEEN! I intentionally avoided going to Fpt. Fairly quiet in Chas. Vil. Visited by Linda Turbyville. Also visited by several large groups of kids and teenagers trick or treating. Vega; Saturn. \$20 + \$16.06=\$36.06(\$11.41/)
- 4 531) 11/5/91(Tue)Rotunda(4:35-7:45PM) Clear but unsteady sky; cold. Searched for Sat. w/o success; same for Vega; then found Sat. e Lyra (once thru finder). Gave out alot of "I SAW SATURN" post-its. A few enthusiastic lookers. \$43.00 + \$12.61 = \$55.61(\$17.54/hr!) Adjourned to STScI for a talk on SETI, followed by looks thru the new 20" Cassegrain on roof of Bloomberg. Interesting experience seeing automated scope slew around sky! Saw M2, M15, M39, M45, M36, Double Cluster, M42, M35!
- 4 532) 11/6/91(Wed)Rotunda(5:03-7:45PM) Clear, clouds which did not completely extinguish Saturn, then clear. Some enthusiastic lookers, including one +/-9 yr. old boy who knew the names of the planets, Saturn's largest moon, and Jupiter's four big moons! His parents said he really liked the subject of astronomy. Visit by Linda Shopes, who was to be interviewed later by Dan Rodricks about her book on Baltimore history. Rec. a \$20.00 contrib. from Dawn Culbertson's music partner! \$44 + \$4.95 = \$48.95 (\$18.13/)
- 4 533) 11/14/91(Thu)Rotunda(4:28-9:27PM) Mild(did not need gloves). Intermittent high, thin clouds. 1/4-moon(Apennines, Archimedes, Straight Wall with amazingly broad shadow); Sat. (nice); Albireo; G And. Slow start. Some enthusiastic lookers. Invited one looker to my JHU course. I must start advertising it at Rotunda! \$45 + \$16.98 = \$61.98 (\$12.45/)

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TOTAL THIS PAGE = \$480.76 + 2 T-shirts
 TOTAL THIS YEAR = \$7,595.45 + 51 T-shirts

- 4 534) 11/15/91(Fri)Rotunda 4:29-8:28PM Mild. Intermittent clouds, then all clouds. 8-d. moon(terminator on Copernicus; nice occultation of bright Aqu star); Sat. Visit by Miriam Linneburg & son, Matt. Good enthusiasm...incl mine! Started to leave at 6:49 because of clouds. Luckily I stayed, as there was alot of traffic after clouds left. Gave out alot of "My Very Educated Mother...." \$57.00 + \$11.92 = \$68.92 (\$17.27/hr.)
- 12 535) 11/16/91(Sat)Fpt.(6-10:52PM) Nice sky, cold wind(should have worn long Johns!)9-d. moon (Tyco; Jura Mts.); Sat.; M 31; Albireo. Very slow early on(Would have done much better at Rotunda!), a rush in mid-evening, then slow again. Packed-up because of cold wind. Some enthusiastic lookers. \$54 + \$15.86 = \$69.86 (\$14.35/hr.) People still talking about last June's planets conjunction! Occultation of Chi Psc.
- 12 536) 11/17/91(Sun)Fpt.(2:55-8:31PM) Clear, semi-mild weather, so started early, posting my SEE A STAR IN THE DAYTIME!! sign. Vega(1st try!); 10-d. moon(+/-3:35PM. Tyco, Gassendi); Sat.(Did not locate till +/-4:45PM); Albireo; g And. Kind of slow traffic early on, making me think I should save my energy for later. Not alot of people around. After dark, however, I had occasional waves of interest. I was in an amazingly energetic and articulate mood! Real up! Visit by M. Potter & friends. \$52 + \$11.93 = \$63.93 (\$11.42/hr.)
- 4 537) 11/19/91(Tue)Rotunda(4:33-8:00PM) Nice sky. Felt uninspired(maybe due to having drunk beer both Fri. & Mon. nights!). 12-d. moon (Tyco, Aristarchus). Sat.(thought I saw Rhea) Light traffic. Visit by Jay Ladin. Gave out some course announcements.\$29.99(\$8.69/
- 4 538) 11/20/91(Wed)Rotunda(4:35-7:45PM) 73°F! Nice sky, but then clouds. Still feeling uninspired. Infact, from the way I was slurring words I am depressed! Moon--+/-22 till full. Tyco + some respectable craters on terminator. Visit by Karen Olsen. Spend the last 1/2-hr. with a guy who brought his wife back to see Sat. Never saw it, but we looked at moon, Albireo, and downtown Baltimore. \$27 + \$11.61 = \$38.61 (\$12.18/hr.)
- 11 539) 11/23/91(Sat)Fpt.(2:50-8:40PM) Mild. Vega(1st try, with alot of amazed people looking on, incl. Jeff Malter's bro-in-law, Richard. Vega shown thru surprisingly thick clouds!) Sat.(nice, while it lasted); Albireo; 16-d. moon (ruined by clouds shortly after it cleared roofs. Some enthusiastic lookers! Am thinking I should try to resist extensive daytime viewing, as I become tired and bored just as the evening crowd is arriving. Also, daytime crowd is light and not real interested. \$39 + \$9.33 = \$48.33 (\$8.28/hr.)
- 4 540) 11/26/91(Tue)Rotunda(4:32-7:46PM) Cold. Toes and fingers uncomfortable. Need to deal w/ that problem! Nice sky, tho messed up sometimes by cars & trucks parked closeby. Sat. (Could located "by the numbers"! Why? Scope was level. However, dec. reading was nearly 1° low when I acquired it 1/2 hr. past transit, suggesting that scope was aligned too far E of north.) Some enthusiastic lookers but alot of no contribs. \$28.02 (\$8.65/hr.)
- 6 541) 11/27/91(Wed) Balto. Polytechnic Inst. Astronomy Club(2:30-4:00PM) Auspices John Roach, adviser (426-6296h, 396-7026w). +/-12 students. I gave out alot of printed materials-- Messier map, autumn & winter star maps, double star charts, AAS careers pamphlet, CTY definitions/questions sheet, womens' seminar announcement, etc. I covered alot of territory, too much, probably. Unfortunately, I was performing rather than teaching. I felt uncomfortable. Rushed! I was afraid of any unfilled moment. I was not thinking straight on my feet. I saw that when I did some moon object visibility math on board. Looked at club's 6" Meade Schmidt Newtonian. It may need collimating, but I was unable to understand instructions enough to give an instant fix. \$50.00 honorarium. (Cloudy sky. I stopped at Rotunda +/-5PM. Evening before Thanksgv. Lots of people. I probably would have done ok there with scope w/clear sky!)
- 11 542) 11/29/91(Fri)Fpt.(4:32-7:52PM) XMAS tree lighting night. Great crowd. Lots of families w/ neat kids! Vega(till dark enough for Sat.); Sat.(Found w/difficulty at sunset, as my RA calculation seems to be +/-20min. off! V. good at first, but then problems w/lights and haze. Lost by +/-7:35PM. Albireo(twice). Gave out lots of post-its, maps. Packed up because of haze, plus no real good fall back object! \$62.00 + \$11.13 = \$73.13 (\$21.90/hr!)

TOTAL THIS PAGE = \$470.79 + 0 T-shirts

TOTAL THIS YEAR = \$8,066.24 + 51 T-shirts

- 12 543) 12/6/91(Fri) Rotunda(4:25-6:50PM) First went to Fpt. but found the scene bleak-- could have parked practically anyplace I wanted! Quickly headed for R. Took +/-12 min. to get there! Saturn(Lost nearly 1/2-hr. trying to find. Ugh! When finally acquired was nearly 2° high(-17°) on dec. I had set-up scope several inches W of paving joint. Brought scope back to alignment w/joint, which put Sat. at about 1/2° high. RA reading was now right on. I should try pointing a bit E of joint, next time. Seeing rapidly degraded. I packed-up while S still visible, because I could not put much enthusiasm into my invitation to passersby to have a look.) Decided to go to Gandy Dancer rather than to Fpt. for more telescoping! \$27 + \$3.66 = \$30.66 (\$12.72/hr.)
- 11 4) 12/7/91(Sat) Fpt. Mild temp. Intermittent clouds with good sky inbetween. Stint A: (3:35-8:40PM) Vega(Searched for 1/2-hr. and could not find!!Why?); Deneb(Acquired quickly, indicating good figures & alignment!); Saturn(Acq. fairly quickly at sunset, 4:44PM. Looked v. good! Followed till 7:25PM, then image too poor to invite lookers.)Albireo (Received good response from lookers.); Psi Psc(First time! Nice, wide, same brightness, same colors pair. Not as pretty as Albireo but OK in a pinch!) Alot of enthusiastic lookers, incl some who viewed Perseids, thanks to my Villager star map. Could see Orion rising, but I packed up and went for supper to give it time to clear radio tower (Darth Vader!). Stint B: (9:55-11:50PM) ORION'S NEBULA(First time since last spring. Great! Almost every lookers really grooved on it. I hyped it very well, I felt--though requires alot of talking. Luckily I was in a terrific mood for this! Packed up as crowd grew rapidly younger and less interested in me. \$82 + \$15.68 = \$97.68 (\$13.95/hr.) This was the 50th anniversary of "Pearl Harbor". I called lookers' attention to the fact that the light from Castor that we now are seeing left the star just about 49 years ago, or Dec. '42, one year after Pearl Harbor! Saw Jupiter in east as I arrived home! Orion is approx. due south as Jupiter is coming into view. First time ever...someone claimed that M 42 was a slide!
- 10 545) 12/8/91(Sun)Fpt.(4:25-5:20PM) Deneb(Couldn't find. Why?); Saturn(Only found thru finder. Could not find by settings. Why?) Nice sky at sunset, but clouds moved in shortly thereafter. They looked permanent, and I packed-up. But, as I was taking stuff to car I saw 1-day moon, again. Fence sat for awhile, then decided to stay packed-up. Probably could have stayed. Sparce number of people but probably enough to make it worthwhile. Kiosk closed up, however, which made square pretty dark. \$7.76 (\$8.43/hr.) Sold 5 child size Fpt. fees to Charlene Lowery.
- 11 546) 12/10/91(Tue)Rotunda(4:30-7:50PM) 3-d. moon; Saturn(Very nice for a short while.) Fooled with scope alignment, periodically. It is looking like N is +/-3° east of paving joint--just like B'way and so much of the rest of Balto.! Had some enthusiastic children lookers. Nice sky. Followed Sat. way down. \$27 + \$7.57 = \$34.57 (\$10.38/hr.)
- 10 12/10/91(Tue) Drove to Fpt. after BAS mtg. to survey the scene. With such a nice sky, how would I have done? Found all parking spaces taken but very few people passing by. Alot of derelicts in corners and doorways. I would have felt very lonely there!
- 4 547) 12/16/91(Mon)Rotunda(4:35-6:05PM) Ok sky but cold--+/-31°F w/some wind. Alot of passers-by, but many said it was too cold to look. 9-d. moon(Tyco, Jura Mts.); Sat.(once, briefly. Visit by Dr. Pembroke, who felt it was too cold for telescoping. Decided to pack it up. Clouds came shortly thereafter! \$15.16 (\$10.11/hr.) Either the seeing was pretty bad, or the scope serely needs collimating. Moon looked a bit flat; Sat. bad!
- 10 547) 12/22/91(Sun)Fpt.(3:20-8:05PM) Took special care in setting up scope, and it was well aligned. Deneb(I had my "SEE A STAR IN THE DAYTIME" sign up but I did not invite lookers to stop, as Deneb looked nebbish. Very few lookers or contribs.); Sat.(Got +/-5PM. As always, it amazed lookers, though image unsteady. Lost in murk +/-6:20PM) Collimated scope as best I could(my scope may be astigmatic!) on Alpha Aries(Hamal). Then acquired Gamma Ari(7.8"--probably the closest I should try at 80X), Gamma And 10.3", Psi Psc, Then M 42(very low, plus light of rising moon); Moon(2-d. past full). Visit by Isabel. Visit by Sons of B. Schulhoff & Howard Berman. \$34.54 (\$7.27/hr.)

TOTAL THIS PAGE = \$220.37 + 0 T-shirts
 TOTAL THIS YEAR = \$8,286.61 + 51 T-shirts

(O V E R)

9 12/25/91(Wed.....XMAS night) Fpt. 11:30PM. Considered going early in the evening but did not go in favor of a movie invitation. However, I drove down later to see what I was missing. As it turned out, I wasn't missing much. Place was very quiet. Several parking slots open at meters. A number of the bars (Adm (Admirals Cup, Oyster, Berthas, Max's, etc.) looked closed. Very few people walking around.
548)

0 12/27/91(Fri)Fpt.(8:30-11PM) Ok sky, but somewhat breezy & cold. Alot of passers-by commented on how cold it was. M 42. This was my main obj. However, never once did I invite people to look. I guess I just didn't feel enthusiastic enough, for whatever reason. Scope seemed well collimated. Good "donut" both inside and outside focus. Entertained myself w/Sigma Ori(nice multiple...my first view); Castor(nicely split at 160X. By 10PM crowd was steadily building, but it was very young. Because of cold, people were walking by quickly. \$13.04 (\$5.22/hr!) Went to Gandy Dancer.

19

TOTAL THIS PAGE = \$13.04 + 0 T-shirts

TOTAL THIS YEAR = \$8,299.65 + 51 T-shirts

Miles = 123 + 53 + 58 + 86 + 81 + 93 + 82 + 101 +
(Year) 90 + 88 + 103 + 98 + 102 + 58 + 68 +
60 + 19 = 1,363

1700 = 15 x 51 = 765 miles

Not for Distribution

STREET CORNER EXPENSES -- 1991

SP	1/2/91	28-copies "HAV-A-LOOK!" article (JHU)	\$ 1.40
POSTAGE	1/2/91	stamps	5.00
FOOD	1/4/91	Jimmies before Fells Pt. stint w/telescope	\$ 2.97
GRANTS	1/9/91	33-copies photos, arts.; handouts for Howard CC job interview	\$1.65
LP	1/13/91	10-copies my rebuttal of City motion to dismiss for Mello?Beaman	\$0.50
SP	1/17/91	1-copy "Last Total Eclipse" art. for BAS Newsletter (JHU)	\$0.05
SP	1/17/91	5-copies "Winter '91" star maps material (JHU)	\$0.25
SP	1/18/91	3-copies "Winter '91" star maps material (JHU)	\$ 0.15
SP	1/18/91	3-copies revised "Last Total Eclipse" art. (JHU)	\$ 0.15
SP	1/18/91	postage for mailing BAS article to editor Wargin	\$ 0.65
SP	1/23/91	3-star slide prints for Ken Lum (Service)	\$ 3.15
TEL	1/26/91	Inv. due 2/12 (889-0460)	\$ 1.13
SP	2/3/91	21-star maps (JHU)	\$ 1.05
SP	2/6/91	20-star maps (JHU)	\$ 1.00
LP	2/7/91	42-copies OPPOSITION TO MOTION TO DISMISS (JHU)	\$ 2.10
LP	2/8/91	postage to mail OPPOSITION to Court and to City	\$ 2.73
SP	2/20/91	4-copies info on early astrophotography for art (JHU)	\$ 0.20
9	3/2/91	Dry run to Fell Pt.. Did not set-up due to clouds.	
TEL	3/3/91	Inv. due 3/12/91 (889-0460)	\$ 2.41
POSTAGE	3/4/91	stamps	\$ 3.28
SP	3/6/91	Sky Guide & S&T cats. for Space Grant talk (S&T)Inv. PF10112	\$ 8.13
EQUIP	3/6/91	1-Kellner eyepiece (18mm) (ORION TELESCOPES) ck#2390	\$36.14
SP	3/10/91	1-copy souther constellations map (Loyola)	\$ 0.10
SP	3/13/91	15-copies southern sky maps for the Parvianens (JHU)	\$ 0.75
SP	3/13/91	to mail star maps to the Parvianens 1st cl.	\$ 0.75
STA	3/14/91	type ribbon; white out (Dawns)	\$ 5.87
SP	3/15/91	9-copies star maps for SPRING '91 handout (JHU)	\$ 0.45
FOOD	3/16/91	Jimmies before stint	\$ 1.65
SP	3/17/91	membership in AMERICAN LUNAR SOC., 1991 (ck#2392)	\$10.00
POSTAGE	3/18	stamps	\$ 2.90
POSTAGE	3/20	clippings to K. Donahoe (1st cl. mail)	\$ 0.52
FOOD	3/21/91	Jimmies before stint	\$ 1.57
TEL	3/25/91	bill of 3/13/91 (889-0460)	\$ 5.40
FOOD	3/30/91	Jimmies before stint	\$ 1.57
PARKING	3/25	Fells Pt. meter	\$ 0.50
PARKING	3/30	Fells Pt. meter	\$ 0.50
SP	4/1	6-copies of MTV "Night Watchman" article (JHU)	\$ 0.30
FOOD	4/3/91	Jimmies	\$ 1.46
PARKING	4/3	Ft. meter	\$ 0.75
FOOD	4/4/91	Jimmies	\$ 1.78
FOOD	4/5/91	sample copy of STAR DATE magazine	\$ 1.00
FOOD	4/6	Jimmies	\$ 1.50
PARKING	4/10	Fells Pt.	\$ 1.25
FOOD	4/10	Jimmies	\$ 2.52
SP	4/10	2-copies Venus phases material (JHU)	\$ 0.10
SP	4/18	3-copies siderial time info (JHU)	\$ 0.15
SP	4/23	5-copies star maps for Villager (JHU)	\$ 0.50
TEL	4/24	bill of 4/13/91 (889-0460)	\$ 2.62
7	4/25	FPT. dry run. Set-up, but sky became very hazy.	

SP = \$29.20 Food = \$15.02 Tel = \$11.56 Books = \$1.00 Miles = 30
 Postage = \$11.70 Local = \$5.33 EQUIP. = \$36.14 STA = \$5.87
 Page T = \$115.90

STREET CORNER EXPENSES -- 1991

SP	5/3/91	1-copies letter to S&T(diamond ring) (JHU)	\$00.05
SP	5/4/91	2-copies Space Shuttle art.(JHU)	.10
SP	5/8/91	1-counterweight for telescope	.25
FOOD	5/10/91	Jimmies before stint	\$6.20
SP	5/14/91	3-copies of moon map material for Selenology (JHU)	\$ 0.15
POSTAGE	5/14/91	moon map materials to Selenology	\$ 0.75
FOOD	5/16/91	Jimmies before stint	\$ 2.60
FOOD	5/22/91	Jimmies before stint	\$ 6.00
SP	5/23/91	19-copies SUMMER '91 star map materials (JHU)	\$ 0.95
FOOD	5/23/91	Jimmies before stint	\$ 3.94
SP	5/24/91	poster bd. for new dew cap; "Post-it"'s (ADCOM)	\$ 4.37
TEL	5/29/91	bill of 5/13/91 (889-0460)	\$ 0.35
SP	5/30/91	4-copies summer star map material (JHU)	\$ 0.20
SP	5/31/91	6-copies MPTV write-up(JHU)	\$ 0.30
POSTAGE	5/31	book of stamps	\$ 5.80
SP	6/4/91	6-copies I SAW SATURN LOGO (JHU)	\$ 0.30
SP	6/6/91	3-star maps (JHU)	\$ 0.15
SP	6/6/91	4-pages City Paper art. (JHU)	\$ 0.20
PHOTO	6/7/91	1-roll Ektachrome-400(36) to photo planets conj.(Service)	\$11.12
SP	6/11/91	rubber stamp "I Saw Saturn" (Moore)	\$12.39
SP	6/13/91	7-copies S&T Test Rpt. 12/89 on SCT's (JHU)	\$ 0.35
SP	6/15/91	2-copies July 12th talk schedule (JHU)	\$ 0.10
SP	6/15/91	10-copies Venus-Mars-Jupiter article (JHU)	\$ 0.50
TEL	6/24/91	bill of 6/13/91 (889-0460)	\$ 1.89
LEGAL	6/24/91	5-copies Nickerson's MEMORANDUM 6/6/91 (JHU)	\$ 0.25
SP	6/25/91	2-copies SOLAR ECLIPSE 7/1/91 headline (JHU)	\$ 0.10
LEG	6/25/91	4-copies Nickerson's SCHEDULING ORDER of 6/24/91	\$ 0.20
PHOTO	6/25/91	processing of planets conj. photos (Service)	\$ 5.21
FOOD	6/25/91	supper at Jimmies before stint	\$ 5.58
SP	6/26/91	7-name tag holders for shoeshine boys	\$ 1.84
STA	6/26/91	Typewriter ribbon (Enoch)	\$ 4.46
SP	6/26/91	Name tags for shoeshine boys (Enoch)	\$ 4.15
FOOD	6/28/91	Jimmies before stint	\$ 7.46
SP	6/29/91	5-copies FELL'S PT. SHOESHINE COMPANY letters (JHU)	\$ 0.25
SP	6/29/91	10-copies FELL'S PT. SHOESHINE COMPANY words (JHU)	\$ 0.50
SP	7/3/91	4-plastic name tag holders (\$ 1.05
PHOTO	7/3/91	2-moon photo prints (Service)	\$ 4.54
PHOTO	7/3/91	1-polaroid camera (Goodwill)	\$ 3.15
PHOTO	7/3/91	film for Polaroid camera (Service)	\$15.70
PHOTO	7/6/91	6 planets alignment prints (Service)	\$14.04
SP	7/7/91	1-copy Bloomberg compass directions (JHU)	\$ 0.05
SP	7/7/91	5-copies SUN article on planets alignment (JHU)	\$ 0.25
POSTAGE	7/8	to mail photos to B. Turner and H. Phillips (UPS)	\$ 1.88
LEGAL	7/8/91	Permit for solar eclipse event in Fell's Pt. (Director of Finance)	\$ 8.00
LEGAL	7/8/91	8-copies MEMORANDUM of 6/6/91 and SCHEDULING ORDER for ACLU (JHU)	\$ 0.40
PHOTO	7/9/91	1-roll film FUJICHROME-400-36 (Service)	\$11.90
9	7/9/91	dry run to Fell's Pt....clouds	
STA	7/10/91	extension cord (Blvd. Hdwe) for eclipse TV	\$ 1.78
FOOD	7/11/91	Jimmies between afternoon and eve. stints in Fpt.	\$ 4.47
STA	7/11/91	extension cord (Shocketts)	\$ 3.14
ST	7/15/91	Venus article mailed to Fr. Kemble in Canada	\$ 0.40
PHOTO	7/15/91	process 7/11/91 solar eclipse photos(Service)	\$ 5.21
//	7/15/91	to Fpt. and ret. to pick-up table and div to David	

SP = \$28.55 Postage = \$8.83 Photos = \$70.87 STA = \$9.38 Miles = 9
 = food = \$34.25 Tel = \$2.24 Legal = \$8.85 Page T = \$164.97

SP 7/19/91 5-copies Russ Poch "to whom it may concern" letter (JHU)	\$ 0.25
PHOTO 7/20/91 2-solar eclipse prints (Service)	\$ 4.54
SP 7/21/91 7-copies eclipse photo (JHU)	\$ 0.35
LEGAL 7/21/91 9-copies allegations for case (JHU)	\$ 0.45
TEL 7/24/91 bill of 7/13/91 (889-0460)	\$4.47
SP 7/26/91 1 ea. postits	\$ 0.80
SP 7/27/91 6-copies "Night Watchman" art. (JHU)	\$ 0.30
SP 7/27/91 2-copies UMBC Space Grant talk payment notice	\$ 0.10
FOOD 7/27/91 supper at Jimmies before stint	\$ 6.83
LEGAL 7/29 15-copies court documents for Clint Bamberger (JHU)	\$ 0.75
S 7/29 dlv. documents to Clint at 255 E. Lafayette St.	
POSTAGE 7/30 book of stamps	\$ 5.80
SP 7/30/91 6-copies Dave Greene, PhD assurance letter (JHU)	\$ 0.30
SP 6/6/91 purchase 18 SC 001 star charts from S&T for July 12 th talk	\$ 5.40
LEGAL 8/2/91 postage to send legal documents to Colaresi	\$ 0.98
SP 8/5/91 8-copies "TONIGHT-THE RINGS OF SATURN!" letters (JHU)	\$ 0.40
SP 8/5/91 4-key rings to attach above to telescope (Boulevard Hdwe)	\$ 1.05
SP 8/5/91 5-copies pasted-up rings of Saturn (JHU)	\$ 0.25
FOOD 8/5/91 supper at Jimmies before stint	\$ 3.02
9 8/7/91 dry run to Fells Pt. Clouds!	
PHOTO 8/10/91 1-roll film-36 (Service) for Venus and Perseids	\$11.71
43 8/11/91 to Rick Foster's farm to view Perseids.	
SP 8/12/91 2-pkg "postits" (Northway)	\$ 1.60
SP 8/12/91 6-copies South pole of Saturn press release (JHU)	\$ 0.30
POSTAGE 8/14/91 10-stamps	\$ 2.90
SP 8/15/91 postage to mail star maps to Malcolm Willette	\$ 1.67
PA 8/17/91 sun shade for Meade (Woolworth)	\$ 1.45
7 8/18/91 dry run to Fpt. (clouds)	
BOOKS 8/19/91 4 ea. (SKY PUBLISHING CORP.)	\$27.35
BOOKS 8/20/91 1 ea. (ASTRONOMICAL LEAGUE)	\$ 5.75
SP 8/20/91 2 ea. pkg. post-its (Dawn's)	\$ 1.64
TEL 8/25/91 bill of 8/13/91 (889-0460)	\$ 1.65
PHOTO 8/26/91 slides processed--Venus at IfC (Service)	\$ 5.21
STA 8/31/91 2-posterboard for new dew cap (Woolworth)	\$ 1.45
FOOD 9/2/91 Jimmies during stint	\$2.42
LEGAL 9/3/91 bus fare to and from City Hall for Discovery docs.	\$2.20
LEGAL 9/3/91 1-copy Colaresi letter (JHU)	\$ 0.05
FOOD 9/8/91 Jimmies before stint.	\$ 4.07
SP 9/13/91 Post-its	\$2.46
10 9/15/91 dry run to Fpt. Haze never lifted.	
FOOD 9/21/91 supper at Jimkies before stint	\$5.22
TEL 9/24/91 bill of 9/13/91 (889-0460)	\$2.75
LEGAL 9/25/91 2-copies letter to Raimondi (JHU)	\$ 0.10
LEGAL 9/25/91 CERTIFIED MAIL Raimondi letter	\$ 2.00
FOOD 9/27/91 Jimmies before stint	\$ 6.04
LEGAL 10/1/91 5-copies mat. for inclusion letter to Raimondi (JHU)	\$ 0.25
BOOKS 10/2/91 1992 wall chart, almanac, handbook (Sky Publishing)	\$21.45
SALES 10/3/91 Post-its (Northway)	\$ 2.27
SALES 10/15/91 6-copies "MY VERY EDUCATED MOTHER....." (JHU)	\$ 0.30
SALES 10/15/91 3-copies 7/11/91 E. Sun eclipse art. (JHU)	\$ 0.15
SALES 10/16/91 3-copies E. SUN art. of 7/12/91 (JHU)	\$ 0.15
LEGAL 10/19/91 2-copies Summary judgement info (Pratt)	\$ 0.40

SP=\$19.75 Legal=\$7.18 Food=\$27.60 STA=\$2.90 Miles=76
 Photo=\$21.45 Tel=\$8.87 Postage=\$8.70 Books=\$54.55

STREET CORNER EXPENSES -- 1991

LEGAL	10/21/91	2-copies Damages Claim sheet(JHU)	\$ 0.10
SP	10/23/91	2-pkg. Post-its (Northway)	\$ 1.64
SP	10/23/91	2-copies of Space Grant copies logs (JHU)	\$ 0.10
LEGAL	10/22/91	bus fare to and from meeting with Raimondi	\$ 2.20
TEL	10/23/91	Bill of 10/13/91 (889-0460)	\$ 28.10
LEGAL	10/24/91	2-copies Damages Claim (JHU)	\$ 0.10
POSTAGE	10/24/91	book of stamps	\$ 5.80
SALES	10/24/91	PMT 250% of "Baltimore's Street Corners Astronomer" (Valley Comp)	\$ 8.00
SALES	10/24/91	4-copies sign (JHU) HAV-A-LOOK!	\$ 0.20
SALES	10/26/91	9-copies sign (JHU)	\$ 0.45
12	10/91	meter equivalent	
LEGAL	10/30/91	1-copy of Raimondi letter for Colaresi(JHU)	\$ 0.05
BOOK	10/30/91	"...Story of the Quantum" (2nd Story Bks.)	\$ 1.58
SALES	10/31/91	7-copies "My Very Educated....."(new edition) (JHU)	\$ 0.35
SALES	11/1/91	12-copies articles (JHU)	\$ 0.60
LEGAL	11/5/91	3-copies Constellation Dock/"Hat" photos (JHU)	\$ 0.15
LEGAL	11/6/91	2-copies STATUS RPT. + JUDGE'S LETTER to Colaresi(JHU)	\$ 0.10
SP	11/6/91	1-Post-its (JHU)	\$ 0.83
SP	11/14/91	3-copies HAV-LOOK! sign (JHU)	\$ 0.15
SP	11/15/91	3-copies "My Very Educated....." (JHU)	\$ 0.15
FOOD	11/16/91	supper at Jimmies before stint	\$ 5.20
SP	11/18/91	2-Post-its (JHU)	\$ 1.66
LEGAL	11/19/91	4-copies material for conf. tmw. w/Judge (JHU)	\$ 0.20
SP	11/19/91	4-copies "My Very Educated....." (JHU)	\$ 0.20
SP	11/19/91	3-copies courses announcement (JHU)	\$ 0.15
LEGAL	11/20/91	RT busfair to courthouse conference w/judge	\$ 2.20
SP	11/21/91	9-copies for ORION'S NEBULA sign (JHU)	\$ 0.45
EL	11/21/91	Bill of 11/13/91 (889-0460)	\$ 1.75
SP	11/21/91	17-copies signs material(moon, Gr. Nebula)(JHU)	\$ 0.85
12	11/24/91	dry run to FPT.(too cold and windy; bleak scene). Drove to Inner Harbor to check out scene. A good quantity of people there. Alot coming over footbridge toward parking lot. That would be an ok place for me on a nice evening, I believe. Horizon is ok. Could park at adjacent lot @ \$2/hr. or a meters 200' away @ \$1.00/hr(2 hr. meters).	
BOOKS	11/26/91	2 sets of DEEP SPACE slides from Black Forest Obsv.(Ck#2426)	\$ 19.90
SP	11/27/91	32-copies A CAREER IN ASTRONOMY (JHU) (for Poly students talk)	\$ 1.60
SP	12/2/91	2ea. Post-its (JHU)	\$ 1.66
LEGAL	12/3/91	3-copies from legal book re discovery (Pratt)	\$ 0.60
SP	12/3/91	5-copies course announcements (Blvd. Hardware)	\$ 0.27
SP	12/4/91	4-copies SEE A STAR IN THE DAYTIME sign (JHU)	\$ 0.20
SP	12/4/91	5-copies course announcement (JHU)	\$ 0.25
SP	12/4/91	5-copies MY VERY EDUCATED MOTHER.....(JHU)	\$ 0.25
LEGAL	12/4/91	4-copies legal book pages on execution, trial(Pratt)	\$ 0.80
BOOKS	12/6/91	1-copy THE AMATEUR ASTRONOMER'S HANDBOOK (Sky Publishing)	\$ 10.95
FOOD	12/7/91	supper at Jimmies between sessions	\$ 6.63
SP	12/9/91	1-copy M 42 in Colliers Encyclopedia (JHU)	\$ 0.05
SP	12/10/91	5-copies course announcement (JHU)	\$ 0.25
BOOKS	12/10/91	shipping charge on DEEP SPACE slides ordered above	\$ 5.00
LEGAL	12/10/91	39-copies (3 x 13ea.) MOTION FOR SUMMARY JUDGEMENT (JHU)	\$ 1.95
LEGAL	12/10/91	postage for mailing MOTION to Nickerson, Raimondi & Colaresi	\$ 2.25
SP	12/11/91	1-copy M 42 in Worldbook Enclyp. (Pratt)	\$ 0.20
BOOKS	12/17/91	Astronomy magazine, Jan. '92 issue	\$ 3.08
FOOD	12/22/91	supper at Jimmes after stint	\$ 6.88
3	12/19/91	rt to City Hall for Raimondi conference	
8	12/23/91	rt to City Hall for Raimondi conference	
LEGAL	12/23/91	11-copies material for MOTION FOR SUMMARY JUDGEMENT(Blvd. Hdwe)	\$ 0.58

- 12/23/91 take MOTIONS to postoffice for mailing
- TEL 12/23/91 tel. bill due 1/12/92 (889-0460) \$1.17
- SP 12/26/91 Science Ctr.(BAS) membership for 1992 \$27.00
- SP 12/26/91 12-copies I SAW JUPITER art (JHU) \$ 0.60
- SP 12/26/91 2-copies " " " " (Blvd. Hwe) \$ 0.10
- SP 12/26/91 14-copies I SAW JUPITER art (JHU) \$ 0.70
- SP 12/29/91 12-copies JUPITER AND ITS MOONS sign (JHU) \$ 0.60

Page T = \$156.83

Legal	= \$ 11.28
Sales	= \$ 49.51
Tel.	= \$ 31.02
Postage	= \$ 5.80
Books	= \$ 40.51
Food	= \$ 18.71
Total	= \$ 156.83

Miles = 42
1991 - Year

Miles	30	42	42	57
Category	P.1	P.2	P.3	P.4
Sales	29.28	28.55	19.75	127.09
Postage	11.70	8.83	8.70	35.03
Food	15.02	38.25	27.60	97.58
Legal	5.33	8.85	7.18	32.64
Tel.	11.56	2.24	8.87	31.02
EQUIP.	36.14			41.16
Books	1.00		54.55	96.06
Stationery	5.87	9.38	2.90	18.15
Photos		7.87	2.45	9.32
Page T	115.90	164.97	151.00	1568358870

1992

Not for Distribution

- 9 549) 1/12/92(Sun) Fpt.(2:58-3:25PM) Moon(not quite 1st qt.); tried for Deneb w/o luck. Very nice daytime sky as I setup, which quickly turned hazy.\$2.75(\$6.11/hr)
- 10 550) 2/21/92(Fri) Fpt. (7:30-11PM) M 42; Jupiter(acquired +/-7:45PM). Ok sky (had trouble seeing Polaris). Sparce number of people around, but the ones who looked were adults and contributed. Later, all kids. Some enthusiastic lookers. One member of a gang of kids snatched some money from my hat(+/-5\$?). I must be more "streetwise from now on! Gave out JUPITER Post-its. Met a history of science student from JHU who said Galileo was first to see moons of J. because he and Marius were on different calendars! Temp. mild at start but dropped fast. Left for Gandy Dancer. \$38 + \$8.21 = \$46.21 (\$13.20/) People in Fpt. still talking about the V-M-J conjunction of last June!
- 10 551) 2/22/92(Sat)Fpt.(6:50-10:47PM) M 42, Sirius, Betelgeuse, then Jupiter by 7:30PM. Intermittent haze, making image quality variable. At one point in mid-evening I was ready to give up, but then image improved again. Quit when it seemed haze had set in to stay. As well, crowd was rapidly getting younger. Again, some mention of the conjunction of the 3 planets last June. \$50 + \$17.71 = \$67.71 (\$17.14/hr.)
- 9 552) 3/1/92(Sun)Fpt.(A 3:40-4:40PM) Tried for Capella in daytime, but w/o success. Later, I found that dec. sale was 1° off, which could have been the problem. Too bad, because I drew alot of interest but couldn't produce! (B 6:20-9:40PM) M 42; Sigma ORI; JUPITER (4 moons on one side...nice!). Mild weather and great sky. Reasonably good traffic with some enthusiastic lookers. Visited by Ruth, a member of the S.F. Sidewalk Astronomers and who knows John Dobson well. In town for job interview at JHU (human genetics). Gave her samples of my stuff to take back. Visit by Isabel. \$50 + \$15.99 = \$65.99 (\$19.76)
- 4 553) 3/9/92(Mon)Rotunda(5:43-8:30PM) 5-d. moon(Theophilus!); Jupiter(glare from light); made 1/2-dozen unsuccessful searches for Mercury, losing lookers in the process. Visit by Jim Dilts. Some enthusiastic lookers. M 42 (twice). \$16 + \$9.75 = \$25.75 (\$9.26/hr.)
- 12 554) 3/21/92(Sat)Fpt.(6:40-12:35AM) Bad weather report but fine sky! 38°F Jupiter(2 moons, then 1 with silhouette of 2nd, then 2, then 3, then 4. Great show! Since all were in close, used 18mm Kellner to good advantage.); 17-day moon. Used kiosk as windbreak but had to move a bit west when they turned on lights. Alot of enthusiastic lookers! Visited by Isabel. \$103.00 + \$15.74 = \$118.74 (\$20.09/hour)
- 10 555) 3/24/92(Tue)Fpt.(6:40-10:10PM) Fearing isolation at south end of square, I set-up near Berthas. More lights around than usual spot. Slow to moderate traffic early-on, then very slow. Jupiter(Had trouble getting good focus, prob. due to atmospheric. Clear sky, however.) M 42(once). \$21.00 + \$8.73 = \$29.73 (\$8.49/hr.) Received at least one comment on the Venus-Jupiter-Mars array of last June!
- 12 556) 3/31/92(Tue)Fpt.(7:10-11:10PM) Bertha's corner. Jupiter. A good stream of lookers, early on, then intermittent bunches. Very nice sky. Temp. cool but comfortable. Could not split gamma Leo. Why? Even at 160X! \$41.00 + \$11.60 = \$52.60 (\$13.15/hr.)
- 10 557) 4/5/92(Sun)Fpt. (6:52-9:33PM EDST; SS at 7:30PM) Capella at 7:06PM(2nd try); Jupiter at 7:12PM. No moons evident at 80X but saw Ganymeade at 160X at 7:15PM. 3-d. moon(nice!). Set up on Bertha's corner. Cool wind, which intensified as evening went on. Moderate traffic. \$25 + \$7.55 = \$32.55 (\$12.15/hr.)
- 10 558) 4/8/92(Wed)Fpt. (6:02-11:40PM) Jupiter(acq. at 6:12PM, 1h25m before ss. Was very vague. Maybe could see stripe. No moons. Tried again at 6:55PM at both 80X and 200X, but no moons in view. Once sky darkened, 4 moons. Nice!); Moon (6-d. Alot of peaks beyond terminator.) Visited by Peter, Mike and other STScI people. Fooled around with collimation but probably didn't improve alignment. Nice sky, thought occasionally unsteady. A good number of enthusiastic lookers. Bertha's corner. Early-on visited by young girl, April (father Kelly). I asked her planet's names, but she responded haltingly. Gave her my mnemonic. They returned several hrs. later, and April gave me a perfect recitation of the planet's names! Was a gratifying moment! \$55.00 + \$12.04 = \$67.04 (\$11.89/hr.) Another thing that happened tonight!"Tim" showed up with a small computer with a real time program of Jupiter's moons. The computer array matched telescopic view, except for orbital inclination. TOTAL THIS PAGE = \$509.07

TOTAL THIS YEAR = \$509.07

- 559) 4/9/92(Thu)Fpt.(7:02-10:48PM) Nice sky but variable seeing. Scope well collimated (a nice surprise!). Slow night. Maybe Thurs. are generally slow. Bertha's has no music on Thurs., for ex. Jupiter; 7-d. moon(Best I've ever see it!. Albategnius emerged from darkness during stint, showing many wall peaks silhouetted on floor, looked great with Kelner at 111X. \$28.00 + \$7.55 = \$35.55 (\$9.43/hr.)
- 560) 4/12/92(Sun)Fpt.(6:28-8:08PM) Nice sky at start, but then intermittent high, thin clds. 10-d. moon(Tyco, Copernicus, Jura Mts.); Jupiter (by 7:30PM--4 moons). Windy and increasingly cold. Closed up when Kiosk did. Some enthusiastic visitors, incl. one derelict type who had a deep, genuine interest and considerable knowledge in astronomy the science. Told him about BAS mtg., as he said he'd seen "Blue Earth" Imax at the Science Ctr. Place was getting bleak looking as I closed up. \$14 + \$3.36 = \$17.36(\$10.46/
- 561) 4/13/92(Mon)Fpt.(6:58-11:02PM) Chilly temp. 11-d. moon(Aristarchus on terminator. Jupiter(Looked for before dark but couldn't acquire! Why? When finally sighted by eye, dec. scale was reading 11 degrees + high. Why?) COLLIMATION! Was not happy w/images of J or moon. Pointed at Regulus and found collimation way off. Collimated scope and suddenly had suprisingly sharp images of both moon and J. Discovered that what had been one J moon was actually two very close! Moon was exquisite. SPLIT GAMMA LEO EASILY AT 80X-- FINALLY! I have finally learned the lesson that I have a GREAT telescope, providing it is well collimated. I must learn the technique for collimating, once and for all. I feel tonight's perfection was as much accidental as conscious! Some enthusiastic lookers. Maybe, I should check out a double star each night and not be content w/collimation unless it can be split cleanly. Gamma Leo was magnificent, tonight!\$32.14 (\$7.92/hr.) After this superb collimation, 160X worked beautifully on Jupiter
- 562) 4/14/92(Tue)Fpt.(7:38-11:20PM) Breezy and cool, but nice sky. 12-d. moon (Aristarchus, Copernicus, Kepler); Jupiter(Red Spot! Appeared as a semi-vague, brownish oval early in evening. Good at 115X; 3 moons, then 4) Scope still well collimated, tho Gamma Leo did not seem quite as pristine as last night. Bleak scene, early on. More derelicts than tourists. Kind of scary! Had \$10 contrib. \$39.00 + \$7.35 = \$46.35(\$12.53/hr.)
- 563) 4/15/92(Wed)Fpt.(7:28-10:28PM) Cold wind increased during stint. Quit because of it. Jupiter (Fantastic show! 1-moon, then two, then 3, then shadow of moon, then 4!); 13-d. moon (ok craters around edge). Visit by Carolyn & Kelly. A number of lookers who were in town for Special Ed. convention. \$33.00 + \$4.53 = \$37.53 (\$12.51/hr.)
- 564) 4/23/92(Thu)Fpt.(6:20-10:18PM; ss 7:52PM) Nice sky all day & early eve. but closed down by clouds. Pollux(6:25PM); Jupiter, 6:30PM. Ganymead, 7:10PM, with 80X. Tried to see it earlier w/160X, but no luck. J ded. reading $\frac{1}{3}^\circ$ low 2 hrs. before transit and $\frac{1}{4}^\circ$ low near trans. Alignment good to within 1-2 mins. Could see Callisto silhouetted. Young crowd, fewer than usual enthusiastic lookers. \$22.00 + \$6.16 = \$28.16 (\$7.09/hr.) Also obsv'd. Regulus before sunset.
- 565) 4/29/92(Wed)OLDFIELD SCHOOL(on invite from teacher, Mary Beth Littlefield, who was urged by students who'd seen my star map in the Villager to have me come to the school.)(7:30-9:30PM) Great, reasonably dark sky, after day-long threat of clouds(first usable sky in 6 days!). JUPITER(2 moons + shadow, then 3 moons. Nice!); IOTA CMC(my 1st view of--beautiful blue/yellow pair); SIRIUS, BETELGEUSE, CASTOR MIZAR, M44. Tried but failed to find M 81. Aligned by magnetic compass; worked fine. Sighted one meteor and maybe a satellite. About 10 students. Good reactions to J and the binaries. One was interested enough to want to hold flashlight and help me read dials. Peak experience! \$75.00
- 566) 5/1/92(Fri)Fpt.(7:35-10PM) Jupiter(4 moons on one side-nice!); Iota Cmc(once, for Ramzi Nassan and his friend, Tracy. Ramzi has just bought a Meade 2040 from Orion, having been motivated by looking thru my scope.) Intermittent haze & clouds. Finally gave it up for a visit to the Gandy Dancer. \$37.00 + \$8.42 = \$45.42 (\$18.77/hr.)
- 567) 5/2/92(Sherwood Gdns.(2-4:15PM) Sun projection w/3" refractor. 1/2-do. small, scattered spots. Intermittent clouds. Moderate crowd and interest. However, some great interest from two young boys and their younger sister who go to Soloman Schechter school. Also, they were lucky enough to see a jetliner pass in front of sun(terrific!). Gave Frank's name and restaurant address to a woman from Amsterdam and who will soon be returning there. Gave out some planets sentence and a few maps. No hat. Visit by Leah, with her mother and Aunt Annie and Joan.

STREET CORNER TELESCOPE LOG

- 11 568) 5/2/92(Sat)Fpt. 6:55-10:18PM. Nice sky, then clouds. Packed-up. Light rain. Pollux (6:55PM); Jupiter(before any moons vis.; the 2 moons on each side); i Cnc(once). Nice, enthusiastic, adult crowd early-on. As I drove away (11:45PM), place was wall-to-wall young people. Summer-like temp. Visited by a guy named Len, who was (\$22.39/) amazed that I kept a count and records of my telescope outtings. \$61 + \$14.69 = \$75.69
- 3 569) 5/3/92(Sun) Sherwood Gdns. (2:15-4:30PM). Nice sky--no clouds, nor birds, nor planes. Sun about same as yesterday, except the gp. of 3 spots on E limb had rotated into view with projection method. Gave out some maps and mnemonics, but there were no really turned on kids, like yesterday. Visit by Willa/Brendan; Al & Bill(Irish dancers). No hat.
- 11 570) 5/3/92(Sun) Fpt.(6-10:05PM) Spent 45 frustrating mins. looking for Pollux w/o success. Why? Found Jupiter at 6:54PM after many attempts. Was out-of-focus and reading $\frac{1}{2}^{\circ}$ high. Shifted scope toward W, and then J was close to right dec. J was magnificent from sunset till dark through 18mm KE (111X); lost contrast after dark. Mostly 3 moons, but 4 for last $\frac{1}{2}$ -hr. Ok traffic. Visit by Len(above) and his girlfriend.\$46 + \$9.87 = \$55.87(\$13.69)
- 2 571) 5/10/92(Sun) Sherwood Gdns.(1:30-4:45PM) Sun(6 widely scattered small spots). Clouds interfering +/-50% of the time. Some interested lookers, including some brights kids. Gave out a good number of mnemonics and some maps. Possible invite from Friends Sch. No hat.
- 10 572) 5/10/92(Sun) Fpt.(8-10:10PM) Arrived to find Preakness Festival underway. Alot of young people--a fairly sober, pleasant crowd, I thought. Lots of clouds but weatherperson saying clear tonight. Had supper atJimmies, then waited and watched sky. Toward 8PM I could see alot of blue coming, so I set up near Kiosk. Alot of enthusiastic lookers, but also alot of no contribs. 8-d. moon (great!); Jupiter (3 then 4 moons). Intermittent trouble with clouds. Had to quit, finally, because of clouds. \$36 + \$7.03 = \$43.03 (\$19.83/hr.)
- 11 573) 5/11/92(Mon)Fpt.(7:15-11PM) After hazy sky all day, sky was nice for the evening. 9-d. moon(Tyco, Copernicus, etc. Very nice. At 10:58PM occultation of a bright star, prob. in Vir. I let a looker witness it.) Jupiter (1 and 3). Moderate traffic. Some enthusiastic lookers. A bothersome number of inebriated street men. \$30 + \$10.75 = \$40.75 (\$10.87/)
- 11) 5/12/92(Tue)Fpt.(7-10:30PM) Mild temp.; great sky. ss 8:10PM. Jupiter(7PM); Pollux(7:10); i Cnc(several times). Moderate traffic. Visit by Isabel. Went out drinking after stint w/ Susan, who I met last night at scope and encountered on sidewalk as I was walking toward Mike's Bar. Great scope alignment. \$31 + \$8.48 = \$39.48 (\$11.28/hr.) 10-d. moon. Visit by Mrs. Romick(?) of Nat. Fed. of the Blind, who said Lorinda and Jim are back in town and L. is working for the Federation again.
- 12 575) 5/13/92(Wed)Fpt.(7:14-9:44PM) Nice sky early-on but then increasing clouds, which caused me(along w/slow traffic) to close up. 11-d. moon(tyco, Copernicus, Aristarchus); Jupiter. Long and nice visit by Elaine, a new Irish dancer person. Visits by Bob and Carla, Robbin Bullock. Some enthusiastic lookers but quiet evening in Fpt. \$15 + \$2.18 = \$17.18 (\$6.87/) Visit by Andy (JHU postoffice) and brother Craig. Andy wearing his souped-up version of my TOTAL ECLIPSE T-shirt. Terrific! Got me thinking about printing some like his.
- 12 576) 5/14/92(Thu)Fpt.(7:35-10:55PM) Mild temp.; ok to slightly hazy sky. Moderate to light traf. Some enthusiastic lookers. 12-d. moon(Tyco, Aristarchus, Gramaldi); Jupiter(3 moons); i Cnc; Arcturus(on req., once). Received alot of compliments for my effort but not commensurate contribs. Had a drink with Julie from Pocomo Mts., PA, at Mikes after stint. Attended Meegan Hamilton's graduation party before stint. \$23 + \$0.58(!) = \$23.58 (\$7.06/)
- 12 577) 5/19/92(Tue)Fpt.6:38-10:15PM) Nice sky; cool(wore winter pants + two jackets). ss 8:16PM. Jupiter(6:40PM. Could not seen any moon, even at 160X, at 7:45PM); Regulus(6:48PM). Light traf. Visited by Helen Hollingsworth & friend. Alot of intererant people!\$16.37(\$4.52/)
- 13 578) 5/20/92(Wed)Fpt.(7:02-11:55PM)Great sky!ss 8:16PM.Jupiter(Gany.7:10PM @ 160X and 7:15PM @ 80X; Red Spot on ctr. 8:09PM--vague; 3-moons on right, 1 on left.). Iota Cnc(once). Moderate traf.Frightened by sudden arrival of 3 bus loads of W.Md. College students, but no damage done! Visit by Linda Kelly (Lidia's beautiful daughter.) A great reunion! Finished eve. w/visit to Cat's Eye with Mike Potter. \$45 + \$10.81 = \$55.81(\$11.41/hr.) Albireo rising just as Jupiter setting behind Adm. Fell Inn.

TOTAL THIS PAGE = \$ 367.76

TOTAL THIS YEAR = \$1,194.34

STREET CORNER TELESCOPE LOG

- 10 579) 5/21/92(Thu)Fpt.(6:58-12:08AM) Mild temp., great sky! Jupiter(4, then 3 moons); Regulus (7:25PM. vis. in main scope but not in finder). Visited by Ramzi with his Meade 2040. It was nice having company, but I felt his presence probably drew a few lookers away from me. View thru his 2040 puny compared to my 2080. a CVn(kind of electric!); M 3(definitely present--mag.7). Heavy traffic thru mid-evening! \$63 + \$12.77 = \$75.77 (\$14.68/hr.)
- 10 580) 5/22/92(Fri)Fpt.(7:06-12:14AM) Fine sky, except over W. Thames St. & Adm. Fell Inn (ie., turbulence). Accompanied by Kay Donahoe for whole evening. We took several photos of me and scope w/SEE A STAR IN THE DAYTIME sign, while pointed at Regulus (+/-65 min. before ss). Incredible alignment. Had both Jupiter & Regulus on first try. Jupiter(3, then 4, then 3; great image early on, which degraded alot in turbulent region. Albireo!(for a few mins. after loosing J, which was at 12:01PM). Heavy traffic for much of the evening. Alot of enthusiasm. Visited by Linda Bayer and Linda Neiderman. Received some compliments about my work. \$87 + \$13.47 = \$100.47 (\$19.58/hr.) All kinds of incredible things were said and happened with lookers tonight, but I cannot any details! Visit early-on by Jan & David and Becka & Volker.
- 12 581) 5/23/92(Sat)Fpt.(6:34-12:11AM) Mild, ok sky. Visited by Jean-Marc Perelmuter, an astro. PhD. candidate at JHU, who watched me set-up and was impressed by how I found Jupiter & Regulus in daylight. Jupiter(6:40PM); Regulus(w/some effort. Why?) Jupiter(2 and 2). i Cnc(once); Albireo(briefly after loosing J.). Heavy traffic at dark. Alot of families w/kids. Gave out numerous star maps. \$119 + \$18.93 = \$137.93 (\$24.59/hr.) It was very hard work by mid-evening. Voice was cracking slightly. Then I recovered and finished ok. Visit by Larry & Roz Rosen & friends. Did a CVn for them. Again, Jupiter's image degraded markedly over W/ Thames St. and the Adm. Fell Inn due to air turbulence.
- 10 582) 5/28/92(Thu)Fpt.(7:17-11:43PM) Great alignment. Jupiter and Regulus right away, then Arcturus(3h12m before transit. Great daytime star--alot brighter than Regulus!) Jupiter (3 & 1, with Ganymede's shadow); a CVn(once--as second object for a pair of enthusiastic young men); Albireo(once, for Colleen of Camp Notre Dame. She said my star maps were a real big hit w/both parents and kids last year!). Visit by Don Ford, Esq., who maybe can help me w/ Inner Harbor negotiations. Generally slow evening, but w/a rush of interest about 10PM. Scope well collimated. \$44 + \$1.65 = \$45.65 (\$10.28/hr.)
- 10 583) 6/3/92(Wed)Fpt.(6:30-11:43PM) High clouds early, then ok sky. Arcturus(6:45PM...4 hrs. to transit and 1h43m till ss. Dec. reading .7° low); Jupiter(7:08PM...no moon till +/-8:15PM, 2 & 2, saw shadows of 2 moon simultaneously. Moderate traffic early-on, the very slow. Some enthusiastic lookers. Visits by Carolyn & Kelly, JHU history of sc. students, Mike Green. About 10:45PM I left scope in charge of a young man w/interest in astronomy and called Ken's apt. in Brooklyn while he had Frank, Eve, Elsbeth, Leah visiting. Spoke to all of them! a CVn(twice); Albireo(4 times). \$31 + \$9.30 = \$40.30 (\$7.72/) Also observed a nice 3-d. crescent moon(Mare Crisium in good view).
- 10 584) 6/6/92(Sat)Fpt.(8:13-11:19PM) Late start due to fence-sitting on weather. Slightly hazy sky, but no clouds. Heavy traffic till +/-11PM, then dramatic drop off. Lost 6-d. moon (Aristotle & Eudoxus!) and Jupiter(3 widely space moons. J lacked usual impact due to haze.) +/-11PM. Tried Albireo, but had little interest. Packed up. Went out for a beer at Mikes with (?), a Clayworks potter, who had bought my Comet Halley T-shirt in Salvation Army because he liked design! Sold 2-L'OPERA! + 1-ILOP! \$91 + \$9.22 = \$100.22 (\$32.33/hr.!)-incl. several \$5.00 contribs.) Arrived at square to find juggler Jerry Rowan finishing act. Would not have been able to set-up in usual spot had I arrived earlier for daytime astronomy!
- 12 585) 6/9/92(Tue)Fpt.(6:55-11:25PM) Slightly hazy early, terrific sky at dark! ss 8:35PM. Jupiter (7:10; 4 moons after ss); Arcturus(7:20...dec.19°); 9-d. moon (Copernicus center stage. Awesome! Used 160X alot.) Visit by Dick Ochs & friend; Wally & Pracilla. Good traffic. Scope near perfect alignment. \$51 + \$8.25 = \$59.25 (\$13.17/hr.) People STILL talking about Venus-Jupiter-Mars array of last June 14th!

TOTAL THIS PAGE = \$559.59
 TOTAL THIS YEAR = \$1,753.93

- 10 591) 6/16/92(Tue)Fpt.(8:05-11:38PM) Visit by Frank & Elsbeth! Had John the Polaroid camera man take some pictures of us. We adjourned to Mike's Bar. Jupiter(3 widely spaced moons. Not very exciting. J is now only +/-35"); A CVn; Albireo(filled in for a few mins. between loosing J and acquiring moon); 16-d. moon(terrific! Mare Crisium, Langrenus, + alot more!). Visit by Susan and her friend Jonathan, from Boston, who bought a CAT T-shirt. \$38 + \$4.31 = \$42.31 (\$11.92/hr.)
- 10 592) 6/17/92(Wed)Fpt.(7:23-10:55PM) Forgot to bring my coordinates list but was able to locate Jupiter(7:28PM) and Arcturus(7:39PM), nevertheless! Moderate traffic. Visit by Mike Potter, who shared a pizza with me. Also visited by Susan Noonan, who wrote the 4/91 MTV article on me. Jupiter looked a little lackluster as its season is drawing to an end. \$28 + \$8.34 = \$36.34 (\$10.27/hr.) Sold 1-CAT.
- 12 593) 6/20/92(Sat--weather rpt. calling for 60% chance of rain, but sky was nice and blue!) Fpt.(Maritime Festival)(5:45-11:10PM) Spent alot of time, without success, with alot of people waiting for a look, looking for Arcturus. Switched to Jupiter, which I found with more difficulty than usual at 6:10PM(maybe because I was looking at +10° while it was really at +9°31'--which I discovered at home). Finally found Arc. at 6:35, close to where is was supposed to be. (Is my problem in the focus?) Toward sunset(which was at 8:36PM), I packed-up and moved to Lee's corner inorder to hold J as long as possible. Jupiter(4 moon close on one side....as nice an array as I've ever seen!). Pretty good traffic for Jupiter. Visited earlier by Isabel, who took daytime photos of me. Packed up when J hit roof. Beforehand had a good bit of interference from a street light and from a pit beef set-up next to kiosk. Because of fatigue and threat of clouds, I decided not to have a go at Saturn, tho there were alot of people around. \$77+\$10.85=\$88.85(\$16.3) Visit early-on by Anne Annikis, who only stayed a moment. Wore my new TE shirt and button, but it received no special interest.
- 10 594) 6/21/92(Sun--same kind of sky as yesterday. However, a very cold wind came up late afternoon!)Fpt.(2nd day of Maritime Festival)(5:26-7:30PM) Jupiter right away-very vague(mag. -1.9; 65° elong.). Arcturus(Searched and searched and finally found at 6:40PM! What's the trouble? Reading only 1/2° low; RA 3 min. fast. Is it the focus? Lost alot of traffic because of time wasted in search. When I finally found it, I was quite demoralized) Visit by Isabel. Packed up because of cold wind and had supper with her at Jimmies. Sold 1-TE(even w/o wearing button!). \$17.99 (\$8.69/hr.) Decided not to stay on for evening session because of demoralization and cold wind, tho very nice sky.
- 10 595) 6/22/92(Mon)Fpt.(8:16-11:01PM)Lee's corner. Found Jupiter on first try--in an instant. Two, then three, then four, then three moons--all on one side. Light traffic; many non-contribs. Visited by Laura(dancer). Because of street light, nearness to Adm. Fell Inn, and haze, J pretty weak toward end. Also looked at Antares and B Sco(nice "14 double). \$20 + \$11.16 = \$31.16 (\$11.33/hr.)
- 12 596) 6/27/92(Sat)Fpt. A.(7:50-10:44PM) Lee's corner for Jupiter(3 & 1). Acquired quickly. Moderate to heavy traffic. Visit by Elaine(Irish dancer). B.(11PM-2:30AM) Immediately upon loosing J moved to square, just W of drain plate. Periodically searched for Saturn but it did not come from behind Rec. Pier roof till 12:05AM. In the interim did Albireo and also M 13(1), which was definitely there and worth add'l. work. Got Col 399 but was not distinct in finder and too big for 80X. Failed to find Neptune and M 57. Saturn started Murky but eventually became magnificent! Many lookers awe struck by it; many disbelieving! (Would be fun to have a lie detector hooked up to me, I thought!) All in all had a long, hard, but peak night in Fpt. \$106 + \$19.49 = \$125.49 (\$19.61/hr.)
- 10 597) 6/28/92(Sun)Fpt.(7:40-10:43PM) Jupiter from Lee's corner. Acquired in an instant with Mr. Compton looking on in amazement. I was somewhat amazed, too! 2 moons on each side, close in. Nice! Visit by Ramzi, Peter(telescope maker), Leonard. Hassled by one of the derelicts--the thin, energetic, kind of wild one. No fun! \$35 + \$8.36 = \$43.36 (\$14.22/hr)
- 44 598) 7/2/92(Thu) Chesapeake Bay Fnd., Gunpwd. St. Pk., auspices Linda Elock. +/-15 teachers, incl. Laura Malick. Crab supper. Set up scope 1 1/2 hr. before ss. Found Arcturus immediately but could not locate Jupiter in daylight. (Used magnetic compass to align. Maybe 7-8 mins. off N.) Nightfall--2-d. moon; Jupiter, Albireo, M 13, M 57, a CVn. Failed to find a Her (maybe due to bad collimation--couldn't split!); Saturn(too marky along horizon). \$50.00
- 118 Also, did "Coathanger" thru finder. Was dim but lookers liked it.

TOTAL THIS PAGE = \$435.50

TOTAL THIS YEAR = \$2,649.11

- 10 586) 6/10/92 (Wed.) Fpt. (6:40-11:17PM) considerable clouds at set-up time, but I was determined to find Arcturus, nevertheless! Took 30-mins., but finally got it. Why so long? Alignment? I felt fatigued tonight. I guess my lack of a good night's sleep is taking its effect! In addition, there was a singer using amps, which made me have to double my effort to be heard by my lookers. 10-d. moon (The arc of the Jura mts. or cusp luminescing. Used 160X several times. Jupiter (1 and 3. A lot of remarks about how the moons are all in a "straight line". Went to going-away celebration for Peter Challis at Cat's Eye. MADE A SOLID COMMITMENT TO GO TO STELLAFANE WITH MIKE P. WILL DO!!) Otherwise on moon--Tyco & Copernicus. \$55 + \$7.17 = \$62.17 (\$13.49/hr.)
- 12 587) 6/11/92 (Thu.) Fpt. (8:10-11:10PM) Late start due to haze. Found Arcturus almost immediately (excellent alignment). Unsuccessful try for a CVn. 11-d. moon (Tyco; Aristauchus on terminator; noticed Epigenes and Anaxagoras above Plato; sharpness reduced by haze 50% of time); Jupiter (3 and 1, all close in; nice!). I felt bored, like I need a break. Also had the thought that I've outgrown this, now. \$31 + \$7.99 = \$38.99 (\$13.00/hr.)
- 10 588) 6/12/92 (Fri.) Fpt. (7:01-2:15AM) Arcturus (Took 34-mins to find, then was very close to calculated coordinates. Why?); Jupiter (7:28 on first try!); 12-d. moon (Tyco w/good rays, plus ok craters on terminator); Albireo; SATURN!!! (1st time this season. Acquired at 1:10AM, +/- 1h25m after losing J, hanging low over Recreation pier. Turbulent seeing and therefore bad image, but lookers were thrilled! A lot of "It's a slide!" remarks! Titan eventually visible.) Ok traffic early, a lull around 11-12, then a pick-up.) Am not sure why I stayed so late. Maybe on one hand I was too tired to pack-up +/- 11PM, and on the other I was subconsciously intending to wait for Saturn. Seeing was not too good mid-evening. J's bands hard to see. \$103 + \$26.16 = \$129.16 (\$17.86/hr.) For whatever reason, for most of the evening I was short on enthusiasm, thinking to myself that maybe I have outgrown this routine and want to do more professional level work. Had a looker who remembered seeing Venus thru my scope at JHU Fair in 1988! He said he'll never forget it! Is now an electrical engr. Visits by Carolyn & Kelly, Anne and Dan.
- 10 589) 6/13/92 (Sat.) Fpt. (6:40-12:30AM) Again, trouble finding Arcturus--probably because out of focus. (FOR SKY FOCUS IN Fpt.---FOCUS ON P&G BUILDING, THEN TURN CYLINDER 1/2-TURN CC!) Jupiter (7PM. At dusk, 4 moons on one side.). Arcturus (7:05). Had good interest for time astronomy. An orthodox Jewish woman who had looked w/her son and husband before sun-down, returned at 12:30AM with \$2.00, saying that they had no money on them during the day for religious observance!! I had given her son a star map, and he asked me to draw circle around Arcturus. A great idea, which I then repeated for a woman with Antares & Albireo (a woman from KY who had been at scope 2-yrs. ago). 13-d. moon (Thru haze, low in sky, and few craters evident, however many lookers still very impressed!). A looker noticed a star near moon (Antares); I then showed moon and Antares together in finder, along with wispy clouds. Incredibly beautiful scene. Visited by Stacy & Christine early on. Albireo (twice). (Last night, the electrical eng. guy split Albireo in 6X finder, which I did, too, after my attention called to it.) Heavy traffic at times, with 10-15 in line. Had trouble packing up to leave because people kept coming. Decided not to wait around for Saturn because of haze. Loyola John lent me a jacket, as I was very chilled by wind. \$124 + \$17.83 = \$141.83 (\$24.33/hr.)
- 10 590) 6/14/92 (Sun.) Fpt. (6:45-1:33AM) PARTIAL ECLIPSE OF THE MOON. Began with a frustrating, 55-minute hunt for Arcturus. What's the trouble? When finally found, it was right on coordinates! Found Jupiter earlier in an instant. With Arc., maybe I am scanning too quickly? Jupiter (3 moons + shadow, then all 4 on same side. Nice!); ECLIPSE! Weather prediction for several days has been rain tonight. Sky was fine, however, Had a steady stream of lookers, including a few who had earlier seen full moon and were a bit confused about why they were now seeing only a crescent. Eclp. was max. 68.7%. Visited by Stacy, Christine, and others--earlier by Jan, David and Mickey. Acquired a murkey Saturn at lam. Because of adverse weather rpts. did not buy film for photos. A taxi driver came by curious as to why he had been seeing so many people around town looking through telescopes (e.g., Chas. Village)! Albireo, a CVn. Visit by KY woman again. \$73 + \$14.53 = \$87.53 (= \$12.87/hr.) Visit by Ramzi. Steve Hargrove of the Nature Co., who said they have scope sessions at Harborplace! Eclp. was beautiful thru both main scope (80X) and finder. Thru main earth's shadow could be seen arching above Tyco. Visited by young girl from St. Paul's School who remembered me from my talk there a year ago. Bill Henry from civil

July 4th. Despite a nice sky, with Jupiter, 4-d. moon, and later--Saturn, I accepted an invite from Joyce to have supper at her house with her and Peggy and then take in the fireworks in Bel Air. No regrets, really. I need alot more socializing in my life--more than I need telescoping!

- 599) 7/6/92(Mon)Fpt.(7:45-9:15PM) 6-d. moon. Nice! Theophilus, Cyrillus, Catharina, Arist. Eudoxus. Haze and passing clouds gave moon a subtle cast. Jupiter (once, briefly. Very yukky image.). Clouds finally closed in and had to pack-up. Too bad, because traffic was steady and lookers were enthusiastic. Had a number ready to look when clouds stopped the show! Forgot sign, but it didn't seem to make much difference. After I closed up met Allison Radcliffe, Susan's daughter, who lives in Fpt. parttime with her father. \$13.00 (\$8.67/hr.) Lee's corner.
- 10 600) 7/7/92(Tue)Fpt.(7:20-10:29PM) 7-d. moon(rugged! Alpine Valley; Archimedes on term.); Jupiter(acquired +/-1hr. prior ss; setting was +/- $^{\circ}$ hi, meaning that I was aligned slightly too much W. Used template to align, which is a good way to go. 3 moons. Somewhat murkey image.) Good traffic early, then gradually slower. Was very slow by 10:15PM. Sold 2-CAT(to 1 family). \$21 + \$5.56 = \$26.56 (\$8.43/hr.)
- 13 601) 7/11/92(Sat)Fpt.(7:15-12:03AM) Arcturus(after 13-min. search, then I reset polar axis angle per dec. circle reading. Scope should now be very well aligned.) Jupiter(2nd sweep. Briefly after sunset, since I was set up in square in anticipation of doing Saturn later and lost it quickly.) 11-d. moon(Tyco--alot of haze, plus poor collimation. Collimated mid-evening, which improved things alot.) Never found At. Visited by Ramzi. Moderate to heavy traffic, but I was bored. Forced to close by clouds, which was ok, as I was ready to leave. \$56 + \$16.04 = \$72.04 (\$15.01/hr) 1-TE
- 10 602) 7/13/92(Mon)Fpt.(10:15-01:15AM)Started evening at Eng. dancing. At break discovered nice sky. Went home, loaded up, and went to Fpt. Clouds when I arrived, but I set up anyway. Moon(just a few hrs. past full; Tyco, + edge craters. Nice!) Collimated and re-collimated--on Arcturus, on a light across the river, finally on Vega. Saturn looked great. Moderate but enthusiastic traffic. Definitely an interesting evening, reminding me I should not falter! \$32 + \$6.60 = \$38.60 (\$12.87/hr...incl. a \$10 con .)
- 11 603) 7/17/92(Fri)Fpt.(9:30-2:10AM) Late start because of clouds. Then, lost +/-30% of time over course of evening to clouds. Albireo as starters. Also γ Delphinus(first time ever. Nice!). Saturn(10:55PM; probably could have gotten 10-min. sooner); 17-d. moon (good craters on terminator; Tyco). Visited by numerous acquaintances. I felt ok, but was not in the mood to give out alot of Saturn stickers. \$50 + \$12.46 = \$62.46(\$13.38/) COLLIMATION(Collimated on Arcturus in W and found that Vega was out of col. Collimated on Vega, and Sat. and moon in east were ok. Collimated on Arcturus originally because first obj. was CVn, was yukky. Its a drag to have to recollimate so much!)
- 11 604) 7/18/92(Sat)Fpt.(7:25-2:20AM) Finally, great weather & sky! Arcturus(immediately!); Jupiter(five mins.--till it hit roof); Albireo(from sunset till Saturn); Saturn(10:43pm. Alot of lookers impressed; alot skeptical); γ Del(once). Searched for Neptune but did not find--maybe because I couldn't identify it. Visits by various acquaintances. Did not feel enthusiastic enough to do alot of explaining or handing out Post-its. 2-Fpt. + 1-TE T-shirts sold. \$112 + \$16.14 = \$128.14 (\$18.54/hr.) 18-d. moon(terrific--I think post-full moon is more impressive than pre-full!!) Visit by Susan Middaugh.
- 11 605) 7/20/92(Mon)Fpt.(8:23-12:53AM) Arcturus(immediately!); Albireo(8:30PM); a CVn(looked blurry--scope out of col. in that direction!); α Her; γ Del; Collinder 399; SATURN (10:35PM...could have had at 10:30PM); URANUS! (little green dot at 200X). Quiet night; some enthusiastic lookers. Visited for a while by Andy, guy in wheelchair.\$35.10(\$7.80/) Visited by a graduate of Franklin & Marshall, who took Michael Seeds' astronomy course and spoke very warmly of him. All in all, this was a very good night for me in Fpt. Also viewed the late-rising 20-d. moon.

TOTAL THIS PAGE = \$375.90

TOTAL THIS YEAR = \$3,025.01

- // 606) 7/29/92(Wed)Fpt.(8:22-12MN) Incredible night! Visited by a man from NM who said that looking at Saturn thru my telescope 2 yrs. ago with a woman friend inspired a romance between them which continues today! Visited by Shirley Saries, a woman from Oregon, in town for a convention, who became a backyard astronomer and bought a scope(Meade) having seen Saturn thru my scope! Arcturus(immediately); Uranus (9:15PM and again, later); Cyg (for a guy who asked, "What's the closest thing you can see?"), SATRUN (ok, tho sky...9:55PM); z Crb(kind of dull and close); 2816 Cep (triple star--interesting!); Albireo(many times). Closed down by clouds. Alot of Saturn doubters, for whom I pulled the plug on tracker! Visit by M. Potter, with whom I adjourned to Cat's Eye, where we met David Harding. Sold 1-TE (to Shirley's friend, Kathleen). \$38.23 (\$10.53/hr.)
- // 607) 8/2/92(Sun)Fpt.(9:45-11:35PM) Late start, having returned early evening from Stellafane conclave in VT. SATURN(nice); URANUS(maybe...not sure tonight); COLLIMATION(seems to be needed ever more frequently...maybe something wrong w/scope?). Visit early eve. by Leonard and Dave Harding. a Her. Quiet, almost bleak night in Fpt.! \$8.37 (\$4.57/hr.)
- /o 608) 8/3/92(Mon)Fpt.(8:30-10:10PM) 5-d. moon(Theophilas!); Saturn(ok, then murky, then gone). Closed up because of clouds--too bad, because alot of potential lookers around! Sold 1-CAT + 1-TE. \$12.00 + \$4.32 = \$16.32 (\$9.77/hr.)
- // 609) 8/4/92(Tue)Fpt.(8:20-11:45PM) Delayed setting-up for 20 min. Derelict "Big Foot" was back and ranging around the square, and I didn't feel like dealing with him. 6-d. moon; Saturn(9:25PM. Murky, then bright, but always rippling from turbulence.) Visits by Mark Fiken, Ted Rouse w/family. Some enthusiastic lookers and interested kids. \$49.20(\$14.39/) Also visited by Kim Hoffman, woman who called recently about telescopes. Russel--hotdog ma
- // 610) 8/5/92(Wed)Fpt.(8:03-12:27AM)Intermittent haze and clouds most of the evening, but some ok views sometimes. Arcturus; 7-d. moon; Albireo; y Del; Saturn(came and went several times but was sometimes in the clear). Slow start but then heavy traffic. Alot of enthusiastic lookers, including some from Austria. 2 TE T's. \$55 + \$6.65 = \$61.65 (\$14.01/)
- // 611) 8/6/92(Thu)Fpt.(7:24-1:10AM) Early-on nice 8-d. moon between hazy clouds. Arcturus(once); Saturn(nip & tuck with clouds for first few hrs., then very good--saw 3 moons); 8-d. moon (Straight Wall, Apennines, Eratosthenes; later Clavius and Tyco). I was in bad mood, I had alot of troublesome lookers and lots of no-contribs. Later visited by at least different, very enthusiastic men--one of whom started thinking about doing street corner telescoping, himself, maybe in Atlantic City, though he has no astro background. Visit by Stelios & Pauline; Christine. Problem with dec. readings; problem w/dec. lock. Scope needs some TLC! \$46 + \$8.90 = \$54.90 (\$9.51/hr.)
- // 612) 8/7/92(Fri)Fpt.(7:07-1:15AM) 9-d. moon(Copernicus); Saturn(9:15PM....bright but very unsteady image. Dec. lock on scope becoming very unreliable. Must do something about it! Long visit by Jack Eisenberg, who took some photos. I felt generally bored and unenthusiastic. Sold 1-TE. \$78.00 + \$24.41 = \$102.41 (\$16.71/hr.)
- // 613) 8/10/92(Mon)Fpt.(7:00-12:04AM) Ostensibly nice sky but actually unsteady and a bit hazy. 12-d. moon(Tyco, Aristarchus, Shickard); Arcturus (7:04...finally! Reading ¼° high); Saturn(9PM, with alot of people waiting for it; Titan not seen for first 1½ hrs.) I felt bored--hearing myself talk. TELESCOPE(dec. control less and less reliable--slipping more often. I think it is close to the end. Must do something quickly--like a call to Meade!) Some enthusiastic lookers--mainly inebriated. \$47 + \$14.96 = \$61.96 (\$12.22/hr.)
- /o 614) 8/12/92(Wed)Fpt.(10:35-11:39PM...late start because of weather uncertainty) Hazy sky, then thick clouds; shut down, then hazy again. Moon(+/-7-hrs till full. Sort of a roughness on the SW edge; Tyco); Saturn(diminished by haze). Some enthusiastic lookers. FIRST NIGHT WITH SPRING COUNTERWEIGHT. SHININESS OF SPRINGS DIDN'T ATTRACT COMMENT--EXCEPT FROM TIM. DEC. LOCK STILL A PROBLEM, HOWEVER. Visit by Mike Potter, with whom I adjourned to Bertha's. Would have done ok had I started at sunset! \$15.80 (\$14.77/hr.) Had alot of inquiries as to whether tonight was the big meteor shower.
- // 615) 8/20/92(Thu)Fpt.(7:00-11:16PM) 1st good sky in 8 days! VEGA(7:12--2nd try); SATURN(8:20--very unsteady for 1st hr., then ok image. 2 moons + 5th mag. star. Nice!); URANUS(once--despite all the new lights. Lots of enthusiastic lookers! \$67.07(\$15.17/hr) 1-TE.

TOTAL THIS PAGE = \$475.91

TOTAL THIS YEAR = \$3,500.92

- // 616) 8/21/92(Fri)Fpt.(7:19-12:22AM) VEGA(2nd try); Albireo; Saturn(8:16PM. Bright image, but unsteady for 1st hr. Never completely still.) Visit by Mike P., David & Jan, Ressa (dancer). Good level of enthusiasm. Saw a bright meteor in E early in evening. 2-TE. \$85 + \$17.93 = \$102.93 (\$20.37/hr.) 3 moons for Saturn.
- 17) 8/23/92(Sun)Fpt.(7:28-11:11PM) Vega(ok thru thickish clouds); Albireo(briefly, before Saturn, then several times later on); Saturn(trouble finding at arrival time due to clouds; had a lot of people waiting to see it and felt pressure in chest; kept at 80X longer than usual due to haze). Lots of families early-on. Ok traffic. Some enthusiastic lookers, including 1/2-dozen sailors from Italian sailing ship in town. Visit by son of George Hess, who says he's a sculptor and film maker. \$51 + \$10.66 = \$61.66 (\$16.62/)
- // 618) 8/24/92(Mon)Fpt.(7:55-11:16PM...actually, did a daytime star photog. session from 6 to 6:50PM...Vega & Arcturus; no trouble finding either.) Vega; Albireo; Saturn(8:10PM... higher up than I expected it....try 8PM tmw night!). Slow night. Scouted around for one couple--a Her; y Del; B Cyg; 2816 Cep) Collimated w/diagonal on. \$24.47 (\$7.30/)
- // 619) 8/25/92(Tue)Fpt.(8:15-10:40PM) Hazy sky all day but set-up because weather rpt. was saying clear tonight. Vega (needed coordinates to find!); Albireo(eventually became ok); Saturn(found about 8:37PM. Hazy, then ok, then very dim). Slow night. Felt down. Closed up. Visit by L. Romick & friends; Mike, who runs TSU planetarium. \$20.03 (\$9.77/)
- // 620) 8/26/92(Wed)Fpt.(8:30-12:47AM) Late start due to fence-sitting over hazy sky. Couldn't even see Vega! Decided to set-up because weather rpt. calling for clear tonight but rain over next few days. Was the right decision, as Saturn eventually became pretty bright. Saturn(1-moon); Albireo(several times); y Del(once). Steady traffic; some enthusiasm. Visit by Gwyn Hammer. Visit by Debbie Marcus, who introduced herself as from the old peace movement--John Brown Collective. She had many children in tow, some her own and some adopted unfortunates. Amazing woman! \$41 + \$18.82 = \$59.82 (\$13.98/hr.)
- 12 621) 8/29/92(Sat)Fpt.(6:24-1:58AM) Visited by Mike & Peggy Potter. Mike spent quite a few hrs. video taping locker reactions to Saturn. He said he got some "fantastic stuff". Vega; Deneb(4-hrs before transit); Albireo(unable to see before sunset...why?); Saturn(great sky for Sat.; 2-moons easy...3 w/effort. Many enthusiastic lookers. Worked at 160X most of the evening.) 2-TE. Visited by friend of my HCC student, Marge Kupiac. Used my old, big, black dew cap for first time in many, many months. Earlier in day I added add'l. counterbalance(nuts) for it. Seemed to work out ok. \$136 + \$15.65 = \$151.65(\$20.03)
- // 622) 8/30/92(Sun)Fpt.(7:45-11:01PM) Vega; Saturn(roof edge @ 7:40PM; intermittent clouds, then very clear; 2-moons; a lot of doubters!); Albireo(once). Quiet night in Fpt., but I had waves of people, most of whom contributed. \$58 + \$10.20 = \$68.20 (\$15.97/hr.)
- // 623) 8/31/92(Mon)Fpt.(7:15-11:45PM) Great sky--transparent, tho a bit unsteady! 3-day moon (nice!); Saturn(4-moons!); Albireo; y Del. Visit by Carole Cole and Bunny Dadds! Moderate traffic. Visited early-on by four Dundalk teenage boys on bikes, who were very interested and asked lots of questions. \$48 + \$7.51 = \$55.51 (\$12.34/hr.)
- 12 624) 9/1/92(Tue)Fpt.(6:32-11:25PM) No fun night! Could not find Vega! Reset dec. on horizon level, but that didn't help. Couldn't find Saturn, either, till 10-mins. later than should have. Also, finder way off. Fooled with it for long time before getting it reasonably centered. 4-day moon(nice!); Saturn(great early-on, then clouds, then good); Albireo; M 57(once--vague). Lost a lot of good time to clouds. Slow traffic.\$38.02(\$7.78/)
- 13 625) 9/9/92(Wed)Fpt.(7:15-11:15PM) Hazy early evening, but then very nice sky. 12-d. moon (lots of good craters on terminator); Saturn(1 moon); y Del; a Her; B Cyg. Slow night. Visit by H. Hollingsworth & friends; Sugi. \$34 + \$8.05 = \$42.05 (\$10.51/hr.)
- 12 626) 9/11/92(Fri)Fpt.(6:47-12:48AM) Vega; rising full moon; Saturn(3, maybe 4 moons) Nice sky, except for intermittent clouds till mid-evening. Have lost moon filter, somehow, so avoided moon as much as possible, though it looked nice. Was full at 10:17PM. Moderate to heavy traf. Some enthusiastic lookers. Anne Watts, Carla Adams, O'Connors. I felt somewhat bored. \$95 + \$24.02 = \$119.02(\$19.77) Visit by one of Jim Steens' ScCtr. students! Joyce Yensen, Johnny & friends, + David.

TOTAL THIS PAGE = \$743.36

TOTAL THIS YEAR = \$4,244.28

- 12 627) 9/12/92(Sat)Fpt.(6:06-12:55AM) Cloudless sky.Vega(had to realign tripod to find); Deneb(2nd try); Saturn(5-min. before sunset-usable; later, a very nice image--for stars nearby. Were all moons?) 15-day moon(ok craters on SW limb). Visit by Jennifer Picket and friends celebrating her bachelorette party. She had told them all(+/-10) that I had saved her life! Heavy traffic; more enthusiasts than doubters. I felt ok but got very cold and packed up. \$145 + \$30.03 = \$175.03 (\$25.66/hr.)
- 12 628) 9/13/92(Sun)Fpt.(6:20-11:08PM) Another great sky! Vega(w/some effort); Saturn(7:09PM; great image...3 moons); Albireo; y Del. Moderate traffic but good enthusiasm. Used 200X on Saturn for a while! I felt ok...only semi bored. \$61 + \$8.12 = \$69.12 (\$14.40/hr.)
- 13 629) 9/14/92(Mon)Fpt.(7:15-11:35PM) Yet another great sky! Different kind of night in Fpt., due to filming for the movie "Sleepless in Seattle". A lot of intently watching bystanders. Some of the film crew people visited scope. Also visited by Arlene Yost, a friend of Kay's from KC. She bought a TE. SATURN(nice; used 200X for a while!); Moon(awesome!). \$40 + \$5.21 = \$45.21 (\$10.44/hr.)
- 13 630) 9/15/92(Tue)Fpt.(7:11-12:04AM) Another night of filming "Sleepless in Seattle". Not nearly so many gawkers as last night. Visited by only 2 or 3 movie workers. Very slow early-on. Saturn (avg. view--not like last few nights); Moon(by about 10pm. Impressive!) Traffic picked up +/-10PM, with some very interesting and enthusiastic lookers, which made it all worthwhile Sold 1-CAT. \$29 + \$7.01 = \$36.01 (\$7.38/hr.)
- 12 631) 9/16/92(Wed)Fpt.(7:20-11:55PM) Avg. sky. Movie co. gone. Place seemed deserted and dirty. Derelicts fighting early in eve.; another fight mid-eve. Very slow early-on, then more interest. Some enthusiasts, including several telescopists. Saturn and the Moon. \$28 + \$6.05 = \$34.05 (\$7.42/hr.)
- 13 632) 9/19/92(Sat)Fpt.(7:00-1:00AM) Clouds early-on. Took 1-hr. to find Saturn, dwelling on Albireo during the interim. Saturn(intermittent clouds, then clear for last 1 1/2-hrs.). Heavy traffic mid-evening. Visited by a lot of people who referred to my Charles Village stints. Visit by Brian Ressler, one of my late HCC students! \$120+\$14.92 = \$134.92 (\$22.49/hr.)
- 633) 9/20/92(Sun)Fpt.(6:09-7:05PM) Vega(immediately); Saturn(searched for before 7pm s set but never found it). Sky was ok at set-up time, but by 7:05 it was totally socked in with clouds coming from the south. \$00.86 (\$0.92/hr.) Never plugged in battery!
- 13 634) 9/23/92(Wed)Fpt.(6:55-10:11PM) Clear sky between high clouds. Saturn(2 moons). Slow but worthwhile traffic, but cold wind forced me to pack-up. \$31 + \$6.56 = \$37.56 (\$11.52/hr). Visited by a lot of electronics engineers. Sold 2 TE T-shirts. Col 366 (once). Visit by Mike Potter, who said Saturn video is "great", and Don.
- 13 635) 9/29/92(Tue)Fpt.(6:19-10:03PM) Set-up south of McKiosk to escape cold wind. 4-day moon; Venus(very low...a writhing blob); Saturn(2 moons); Albireo. From this location I noticed the blue light atop a S. Balto. steeple. Thru scope it turned out to be a beautiful, blue, neon light star. In almost five years in Fpt., this is the first interesting horizon object I've found. Lookers who viewed it were quite pleasantly surprised! Quiet night, tho some enthusiastic lookers. Visit by Paul and woman Irish dancer. \$25 + \$3.06 = \$28.06 (\$7.52/hr.)
- 10 636) 10/1/92(Thu)Fpt.(6:19-11:10PM) Great sky & weather. 6-d. moon(near Antares); Saturn (2 moons); Albireo; 61 Cyg; Lambda Ari; y Del. Moderate traffic; some enthusiastic^{#6.43/} lookers. Visit by Mark, husband of pres. of Waverly Improv. Assoc., K.C. \$-TE \$40.87.
- 13 637) 10/2/92(Fri)Fpt.(6:09-11:55PM) Festival Eve! I arrived +/-5:15PM and found plenty of meter spaces open. Booths in place in my preferred spot so moved a bit toward McKiosk. Great sky; mild temp. Visit by Johnny Heyn, wife Tracy and friends. Johnny videoed me and lookers. Isabel(briefly); a woman(Ms. Gidwitz) who reported that her 6-yr. old son was totally turned on by me in Sherwood Gdns. last spring, that she bought a scope for him but needs held with it. I told her to call me. A lot of enthusiastic lookers, but interest dropped off toward midnight as crowd got younger. 7-d. moon; Sat.(2) Albireo. Frank Pratkan & family. \$84 + \$11.95 = \$95.95 (\$16.63/hr.)

TOTAL THIS PAGE = \$697.64

TOTAL THIS YEAR = \$4,941.92

- // 638) 10/5/92 HARBORPLACE(!) 5:15-9:05PM. Wow! Exciting experience!! I was really up, being in a new locale--totally articulate--unbored. Visits by Bill Tashlick (at set-up time), then by Max Hepnner, Isabel, Joel Knispel. Great sky; mild temp. Assisted early-on by a Anthony (Tony) Scott (523-6929), who, it appears, lends assistance to the jugglers on a regular basis and who knows Jeff Trueman...who knows all the ropes around there. He knew how to turn off the spot lights I was concerned about, disciplined young kids, and kind of protected me from the derelict types, of which there were many early-on. I intend to invite him to meet me on subsequent Harborpl. nights. First obj. was 9-d. moon as it sailed thru the rigging of the Constellation. The post sunset moon was incredible--Tyco and Copernicus(just past terminator); Saturn--2 moons + Casinni with no trouble. A lot of good reactions from lookers. Things were going so well that I couldn't bring myself to quit at 8:30PM, finally pulling the plug a few mins. after 9:00PM. Tony helped me get my stuff to the car (parked in the Stauffer garage; unloaded and loaded in Pratt St. driveway). I tipped him \$15.00, and will do same in future. $\$65.00 + \$11.22 = \$76.22 (\$19.90/$
- 10 639) 10/6/92(Yom Kippur eve) Fpt. (6:35-10:12PM) Intended to start later, but the moon looked so great I couldn't resist having a look! Very quiet night in Fpt.--always a lot of open parking spots. However, I had a fairly steady stream of enthusiastic lookers for a while. Visits by Ted Rouse and Jim Balder. 10-d. moon(Tyco; Jura Mtns. luminescing!); Saturn(as sharp as I've ever seen it!) $\$34 + \$3.21 = \$37.21 (\$10.28/hr.)$ Visit by Susan, who bought me a coffee.
- 13 640) 10/7/92 Fpt. (6:43-10:05PM) Slightly hazy sky early, but then nice. 11-d. moon (Tyco); Saturn(2 moons); Albireo; Gamma Del; M 57(for Gene, a real interested young man). Visit by ? (Dillon's mom) and her friend; Robbin Bullock, with whom I adjourned to the Cat's Eye. Kind of a slow evening(lots of parking spaces). $\$37.27 (\$11.09/hr.)$
- 10 641) 10/10/92(Sat)Fpt.(5:47-11:42PM) Was hesitant to set-up because of adverse weather rpt. and clouds in north coming closer. Decided to, anyhow. Vega(several tried--more than I'd like); Saturn (a few mins. before ss; 1-moon) 14-d. moon (Tyco, plus a few terminator craters. Intermittent clouds/haze throughout evening; Alternately, Saturn murky and moon hazy, but I managed to hang on till Sat. gone and moon very hazy. Visit by Tony Scott; Wayne, cab driver from Dundalk w/two daughters. Very busy night; lots of enthusiastic lookers. $\$121 + \$14.79 = \$135.79 (\$22.94/hr.)$ Lots of people asking if I saw last night's meteor shower, plus some who actually saw it, reporting its intense green color. I did not see it, first learning of it at the Gandy Dancer when Pat told me that Kim called say-GNN-TV reported a meteorite fall in Preston, WVa. Tonight, people seeing footage of it on their TV's today. My best guess is that it was a rare flare up of the Giacobinids. Some people said that a second event is being predicted for Oct. 20th! I am sorely disappointed that I missed last night's event, but maybe I'll get to see the second show, if it occurs!
- 10 642) 10/12/92(Mon)Fpt.(8:05-10:53PM) Late start due to heavy cloud cover late afternoon which fooled me into taking a nap in prep. for Eng. dancing. Also, cancelled my Harborplace slot. Woke up at 7:30PM to find very clear sky and quickly headed for Fpt. First lookers contributed \$5, which sort of made up for lost time! Saturn(1 moon for me; 2 for some); 16-d. moon (nice!). Good traffic for a while. Visited by Dan, ex. Boys' Latin teacher, who saw the Friday evening phenomena as he was driving N. thru Pa. His description made it sound like a bolide. Visited by a large gp. of Russians, who seemed in a great hurry, one of whom, reportedly, was the ambassador. $\$28 + \$7.60 = \$35.60 (\$12.71/)$
- 10 643) 10/13/92(Tue)Fpt.(6:18-11:20PM) Great sky. Vega(1st try!); Venus(a writhing blob); Saturn (great! 2-moons); 17-d. moon. Visit by Tony, who had gotten some good library books. Quiet night, for the most part, with some moments of activity. I gave Tony 2 books I bought at 2nd Story, plus an Orion catalog. I taught him how to estimate angular degrees by hand. $\$49.00 + \$8.31 = \$57.31 (\$11.39/hr.)$ Saw Orion rising as I arrived back home!

TOTAL THIS PAGE = \$379.40

TOTAL THIS YEAR = \$5,321.32

- 13 644) 10/14/92(Wed)Fpt.(5:57-12:29AM) Started early because of many large sailing ships tied-up at pier. Nice sky early, then thin clouds and haze; quite humid. Vega(1st try); Saturn (16-min. before sunset; pale, but people liked; brightened rapidly) Albireo; Lambda Ari. Moderate traffic. 18-d. moon(with help from Tony moved scope to speed acquisition) Visit by Andrew & Janice (dancers). Long, kind of boring evening. \$53 + \$10.97 = \$63.97(\$9.80/)
- 1 645) 10/15/92(Thu)Fpt.(6:21-10:58PM) Nice sky early, but forced to close-up by high clouds. Vega(1st ry); Venus(vis. in finder); Saturn(nice for a while, then diminished image; 1 moon) Quiet night but I had occassional knots of lookers, all enthusiastic, and all or most of whom contributed. \$45 + \$2.66 = \$47.66 (\$10.32/hr.)
- 13 646) 10/17/92(Sat)Fpt.(6:19-12:00MN) Nice sky. (Saturn(1st try!...5 mins. before sunset; stayed on it all night; 2-moons) Cold weather. Moderate traffic, with long spaces empty. Visit by the O'Connors with Frank Munley(!); David/Jan, who bought me soup. Followed Sat. until it became gloppy. \$88 + \$15.39 = \$103.39 (\$18.20/hr.)
- 10 647) 10/22/92(Thu)Fpt.(6:05-10:25PM) Nice sky. Saturn(2 moons). Quiet night. Visit by Rafael Alvarez, who wants to visit me in Harborpl. \$32 + \$7.80 = \$39.80 (\$9.17/hr.)
- 13 648) 10/23/92(Fri)Fpt.(6:24-11:55PM) Very nice sky. Saturn(I saw 2 moons; a looker saw 4.) Albireo; y Del; Pleiades(nice thru finder!). Good traffic for most of night, even early. Lots of enthusiasm. Visits by Arlene, Marlin B.(who came to juggle w/Jill), Regina(attends STScI mtgs.), Kelly/Carolyn, Ken (stained glass guy). Took Saturn almost to the roof. Witnessed arrest of "Big Foot". Had a budding tooth ache when I arrived, but it subsided sufficiently to let me continue. 1-TE. \$85 + \$11.05 + \$96.05 (\$17.40/hr.) Also visited by one of my HCC women students.
- 11 649) 10/25/92(Sun)Fpt.(LEE'S CORNER...scene in sq. looked bleak)(5:48-9:58PM STD. TIME). Venus(a blob); SATURN(5:15...ss 5:14PM...vague in finder; clear sky but often undulating image; 1 moon); Quiet in Fpt. w/occassional knots of traffic. \$52 + \$10.97 = \$62.97(\$15.10. Tonight as I was looking at Saturn through my scope I had the thought that at this point in time I think of it as much as a source of money as a thrilling celestial sight. It no longer jolts me each time I look at it, at least no nearly so much as it once did.
- 4 650) 10/26/92(Mon)Rotunda(!)(5:28-7:29PM) Due to clouds, only Venus vis. at sunset. Did not invite looks at it as it was only a blob. Saturn made it thru the clouds at 5:52, but it remained clear only intermittently. Too bad, because I had alot of potential lookers. Gave up when it went into a big cloud. Visited by David; Laura, the photography student waitress at Jimmies. Lots of families with kids. \$16 + \$6.39 = \$19.39 (\$9.65/hr.)
- 9 651) 10/27/92(Tue)HARBORPLACE(5:47-8:30PM) Arrived early in hopes of getting Saturn at sunset (5:12PM) if no one else performing. Amphitheatre clear but clouds moved in. Unload^{ed} stuff into Pratt St. bldg. and then moved it in "lifts" to Amph. Decided to wait out clouds. Saturn acquired at 5:47(2 moons). Quiet scene; slow traffic, plus lots of nocontribs. Alot of wierd street types around early-on. Visit by Henry Neuberger & friends. Wished I was at Rotunda! Shut down by clouds right at 8:30PM(!). Moved out by leaving stuff near horse carriages while fetching car. \$30 + \$10.43 = \$40.43 (\$14.86/hr.)
- 652) 11/10/92(Tue) ROTUNDA(4:43-6:37PM) Car in shop; given ride to by Dick Ochs. Got Saturn on first try, 13-min. before sunset! Lots of enthusiastic lookers, but then clouds came, and I had to quit. Even rising full moon clouded over. Gave out lost of "I saw Saturn from the Rotunda"stickers. Packed up and called Wieska Waters, who picked me up, took me home to unload scope and then took me to Science Ctr. for BAS mtg(!). Sold \$70.00 in goods at BAS flee mkt. Given ride home by the Pembrokes. \$24 + \$6.30 = \$30.30 (\$15.95/hr.)
- 16 653) 11/13/92(Fri) 5TH ANNIVERSARY OF STREET CORNER TELESCOPE! 1ST NIGHT OUT WAS FRI., NOV. 13TH, 1987. ROTUNDA(4:40-7:23) SATURN(immediately). Looked for Comet Swift-Tuttle but was distracted by lookers. Visited by a JHU Prof. who told me one of his students hates JHU but love Baltimore because of its uniqueness, for ex. the street corner telescope man! As traffic slowed, I packed and left for Fpt. FELL'S PT. (8:50-10:20). Soup and pie at Jimmies, then set-up. A yukky SATURN, briefly. Visit by Arline (from Gandy Dancer) and gave her a sky tour, including y And, M 42, M 45, Orion's belt behind U.S. flag flying over Rec. Pier(!). Light traffic. 17-d. moon. Quit to go to G.D. as wind picked up and it became cold. Visited by a couple who see my star map in Villager. \$62.10 (\$14.75/hr.)

TOTAL THIS PAGE = \$566.06

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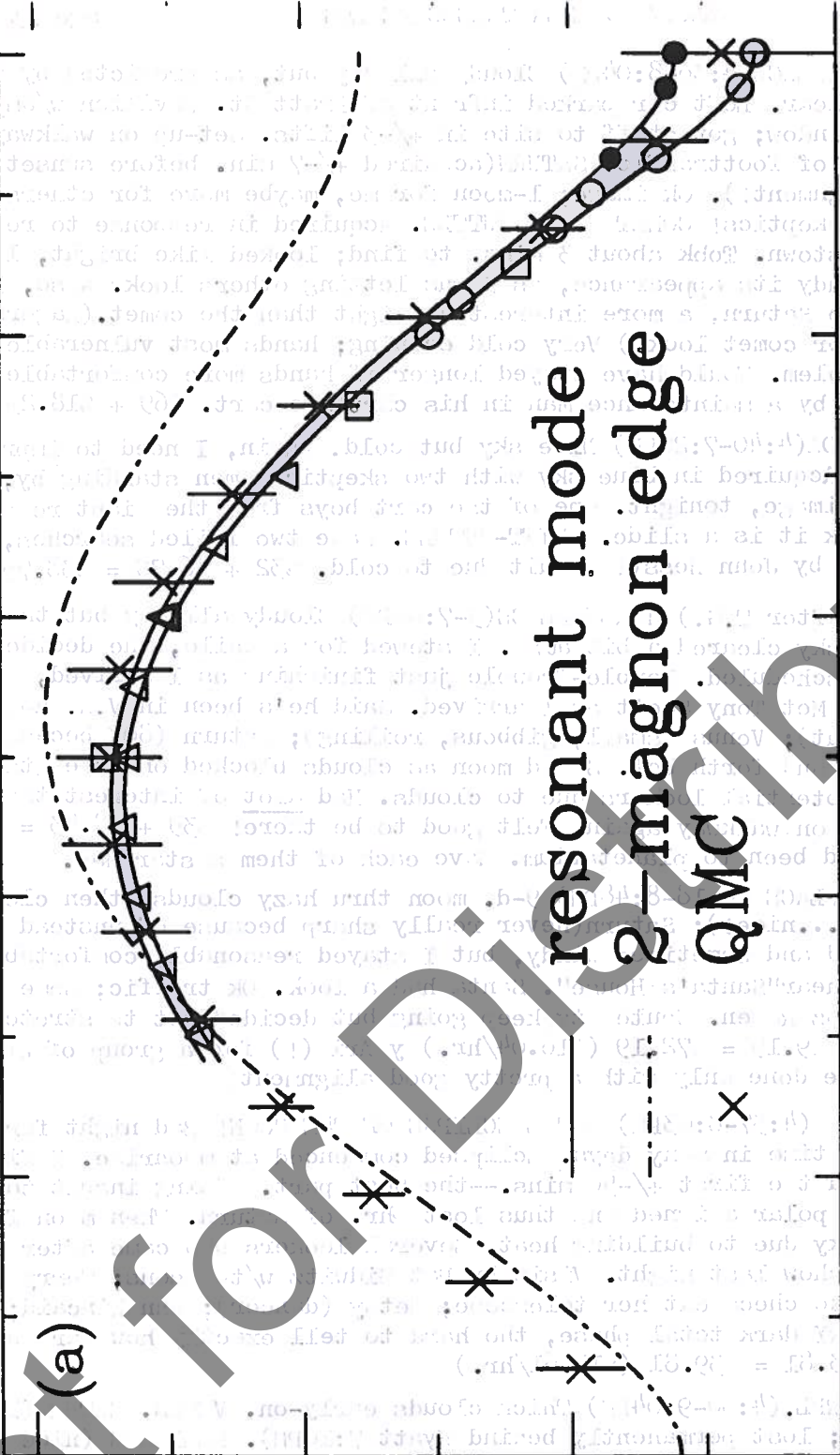
- 9 654) 11/15/92(Sun) HARBORPLACE(4:36-8:04PM) Cloudy all day but, as predicted by weather rpt., evening was clear. Left car parked in front of Pratt St. Pavilion w/amphitheatre performer sign in window; got stuff to site in +/-3 lifts. Set-up on walkway, so I'd be closer to stream of foottraffic. SATURN(acquired +/-7 min. before sunset...meaning I had very good alignment!). Ok image; 1-moon for me, maybe more for others. Lots of amazement; lots of skeptics! COMET SWIFT-TUTTLE. Acquired in response to request from a family from Hagerstown. Took about 3 mins. to find; looked like bright, large fuzzy patch. I did not study its appearance, as I was letting others look. Also, I was in a hurry to get back to Saturn, a more interesting sight than the comet.(Hagerstown folks contributed \$5.00 for comet look.) Very cold evening; hands most vulnerable part. Need to address that problem. Would have stayed longer if hands more comfortable. Scope given ride back to my car by a maintenance man in his electric cart. \$69 + \$18.25 = \$87.25(\$25.1)
- 4 655) 11/16/92(Mon) ROTUNDA(4:40-7:20PM) Nice sky but cold. Again, I need to improve my gloves situation! SATURN (Acquired in blue sky with two skeptical men standing by, as well as Dr. Pembroke. Nice image, tonight. One of the cart boys from the Giant remarked that a lot of people think it is a slide. SWIFT-TUTTLE. Made two failed searches, maybe due to bad lights. Visited by John Hess(!). Quit due to cold. \$32 + \$6.79 = \$38.79 (\$14.58/hr.)
- 9 656) 11/27/92(Fri...day after T.G.) HARBORPLACE(5-7:00PM) Cloudy all day but then, as not predicted by W. rpt., sky cleared a bit at SS. I stewed for a while, then decided to try Hpl., even tho I was not scheduled. Double-Trouble just finishing as I arrived, and no other performers present. Met Tony Scott as I arrived. Said he's been in V.A. hospital for 3 wks. 3-d. moon (great); Venus (small, gibbous, roiling); Saturn (80X because of haze, clouds). Swung back and forth bet. S and moon as clouds blocked one then the other. Probably lost 50% of potential lookers due to clouds. Had a lot of interest that I couldn't accommodate! Set-up on walkway again. Felt good to be there! \$39 + \$8.83 = \$47.83(\$23.92/). Had families who had been to planetarium. Gave each of them a star map.
- 9 657) 12/3/92(Thu) HARBORPLACE (4:18-8:48PM) 9-d. moon thru hazy clouds, then clear (Copern., Tyco, Straight Wall...nice!); Saturn(never really sharp because of unstead sky; followed almost to roof) Cold and sometimes windy, but I stayed reasonably comfortable. Set up above Amphitheatre, near "Santa's House". Santa had a look. Ok traffic; some enthusiastic lookers. Visit by Roz Rosen. Wanted to keep going but decided not to stretch the rules to far. \$63 + \$63 + \$9.19 = \$72.19 (\$16.04/hr.) y Ari (!) for a group of JHU women students. Could have done only with a pretty good alignment!
- 4 658) 12/9/92(Wed) ROTUNDA (4:37-8:03PM) TOTAL ECLIPSE OF THE MOON! Bad night for me, tho sky reasonably OK first time in many days. Eclipsed commenced at moonrise. I figured my angles wrong and missed the first +/-50 mins.--the best part. Adding insult to injury, I had trouble getting polar aligned and thus lost 1/2 hr. of Saturn. When moon finally arrived it was somewhat shaky due to building heat. Several lookers who came after hearing me on Dan Rodrick's talk show last night. Visit by Pat Gidwitz w/two sons; Terry Thometz, Fpt. woman who wants me to check out her telescope; Betsy (dancer); Ann Kincaid; Dorothy H.; Linda Niederman. VERY dark total phase, tho hard to tell exactly how dark because of haze and lights. \$36 + \$3.81 = \$39.81 (\$11.61/hr.)
- 9 659) 12/18/92(Fri) HARBORPL.(4:30-9:04PM) Thick clouds early-on. VENUS. SATURN(lost at least 1 hr. due to clouds; lost permanently behind Hyatt 7:10PM). PLEIADES (nice in finder... I made Subaru connection but need illustrations); Orion's Belt; Sigma Ori; MARS(a writhing disk). A lot of families; good vibes! Visit by Inner Harbor News Letter lady. Went home, changed and then to GD, instead of Fpt. \$65 + \$83.45 = \$18.26/hr.)
- 9 660) 12/21/92(Mon) HARBORPL.(4:24-7:30PM) Ok sky. VENUS and SATURN 1.1° apart. Could see both at once thru finder. Good traffic for several hrs., then it got quiet. Lost Sat. in yuk by 7:04. Switched to Pleiades but quit soon after because of slow traffic and cold wind. Gave out stars maps to almost every family with kids. \$51 + \$8.27 = \$59.27 (\$18.47/hr.) Visited with Frannie Friedman and Nancy Patz B. in their parked car after stint.

TOTAL THIS PAGE = \$428.59

TOTAL THIS YEAR = \$6,315.97

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STREET CORNER TELESCOPE LOG

- 1) 12/26/92 (Sat) HARBORPLACE (3:58-7:10PM) Nice sky but cold--probably below freezing, incl. wind chill. VENUS (uninteresting, smallish 1/2-moon, but ok for starters before sunset); 3-d. MOON (Magnifique! Most lookers quite awed by it. Let looker watch occultation of +/-3rd mag. star in Cap; SATURN (wasn't planning to do much with it, but it turned out to be a big attraction, as usual!). Slow traffic early, followed by good traffic with lots of families. Again, my fingers were my most vulnerable body part. Verified with some Japanese that Pleiades = Subaru. Used Subaru logo once to good effect! A PLUS night in Harbpl.! \$79 + \$9.98 = \$88.98 (\$27.81/hr.) Used "Tonight the MOON...." sign.
- 9 662) 12/27/92 (Sun) HARBORPLACE (3:37-7:27PM) Very good sky, but cold again. Put thin liner under blue gloves, which improved my fingers problem, somewhat. VENUS (first object); 4-d. Moon (became fine as twilight deepened); SATURN (stayed at 80X to avoid taking off gloves to change eyepieces). TO MY AMAZEMENT, DARKENED SKY REVEALED THAT VENUS, THE MOON, AND SATURN FORMED A PERFECT, UPSIDE DOWN, EQUILATERAL TRIANGLE; VERTEXES WERE VENUS-L, MOON-R, AND SATURN BOTTOM. I WISHED I'D HAD A CAMERA! Had longer periods of down time, tonight, then previously in Harborplace, punctuated by times of intense, enthusiastic groups of lookers. Exactly at the time the Moon hit the roof of the Hyatt, clouds moved in and obliterated the whole sky. Timing could not have been better, because it really was time for me to quit! Visit by J. and S. Hettleman. \$68 + \$16.52 = \$84.52 (\$22.07/hr.)

HARBORPLACE STATISTICS -- 1992

- 1) total performances = 9 (performances scheduled = 13)
- 2) contributions/performance (\$) 76.22 + 40.43 + 87.25 + 47.83 + 72.19 + 83.45 + 59.27 + 88.98 + 84.52
- 3) total contributions = \$640.14
- 4) avg. performance total = \$71.13
- 5) total performance hours = 31.22
- 6) contributions/hour avg. = \$20.50

TOTAL THIS PAGE = \$173.50

TOTAL THIS YEAR = \$6,489.47

TOTAL MILES = 1,250

STREET CORNER EXPENSES -- 1992

P. 1 of 3

SALES 1/2/92 copy of Eve. Sun. art. on "The Stars of 1992"	\$ 0.50
SALES 1/5/92 5-copies WINTER '92 star map materials (JHU)	\$ 0.25
SALES 1/7/92 "I SAW...JUPITER" rubber stamp (Moore Printing)	\$14.70
POSTAGE 1/13/92 5-post cards + \$0.23 stamp	\$ 1.18
LEGAL 1/18/92 2-copies law book pages (Pratt)	\$ 0.40
PHOTO 1/18/92 1-roll film for moon photos (Service)	\$ 8.44
SALES 1/22/92 24-copies SPRING '92 and SUMMER '92 maps for JHU class (JHU)	\$ 1.20
TEL 1/22/92 Bill of 1/13/92 (889-0460)	\$ 4.22
LEGAL 1/28/92 80-copies material to take to deposition (JHU)	\$ 4.00
LEGAL 1/29/92 1-copy "Privileged Communications" definition in law dictionary (Pratt)	\$ 0.20
LEGAL 1/29/92 41-copies material to take to deposition (JHU)	\$2.05
LEGAL 2/3/92 parking during deposition at City Hall	\$3.50
LEGAL 2/19/92 4-copies of Motion for Extension (Boulevard)	\$ 0.21
SP 2/22/92 contrib. to Greg, Fpt. musician	\$ 1.00
TEL 2/23/92 bill of 2/13 (889-0460)	\$ 1.52
SP 2/25/92 fee to attend 3/19/92 WASH. AREA ASTRONOMERS mtg. at JHU	\$ 5.00
POSTAGE 2/26 book of stamps	\$ 5.80
STATIONARY 2/27/92 (STAPLES) pens	\$ 3.53
3 2/25/92 rt to JHU (Bloomberg) to give SSIP presentation	0.70
3 2/28/92 rt to Convention Ctr. to give MESA presentation	2.00
AUTO 2/28/92 parking for MSEA presentation	\$ 7.00
LEGAL 3/4/92 55-copies "Attachments" for Opposition to Summary Judgement Motion (JHU)	\$2.75
LEGAL 3/4/92 postage for mailing Opposition	\$1.96
LEGAL 3/8/92 3-copies Eve. Sun. art. of 12/10/91 w/ Salv. Army (Loyola)	\$ 0.30
SP 3/11/92 postage--VILLAGER rate card w/letter to Cobblestone Publishing	\$ 0.98
SP 3/11/92 5-copies MTV article (JHU)	\$ 0.25
SP 3/15/92 6-copies "Farthest Star You Can See...." art. (JHU)	\$ 0.30
7+4 3/16/92 Rotunda, but too windy; Fpt., but too quiet. Returned home.	3.30
4 3/19/92 to attend WASH. AREA ASTRONOMERS mtg. at JHU.	1.04
TEL 3/20/92 bill of 3/13/92 (889-0460)	\$ 1.16
LEGAL 4/1/92 4-copies Damages Update (Blvd.)	\$ 0.21
SP 4/3/92 10-copies SEE THEM IN THE DAYTIME! article (JHU)	\$ 0.50
POSTAGE 4/3 mail SEE THEM IN THE DAYTIME to S&T	\$ 0.52
STATIONARY 4/3 2-typewriter ribbons (Staples)	\$ 4.54
SP 4/5/92 contrib to Jill the Juggler in Fpt.	\$ 1.00
SP 4/12/92 Moon/Star pin (JHU Sp. Fair)	\$ 5.00
STA 4/13/92 1-White Out (Dawns)	\$ 1.78
LEGAL 4/19/92 8-copies letter of 4/18/92 to Judge Blake (JHU)	\$ 0.40
LEGAL 4/20/92 postage to mail letter to Judge Blake	\$ 0.52
LEGAL 4/23/92 1-copy page from legal book on damages (Pratt)	\$ 0.20
LEGAL 4/24/92 4-copies legal theory books (U of B)	\$ 0.40
POSTAGE 4/27/92 art. to di Cicco (revision) + 2 post cards	\$0.90
TEL 4/28/92 bill of 4/13/92 (889-0460)	\$1.17
SP 5/3/92 contrib to Greg the guitar man	\$1.00
SP 5/4/92 1-copy of 3-body problem explanation for school (HCC)	\$ 0.20
LEGAL 5/8/92 4-copies up-to-date damages (Hdwe.)	\$ 0.21
LEGAL 5/9/92 rt bus fair to negotiations at Fed. Crt. Hse.	\$ 2.20
STA 5/9/92 2-bottles white-out (Ginn's)	\$ 3.12
SP 5/17/92 7-copies SEE THEM IN THE DAYTIME art. (JHU)	\$ 0.35
SP 5/18/92 3-copies "How to identify meteorites" for Jason (JHU)	\$ 0.15
SP 5/18/92 postage for 3rd rendition of art. to di Cicco	\$ 0.52
SP 5/18/92 postage to return "meteorite" specimen to Jason Bailey	\$ 1.62
LEGAL 5/19/92 rt bus trip to negotiations at Fed. Ct. Hse.	\$ 2.20
P 5/19/92 contrib. to derelict in Fpt.	\$ 1.00
TEL 5/22/92 bill of 5/13/92 (889-0460)	\$ 2.65
SP 5/23/92 contrib. to Jill the Juggler	\$ 1.00

Page = \$113.04

STREET CORNER EXPENSES -- 1992

P. 2 of 3

SP 5/26/92 6-copies Galileo cartoon material for Pickett(Loyola)	\$ 0.60
SP 5/27/92 process slides w/daytime astronomy subjects (Service)	\$ 4.12
STA 5/29/92 ream of 8 1/2 x 14 paper; stamp pad ink (staples)	\$ 5.85
SP 5/30/92 5-copies more article material to S&T (JHU)	\$ 0.25
LEGAL 5/31/92 6-copies letter to J. Blake re Settlement Agreement(JHU)	\$ 0.30
10 6/1/92 dry run to FPT.--clouds	\$ 2.60
LEGAL 6/2/92 rt bus fare to Scheduling Conf. at Fed. Ct. Hse.	\$ 2.20
LEGAL 6/2/92 2-copies Space Grant program w/me for Raimondi/Stitchel (JHU)	\$ 0.20
SP 6/2/92 1-copy (ibid) for Russ Poch(JHU)	\$ 0.05
SP 6/3/92 1-copy Wasson letter for Jason (Hdw.)	\$ 0.05
SP 6/5/92 1-sticker w/"Baltimore" on it for prototype for astro sticker	\$ 0.27
SP 6/9/92 Folk Arts Network FOLK DIRECTORY listing	\$ 5.00
STA 6/9/92 15-copies of tax forms (Blvd. Hdwe)	\$ 0.74
SP 6/13/92 2-copies celestial radio sources for J.L. Henry(JHU)	\$ 0.10
SP 6/13/92 purchase of flower from rose seller in FPT.	\$ 2.00
STA 6/14/92 8 1/2 x 14 paper + typewriter ribbon (Staples)	\$ 6.70
SP 6/17/92 contribution to a FPT. derilict w/two kids	\$ 1.00
POSTAGE 6/22 1-book of stamps + 5-postcards	\$ 6.75
TEL 6/26/92 bill of 6/13/92 (889-0460)	\$ 1.22
PHOTO 6/24/92 process & prints FPT. star in daytime by Isabel	\$ 9.24
LEGAL 6/30/92 4-copies "To whom it may concern..." letter (JHU)	\$ 0.20
SP 7/6/92 2-reams 8 1/2 x 14 paper (Staples)	\$ 7.75
STA 7/6/92 Scotch tape + Hi-Liter (Staples)	\$ 2.79
POSTAGE 7/6 mail literature to Mark Elliott	\$ 0.52
SP 7/9/92 3-copies teachers' talks material (JHU)	\$ 0.15
LEGAL 7/22/92 bus fare to settlement-rt	\$ 2.20
TEL 7/23/92 bill of 7/13 (889-0460)	\$ 1.50
P 7/28/92 2-prints of Bailey photos for Jason (Service)	\$ 1.68
PHOTO 7/29/92 1-roll Fujichrome 400D (36) (Service)	\$ 11.93
SP 8/5/92 10-copies URANUS sign (JHU)	\$ 0.50
SP 8/5/92 12-copies Harborplace Saturn stamp (JHU)	\$ 0.60
SP 8/9/92 3-copies constellations material for Sc. Ctr. class (JHU)	\$ 0.15
STA 7/1/92 Dept. of Interior--Isogonic map (ck#2457)	\$ 4.75
STA 8/11/92 Spring to counterbalance scope (Hechinger)	\$ 3.67
SP 8/14/92 4-copies moon map for Sc Ctr. class. (JHU)	\$ 0.20
SP 8/17/92 1-glass prism for classrm. demo.(Herstein & Co.)	\$ 3.47
SP 8/18/92 3-copies Greek alphabet for Sc. Ctr. class (JHU)	\$ 0.15
TEL 8/23/92 bill of 8/13/92 (889-0460)	\$ 1.20
FOOD 8/24/92 FPT. between stints (Jimmies)	\$ 7.04
OSTAGE 8/26/92 4th rendition of article to S&T	\$ 0.52
SP 8/26/92 6-copies of article for S&T (JHU)	\$ 0.30
PHOTO 8/28/92 slides (daytime stars) (Dark Room)	\$ 8.40
STA 8/29/92 68ea. counterweight bolts (Hechinger)	\$ 2.15
BOOKS 8/31/92 LIFE MAGAZINE w/cover art. on SETI (Giant)	\$ 3.10
BOOKS 8/31/92 THE OMEGA POINT by Gribbin '2nd Story Bks.)	\$ 6.30
SP 9/3/92 4-copies Harborplace stamp art (JHU)	\$ 0.20
SP 9/8/92 3-copies of "Star Light, Star Bright!" article (JHU)	\$ 0.15
SP 9/8/92 "I SAW SATURN!" HARBORPLACE rubber stamp (Moore)	\$ 12.39
SP 9/11/92 2-moon maps(JHU)	\$ 0.10
SP 9/11/92 5-copies MPTV art. (JHU)	\$ 0.25
SP 9/11/92 7-Autumn '92 star maps (JHU)	\$ 0.35
SP 9/13/92 7-copies SEE THEM IN THE DAY....5TH REND. (JHU)	\$ 0.35
SP 9/13/92 2-copies Autumn star map (JHU)	\$ 0.10

Page = \$134.25

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Postage 9/14/92 5TH RENDITION of article to S&T	\$00.52
Stationery 9/14/92 file cards (Rite Aid)	\$00.73
SP 9/14/92 film positive SATURN for sign (Valley)	\$ 6.00
SP 9/15/92 3-copies TONIGHT--THE RINGS OF SATURN sign (JHU)	\$ 0.15
LEGAL 9/19 2-copies Harborplace slots application (Blvd)	\$ 0.10
TEL 9/22/92 bill of 9/13 (889-0460)	\$ 2.92
PHOYO 9/23 1-copy of pinhole camera article (Pratt)	\$ 0.20
LEGAL 9/30/92 2-copies Nov. Harborpl. schedule (Blvd.)	\$ 0.10
SP 10/1/92 7-copies 6TH RENDITION of article for S&T (JHU)	\$ 0.35
POSTAGE 10/1/92 mailing 6TH RENDITION to S&T	\$ 0.52
Stationery 10/5/92 Harborpl. parking signs 7/ea. (JHU)	\$ 0.35
SP 10/5/92 tip to Tony Scott for Harborpl. services	\$15.00
PARKING 10/5/92 Harborpl.	\$ 3.00
SP 10/10/92 2-copies BAS article for Lovi (JHU)	\$ 0.10
SP 10/10/92 \$7.32 tip to Tony Scott for FPT. visit	\$ 7.32
BOOKS 10/13/92 2 ea. for Tony Scott (2nd Story)	\$ 6.25
SP 10/15/92 4-copies for Russ Poch (JHU)	\$ 0.20
BOOKS 10/16/92 Edmund Sky Guide (Orion)	\$ 9.74
SP 10/19/92 2-copies WINTER star map for Villager (JHU)	\$ 0.10
SP 10/23/92 contrib. to Jill the Juggler in Fell's Pt.	\$ 1.00
TEL 10/27/92 bill of 10/13 (889-0460)	\$ 4.54
PARK. 10/27/92 Harborpl.	\$ 3.00
STA 10/28/92 pen (Adcom)	\$ 1.03
SP 10/28/92 I SAW SATURN! ROTUNDA stamp aft 10-copies (JHU)	\$ 0.50
SP 10/30/92 ROTUNDA rubber stamp (Moore)	\$12.39
SP 11/1/92 10-copies misc. street corner materials (JHU)	\$ 00.50
BOOKS 11/2/92 Lion Recording Ser. for 3 tapes of astronomers interviews	\$ 14.85
POSTAGE 11/5/92 7th RENDITION of art. to S&T	\$ 0.52
SP 11/5/92 8-copies 7TH RENDITION for S&T (JHU)	\$ 0.40
SP 11/6/92 3-copies moon phases diagram for street corner explanations (JHU)	\$ 0.15
BOOK 11/10/92 Edmund Sky Guide (sold at BAS flee mkt.)	(\$ 6.00)
STA 11/10/92 KELLNER EYEPIECE (sold at BAS flee mkt.)	(\$25.00)
SP 11/10/92 10% fee paid to BAS for sales	\$ 7.00
SP 11/13/92 13-copies art. ASTRONOMER PREDICTS COMET COLLISION (JHU)	\$ 0.65
SP 11/18/92 6-copies Rendition #8 of art. for S&T (JHU)	\$ 0.30
POSTAGE 11/18 Rendition #8 to S&T	\$ 0.52
SP 11/24/92 1-copy ASP subscriber form (Blvd. Hwd)	\$ 0.05
TEL 11/26/92 bill of 11/13/92 (889-0460)	\$ 2.09
SP 11/27/92 tip to Tony Scott for help at Harpl.	\$ 5.00
SP 11/30/92 21-copies Winter '93 star map materials (JHU)	\$ 1.05
SP 12/1/92 5-copies S&T child. books for Cobblestone Pub. (JHU)	\$ 0.25
POST 12/1/92 letter + article to Cobblestone Pub.	\$ 0.52
SP 12/1/92 8-copies sky map materials (JHU)	\$ 0.40
SP 12/1/92 1-Mars orbit transparency for sky map (Valley Comp.)	\$ 5.50
BOOKS 11/15/92 SKY PUBLISHING for '93 RASC Handbk. and Wall Chart (ck#2471)	\$22.90
POST. 12/11/92 9TH RENDITION of article to S&T	\$ 0.52
SP 12/11/92 17-copies 9th Rendition of article (JHU)	\$ 0.85
SP 12/14/92 1-copy astrophoto art. for Villager (Hwd. Blvd.)	\$ 0.05
BOOKS 12/14/92 WEATHER by Zin, et al. (2nd Story Books)	\$ 1.58
SP 12/23/92 20-copies artwork for MARS and VENUS signs (JHU)	\$ 1.00
TEL 12/24/92 bill of 12/13/92 (889-0460)	\$ 1.72
SP 12/26/92 2-copies p.4 of article for S&T (JHU)	\$ 0.10

Page = \$ 113.58

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SC OUT-OF-POCKET EXPENSES -- 1993

BOOKS 1/2/93 PHYSICS, ASTRONOMY & MATHEMATICS (2nd Story)	\$ 10.50
SP 1/4/93 3-copies Venus in 1993 (JHU)	\$ 0.15
P 1/6/93 2-copies from photo history book (JHU)	\$ 0.10
P 1/6/93 5-copies from encyclopedias about photo history (Pratt)	\$ 1.00
SP 1/10/93 6-copies Mercury article for newsletters (JHU)	\$ 0.30
SP 1/10/93 2-copies material for photo article (JHU)	\$ 0.10
SP 1/13/93 3-copies Astrophoto Alert! article (Blv. Hdwe)	\$ 0.15
P 1/14/93 3-copies S&T art. for G. Lintzaris (JHU)	\$ 0.15
PHOTO 1/14/93 6-prints of 4/12/68 lunar eclipse (Service)	\$ 6.18
SP 1/15/93 3-copies space debris refs. + astrophoto art. for Jamie (Hdwe)	\$ 0.15
SP 1/19/93 BAS/Md. Sc. Ctr. membership '93 (ck.#2484)	\$27.00
POSTAGE 1/19/93 stamps	\$ 2.90
POSTAGE 1/21/93 materials to McDaniels	\$ 0.75
TEL 1/25/93 bill of 1/13/93 (889-0460)	\$ 1.48
SP 1/28/93 10-copies of 10TH RENDITION of art. for S&T (JHU)	\$ 0.50
POSTAGE 1/28 mail 10TH RENDITION to S&T	\$ 0.52
SP 1/29/93 8 1/2 x 14 paper (Staples)	\$ 3.87
STA 1/29/93 2-type ribbons; Scotch tape; (Staples)	\$ 7.83
STA 1/30/93 whiteout (Staples)	\$ 2.29
SP 2/1/93 10-copies 11TH RENDITION (JHU)	\$ 0.50
POST 2/1 mail 11TH RENDITION	\$ 0.75
SP 2/2/93 tip to Tony Scott at Hpl. for helping me load equip. into car.	\$3.00
SP 2/3/93 Ibid.	\$4.00
POST 2/9/93 stamps	\$ 5.80
SP 2/13/93 3-copies art. "Killer Winter Tripple" (Hdw.Blvd.)	\$ 0.15
SP 2/15/93 2-copies Venus--Moon art. to Sun Papers (JHU)	\$ 0.10
SP 2/15/93 2-copies Venus--Moon art. to Dundalk Elem.(JHU)	\$ 0.10
P 2/16/93 1-120 min. cassette tape for Weinberg radio talk(Radio Shack)	\$ 2.93
AUTO 2/19/93 MESA parking == 23 miles	\$ 6.00
BOOKS 2/20/93 ASTRONOMY magazine sub. (ck.#2486)	\$15.00
BOOKS 2/22/93 ASTRONOMY TEACHING HANDBOOK and THE UNIVERSE FOR CHILDREN (2488).L.	\$14.95
AUTO 2/9/93 4-miles SSIP talk	\$ 1.12
AUTO 2/23/93 4-miles SSIP talk	\$ 1.12
AUTO 2/25/93 21-miles DUNDALK ELEM. talk	\$ 5.88
SP 2/25/93 2-copies arts. for L. Kemble (Blvd.)	\$ 0.10
POST. 2/26/93 postage (ltr. to Kemble + 10 stamps)	\$ 3.01
SP 3/3/93 2-copies Mercury/Venus positions (JHU)	\$ 0.10
SP 3/8/93 3-copies Venus-Moon occultation art. for clubs (Blvd.)	\$ 0.15
SP 3/11/93 8-copies SPRING '93 star map preparation (JHU)	\$ 0.40
TEL 3/11/93 bill of 2/13/93	\$ 5.40
POSTAGE 3/12/93 10 stamps + 5 postcards	\$ 3.85
3/16/93 3-round trips to JHU for SSIP talk @ 3.39 miles ea.	\$ 2.80
3/18/93 8-copies "Charting the Planets" for Tony Scott (Blvd.)	\$ 0.42
P 3/19/93 supper for Tony Scott at Jimmies	\$ 6.00
TEL 3/24/93 bill of 3/13/93 (889-0460)	\$ 6.67
POST. 3/34/93 extra for letter to L. Kemble in Canada	\$ 0.11
SP 3/25/93 composition & copies of letter to Audition Judges (JHU)	\$ 1.05
POST. 3/26/93 stamps	\$ 2.90
3/27/93 trip to Harborpl. to check out auditions(mine tomorrow)	\$ 2.52
SP 3/27/93 lunch for Tony Scott at Hpl.	\$2.94
SP 3/28/93 tip to Tony Scott for helping me get in & out of audition area	\$20.00
P 3/29/93 6 ea. MTV art. + 2 ea. JH Newsletter art. (JHU)	\$ 0.40
SP 3/30/93 13-copies 12TH RENDITION of article to S&T (JHU)	\$ 0.65
POST. 3/30/93 mail 12TH RENDITION to S&T	\$ 0.75
STA. 3/31/93 whiteout (Rite Aid)	\$ 2.41

PAGE TOTAL = \$ 192.365

SC OUT-OF-POCKET EXPENSES -- 1993

SP 4/1/93 6-copies articles for newsletters (JHU)	\$ 0.30
POST 4/1/93 materials mailed to Ray Blank	\$ 0.98
SP 4/2/93 1-copy angular meas. flier for ASP survey(JHU)	\$ 0.05
Post 4/2/93 add'l to mail survey back to ASP	\$ 0.46
SP 4/3/93 tip to Tony Scott for unloading/loading help at Hpl.	\$ 5.00
PHOTO 4/3/93 Venus at IC set processing (Service)	\$ 7.16
SP 4/6/93 6-copies SPRING '93 star map materials reconstruction (JHU)	\$ 0.30
SP 4/8/93 1-pr. white pants for summer SC uniform (Goodwill)	\$ 1.45
SP 4/8/93 2-pr. white pants for summer SC uniform (Goodwill)	\$ 3.81
EQUIPMENT 4/8/93 1-Mega Vista eyepiece (16.8mm) (Orion--ck.#2496)	\$142.67
STA 4/10/93 2-rubber fingers (Towson Stationers)	\$0.53
STA 4/10/93 5-T-120 Video Tapes--3 for Mike Potter; 2 for SC)	\$10.45
SP 4/11/93 tips to Jill and man for helping me get out of Hpl.	\$ 2.00
SP 4/22/93 2-copies arts. for May BAS newsletter (Blvd)	\$ 0.10
SP 4/23/93 5-copies Sirius MTT's art. for clubs (JHU)	\$ 0.25
TEL 4/24/93 bill of 4/13/93 (889-0460)	\$5.36
BOOKS 4/24/93 1-yr. sub/membership Selenology/Am. Lunar Soc. (ck#2499)	\$10.00
POST 4/26/93 10-stamps + 2 postcards	\$ 3.28
POST 4/29/93 return eyepiece to Orion (UPS)	\$3.88
12 4/30/93 dry run to Fpt. (clouds)	\$3.36
SP 5/1/93 handouts to Fpt. derelicts	\$2.25
12 5/2/93 dry run to Fpt.(haze, wind), + check-out run to Carousel at Hpl.	\$3.36
At home, again, at sunset (8PM) Moon was quite doable! But I was too demoralized by hanging out in Fpt., by getting there tooo early, to be in the right frame of mind to return. When will I learn to stop wearing myself down trying for late afternoon daytime astronomy, getting bored, going home, and then being tooo demoralized to return at just the time I should be arriving, in the first place??	
WA 4/5/8/93 safety belt (back support for lifting scope)(Hoechinger)	\$25.20
STA 5/8/93 stool for sitting on at scope (Armer)	\$ 8.40
SP 5/8/93 handout to Fpt. derelict	\$ 1.00
SP 5/10/93 1-ream 8 1/2x14" paper for star maps (Staples)	\$ 3.35
SP 5/13/93 5-copies "Baltimore's Night Watchman" (JHU)	\$ 0.25
SP 5/15/93 3-copies "The Hunt for Omega Cen" (Blvd.)	\$ 0.15
QUIP. 5/17/93 refund from Orion for eyepiece purchased 4/8/93 (above)	(\$139.00)
POST 5/19/93 response to req. for SC info from Argentina	\$ 0.95
SP 5/14/93 contrib. to Charlie McVicker (musician)	\$ 1.00
SP 5/20/93 contrib. to "The Hawk" in Cat's Eye (dancer)	\$ 1.00
SP 5/22/93 2-copies: computer bullentin bd. on daytime stars; Tuthill ad(Blvd)	\$ 0.10
SP 5/23/93 3-copies distance modulus calculations for Jim Tomney (JHU)	\$ 0.15
SP 5/23/93 contribution to musicians in Fpt.	\$ 1.00
TEL 5/24/93 bill of 5/13/93 (889-0460)	\$ 3.50
SP 5/24/93 7-copies materials for S. Haas & SPYGLASS (JHU)	\$ 0.35
POST 5/24/93 mail materials to S. Haas & SPYGLASS	\$ 1.04
SP 5/28/93 17-copies prepare Summer '93 star map (JHU)	\$ 0.85
STA 6/6/93 1safety belt (Home Depot)	\$ 19.81
POST 6/9/93 10-stamps	\$ 2.90
SP 6/10/93 4-copies "Soup Up Your Planisphere" for clubs (JHU)	\$ 0.20
SP 6/14/93 contrib. to Ted Shargel ("Mr. Fiddle")	\$ 1.00
POST 6/14/93 return his book to Shargel	\$ 0.98
SP 6/14/93 8-copies Summer '93 star map preparation (JHU) revision	\$ 0.40
SP 6/22/93 contributions to derelicts in Fpt.	\$ 0.75
L 6/23/93 bill of 6/13/93 (889-0460)	\$ 3.58
SP 6/25/93 contribution to Fpt. derelict	\$ 1.00
P 6/27/93 1-ream of white paper 8 1/2x14" (Staples)	\$ 3.87
6/28/93 bike repair	\$23.80
6/30/93 Space Telescope talk	\$ 0.84

#150.22

SP 7/1/93 11-copies "More Course Objectives" (Blvd. Hdwe)	\$ 0.58
POSTage 7/6/93 60mm to Camp Shiloh nature counselor w/literature	\$ 2.22
POST. 7/7/93 10-stamps	\$ 2.90
SP 7/11/92 2-copies Kepler mats. for talk (JHU)	\$ 0.10
SP 7/11/93 contrib. to car parker in Fpt.	\$ 0.25
SP 7/19/93 4-copies of Wash. Post. art. on comet (JHU)	\$ 0.20
SP 7/22/93 4-copies Perseids article (JHU)	\$ 0.20
TEL 7/25/93 bill of 7/13/93	\$ 4.53
4 7/15/93 To Space Grant for Savit's Talk	\$ 1.12
9 7/23/93 To Brian Mar for "Summerotech" Talk	\$ 2.52
SP 7/26/93 2-copies of Perseid article for Roylance (Blvd.)	\$ 0.10
STA 7/29/93 2-typewriter ribbons (Staples)	\$ 5.14
19 7/29/93 4-bicycle brake shoes (Horizon, \$4.95)	\$ 5.32
SP 7/31/93 \$ contribution to derelict in Fpt.	\$ 1.00
SP 8/1/93 5-copies Perseid blurbs for street corner handout (JHU)	\$ 0.25
SP 8/2/93 5-copies Perseids blurbs (JHU)	\$ 0.25
SP 8/2/93 4-copies Perseid art. for Rick Foster (JHU)	\$ 0.20
POST 8/2/93 10-stamps	\$ 2.90
POST 8/2/93 5 postcards	\$ 0.95
4 8/4/93 to JHU for "Visit to the Third Planet" talk	\$ 1.12
8/7/93 2-copies UMI limiting mags. for "Visit" (JHU)	\$ 0.10
SP 8/9/93 contribution to Fpt. derelict	\$ 0.25
POST 8/10/93 stamps for letter to Prof. Heck (France)	\$ 0.66
STA 8/11/93 red tissue paper to subdue flashlights for meteor observing (Towson)	\$ 1.58
PHOTO 8/11/93 1-roll film to photography Perseids (Camera Shop)	\$ 7.34
SP 8/13/93 contrib. to Fpt. unicycle rider	\$ 1.00
SP 8/14/93 contrib. to derelict in Fpt.	\$ 0.50
8/15/93 1-rm. 3-hole paper (Rite Aid)	\$ 1.04
SP 8/23/93 Van Gogh book and slide (Van Gogh Museum)	\$ 8.55
STA 8/27/93 repair and clean typewriter (Enoch)	\$ 21.25
TEL 8/28/93 bill of 8/13/93	\$ 1.98
SP 8/30/93 contribution to Fpt. derelict	\$ 0.25
POSTAGE 8/31/93 stamps & postcards	\$ 4.04
SP 9/1/93 10-copies "resume" for Elderhostel (JHU)	\$ 0.50
POST 9/2/93 resume to Elderhostel	\$ 0.75
SP 9/10/93 contrib. to Fpt. derelict	\$ 0.25
SP 9/13/93 " " " "	\$ 0.25
SP 9/18/93 " " " "	\$ 0.50
SP 9/20/93 compose Autumn '93 star map (JHU) 9-copies	\$ 0.45
QUIP 9/21/93 1 Wesco #510-514-P-FN30 hand truck (S.W. Betz Co., Inc.)	\$ 173.15
STA 9/21/93 22 ea. bungee straps (Hechinger)	\$ 10.48
SP 9/22/93 4-copies Gamma Del article for newsletters (Blvd.)	\$ 0.20
TEL 9/23/93 tel. bill of 9/13/93 (889-0460)	\$ 1.23
STA 9/28/93 2-sheets blue acetate for "Blue Moon" evening (Towson Art Supp.)	\$ 3.57
SP 10/3/93 contrib. to Greg Becker for taxi to cash paycheck PAID BACK	\$ 5.00
SP 10/5/93 contrib. to Tony Scott for assistance at Harborplace	\$ 10.00
SP 10/7/93 5-copies "Nightwatchman" art. (JHU)	\$ 0.25
SP 10/10/93 contrib. to Tony Scott for Hpl assistance	\$ 5.00
SP 10/12/93 contrib. to Hpl derelict	\$ 0.25
STA 10/13/93 white out (staples)	\$ 3.57
STA 10/14/93 Softique tissue for cleaning lenses (Giant)	\$ 1.19
10/26/93 telephone bill of 10/13/93	\$ 2.12
TA 11/2/93 Sharpie markers, 5ea. (Staples)	\$ 3.87
BOOKS 11/2/93 sub. to The Double Star Observer (ck.#2518)	\$ 6.00

\$ 303.97

POST 11/3/93 stamp for postcard to Astronomy mag. \$ 0.19
 BOOK 11/2/93 sub. The Double Star Observer \$ 6.00
~~7/1~~ 11/22/93 parking ticket for \$20.00 in driveway Pratt St. Pavillion \$20.00
 STA 11/24/94 stamp pad ink (Staples) \$ 1.50
 TEL 11/25/93 bill of 11/13/93 (889-0460) \$ 1.86
 SP 11/28/93 contributions to street performers at Lunar Eclipse Party \$10.00
 STA 12/4/93 scotch tape (Staples) \$ 1.47
 BOOK 12/13/93 sub. ASTRONOMY for two (2) years \$50.00
 SP 12/15/93 3-copies hand-angular measurement instrs. for F. Roylance (JHU) \$00.15
 POST 12/15/93 mail angular meas. info to Roylance \$00.52
 SP 12/15/93 4-copies history layout of Balto. streets (JHU) \$00.20
 BOOK 11/16/93 to S&T for Obsv's. Hnbk. '94, and Sky Gazer's Almanac(ck#2522) \$19.95
 SP 12/20/93 7-copies Microscope Man ant. for B. Margulies (JHU) \$00.35
 STA 12/21/93 repair of observing sweater (Standard) \$ 8.00
 TEL 12/26/93 bill of 12/13/93 (889-0460) \$ 0.74
 SP 12/27/93 Md. Science Center membership, 1/31/94 (1-yr.) \$27.00
 STA 12/30/93 marker pen (Harvey's Hallmark) \$ 1.78

\$ 149.71

1993 Summary

	(1)	(2)	(3)	(4)	T
SALES	78.87	35.60	31.43	37.70	183.60
POSTAGE	21.34	14.47	14.42	00.71	50.94
Tel.	13.55	12.44	9.86	2.60	38.45
STATIONERY	12.53	39.19	51.69	12.75	116.16
AUTO #356.44 +	19.44	31.36	10.08	20.00	437.32*
PHOTO	6.18	7.16	7.34	—	20.68
EQUIP	—	—	173.15	—	173.15
Books	40.45	10.00	6.00	75.95	132.40
T	192.36	150.22	303.97	149.71	\$1,152.70

FRT-Hel. Mileage = 1,273 x .28 = \$356.44

* = 1,561.9 Miles

Rent 12 x \$55.00/Mo. \$ 660.00
 Utilities 12 x \$10.00/Mo. \$ 120.00
 Total = \$ 1932.70

1994

Not for Distribution

- 9 793) 1/22/94 (SAT) HPL (3:25-7:33PM) Above freezing temp., nice sky, + 10-day Moon convinced me to go early and do Moon in daytime. However, from my position on Promenade it remained behind Wolrd Trade Ctr. for 45-min. Rec. only \$2.00 during that time, while I searched unsuccessfully for ~~A~~ Aur. Once Moon in scope I had good traffic. Tyco & Jura Mts. good. SATURN(briefly while low over Hyatt; lookers thrilled by it, even tho small, fuzzy image!). M 45 (several times); M 42 (nebulosity barely vis.). Gave away lots of maps to families. \$61.00 + \$15.96 = \$76.96 (\$18.63/hr.)
- 9 794) 2/16/94 (WED) HPL (3:00-9:00PM) 40's temp. and clear. 6-day Moon (Theophilus-Cyrillus-Catharina); ALDEBARAN(at 4:40PM, after much searching and adjusting). Set-up on upper level. M 42, B Mon. ~~Accidentally~~ dropped Or. 12mm eyepiece and put it out of round! \$53.00 + \$17.38 = \$70.83 (\$11.81/hr.)
- 9 795) 2/17/94(THU) HPL (4:40-9:10PM) Mild but damp cold. 7-d. Moon (Hipparchus and Albategnius coming in to view; Aristotle & Eudoxus. A sensational moon!) Sirius (twice). Fixed 12.5mm Or. by reversing barrel ends! \$56.00 + \$13.54 = \$69.54 (\$15.45/)
- 9 796) 2/18/94(FRI) HPL (4:15-10:30PM) Mild, great sky! 8-d. Moon (Plato on terminator: Appenine Mts. in good relief.); M 42 (several times to good effect!). Visits by Meegan Hamilton, Elsie (Jane's Mom) & Rosie, Tony Scott (did balloon tricks for kids). Mod. to good traffic, except for bad lull bet. 6-7PM. \$105.00 + \$29.99 = \$134.99(\$21.60/)
- 9 797) 2/19/94(SAT) HPL (5:00-10:45PM) Again, mild w/great sky! Again, set-up on Promenade. Huge number of people strolling in Hpl. Had some of the heaviest traffic ever at telescope. 9-d. Moon(Copernicus right on terminator--terrific!); M 42 (several times); B Mon (twice). Got another parking tkt! \$181.00 + \$94.47 = \$275.47 (\$47.91/hr.) Visit by Dorris Gugel & husband; Terry Thometz & family (of Patterson Pk. Ave.).
- 9 798) 3/12/94(SAT) HPL (6:00-9:15PM) Very clear sky early, slightly chilly. SIRIUS(10min. before sunset); M 42 (good by about 30-min after sunset; by 8:30PM had gotten too low for satisfying looks); B Mon (twice). Visit by Tony Scott. \$46 + \$17.99=\$63.99(19.69 Parking ticket. Will go to court, but I will try parking in Stouffer lot.
- 9 799) 3/14/94(MON) HPL (5:48-8:15PM) Slightly hazy blue sky; mild. Parked in Stouffers. No big deal, but it takes extra time & energy to get to Amphitheater, plus costs \$3.00. SIRIUS (quickly); Nature Co. had a 10" Meade SCT set-up that had just been purchased, and they were trying to find something by daylight! 2-d. Moon (nice, while it lasted!). M 42 (so/so in haze). Had near perfect alignment so entertained myself w/doubles during lulls: B Mon, h3945, K Pup, 17 Hya, δ Cnc, γ Leo and ι Cnc. Visited by Tony Scott, who I gave ride home. Did a good Subaru thing w/a Japanese couple.\$17 + \$3.58 = \$20.58.
- 9 800) 3/19/94(SAT)HPL(4:15-10:08PM) 7-d. Moon(Ptolemaeus on terminator w/nice shadows on floor); Sirius(daytime); M 42; ι Cnc; M 45(did a good Sabaru thing, again). Visit by Tony Scott,early. Lots of enthusiastic lookers. ~~I~~ felt dizzy and faint in mid eve. Had someone get me a hotdog, which helped alot. \$136.00 + \$40.91 = \$176.91 (\$30.09/hr.)
- 12 801) 3/20/94(SUN) HPL(4:10-8:01PM) ST. PATRICK'S DAY PARADE(Unable to reach Stouffer garage and parked at a red meter on Guilford Ave., thinking it didn't need feeding on Sunday. Got \$20.00 ticket!) 8-d. Moon (good!); Sirius (by daylight); M 42. Sometimes heavy traffic w/lots of no-contribs. Tough woman Sgt. made me move off of promenade and into Amphitheater (probably didn't make big dif. in number of lookers; Tony Scott helped me move, for which I tipped him \$5.00). Lot's of roudy kids after dark. Witnessed a confrontation between woman Sgt. and kid who she maced, which convinced me to pack-up. \$87.00 + \$24.81 = \$111.81 (\$29.04/hr.)
- 10 802) 3/23/94(WED) Fpt.(needed a break from HPL, but I'm sorry I went because it was boring!) (6:38-9:46PM) 11-d. Moon(Aristarchus, Kepler, Copernicus, Tyco; intermittent hazy clouds M 42 (once); B Mon; ζ Cnc; 17 Hya; ι Cnc. \$17 + \$6.20 = \$23.20 (\$7.39/hr.)

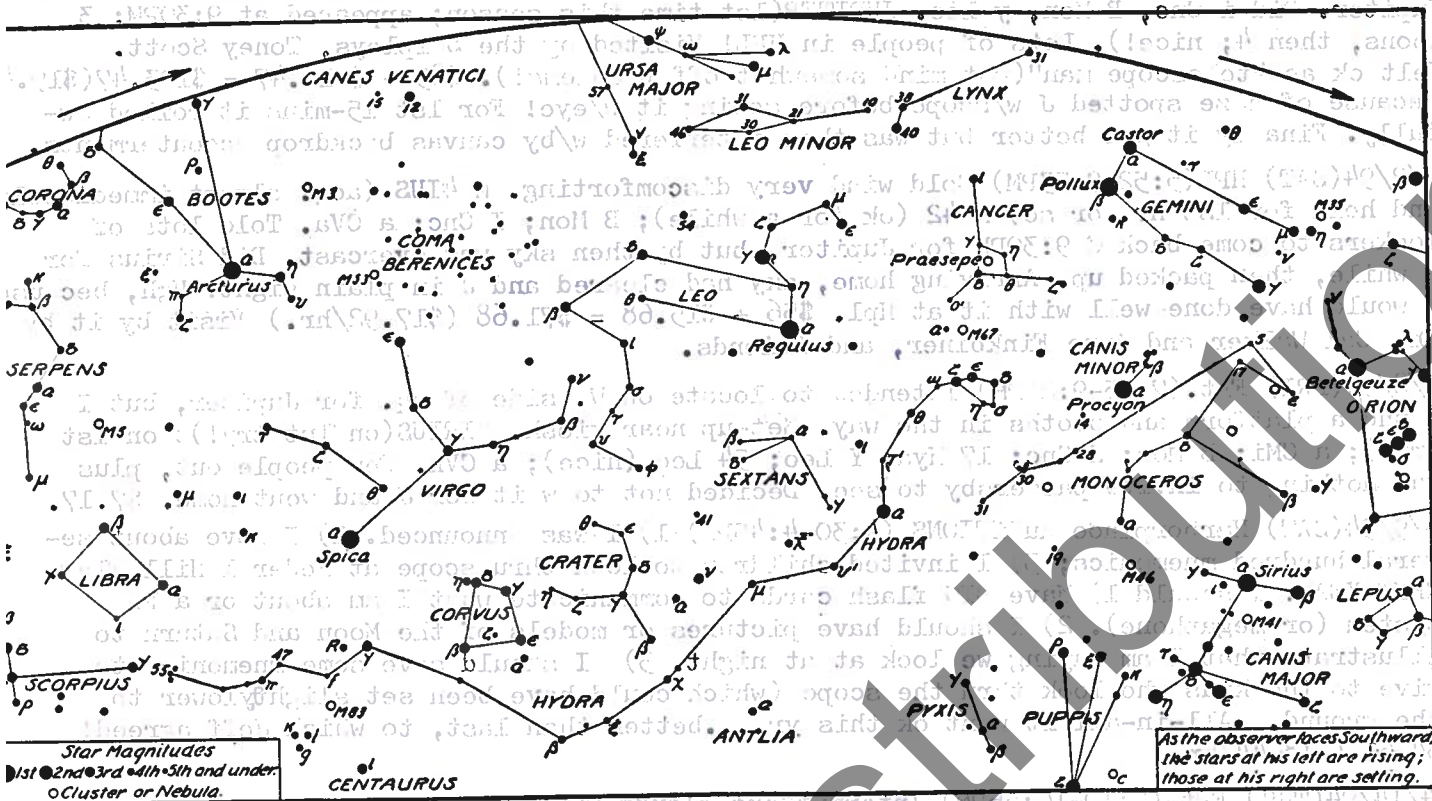
TOTAL THIS PAGE = \$1,024.28

TOTAL THIS YEAR = \$1,024.28

- 803) 4/1/94("Good" Friday)HPL.(5:55-11:15PM) Good sky; mild temp. Wasted +/-45 min. looking for Sirius(Tripod slipped off of handcart on way from parking garage; maybe got slightly out of line?) M 42; then had to really squeeze to keep things going waiting for Jupiter. Did i Cnc, B Mon, y Leo. JUPITER(1st time this season; appeared at 9:30PM; 3 moons, then 4; nice!). Lots of people in HPL! Visited by the Shipleys, Toney Scott. Felt ok as "telescope man"(got mind somewhat off problems!). $\$85 + \$18.47 = \$103.47$ (\$19.1/hr.) Because of haze spotted J w/scope before seeing it w/eye! For 1st 15-mins it roiled awfully. Finally it got better but was then interfered w/by canvas backdrop accouterments.
- 9 804) 4/2/94(SAT) HPL(5:52-9:53PM) Cold wind very discomforting. SIRIUS (acq. almost immediately and held for 1st hr. or so) M 42 (ok for a while); B Mon; I Cnc; a CVa. Told lots of lookers to come back @ 9:30PM for Jupiter, but by then sky was overcast. Did Sirius for a while, then packed up. Arriving home, sky had cleared and J in plain sight! Ugh, because I would have done well with it at Hpl. $\$56 + \$15.68 = \$71.68$ (\$17.92/hr.) Brief visit by Dr. Cal Walker and Anne Finkbiner, and friends.
- 9 805) 4/8/94(FRI) Fpt.(7:15-9:20PM) Intended to locate on W. side of sq. for Jupiter, but I found a platform and booths in the way. Set-up near kiosk. SIRIUS(before sunset on 1st try!); a CMI; B Mon; Z Cnc; 17 Hya; Y Leo; 54 Leo (nice); a CVn. Few people out, plus I had nothing to invite passersby to see. Decided not to wait for J and went home. $\$7.17$.
- 9 806) 4/9/94(SAT) HARBORPLACE AUDITIONS (4:30-4:45PM) 1) I was announced. 2) I gave about several hundred mnemonics; 3) I invited children to look thru scope at Federal Hill Flag. NEXT YEAR: I should 1) have BIG flash cards to communicate what I am about or a PA system (or megaphone). 2) I should have pictures or models of the Moon and Saturn to illustrate what I am saying we look at at night. 3) I should save some mnemonics to give to the kids who look thru the scope (which could have been set slightly lower to the ground. All-in-all it went ok this yr....better than last, to which Jeff agreed! $\$4.61$ (\$18.44/hr.)
- 9 807) 4/14/94(THU) Fpt.(7:10-10:55PM) Intermittent clouds which really cut into my obsv. time. 4-d. moon. Lost Moon behind hotel several hours before Jupiter scheduled to appear. Made do w/doubles: a CVn; 54 Leo; y Leo, i Cnc. JUPITER(10:06PM...just a blob at first; 3 moons then 4; image never real great). Did a CMA and a Cmi before ss. Finally driven by clouds to pack up. Ok number of people in Fpt. $\$26.00 + \$6.14 = \$32.14$ (\$8.57/hr.)
- 11 808) 4/16/94(SAT) Fpt.(7:20-01:05AM) Nice sky but continuous cold wind! 6-d. Moon (Theophilus-Cyrrillus-Catharina + Aristotle-Eudoxus); JUPITER(4-moons on one side--GREAT!). Slow traffic at first, then reasonably heavy traffic. Lots of enthusiasm. $\$124.00 + \$29.60 = \$153.60$ (\$26.71/hr.)
- 12 809) 4/17/94(SUN)Fpt.(8:54-10:20PM) Arrived late having spend day w/IB in Gaithersburg. Bleak scene in Fpt. 7-d. Moon(Aristotle/Eudoxos); JUPITER (2 & 1 moons). Light traffic. Early lookers got to enjoy view of a Gem star near moon. $\$11 + \$3.73 = \$14.73$ (\$10.30/hr.)
- 9 810) 4/20/94(WED)Fpt.(7:15-11:00PM) Great sky mostly, but shut down by clouds. PROCYON(before ss); 10-d. Moon(Tyco-Caparnicus-Jura Mts.; used 200X often on last two!); i Cnc; MIZAR(nice--had forgotten about!); y Leo; JUPITER(3 + 1...nice!) Slow to moderate traffic. Several enthusiastic lookers. $\$32.00 + \$5.87 = \$37.87$ (\$10.10/hr.)
- 9 811) 4/22/94(FRI)Fpt.(7:08-12:08AM) Great sky. 12-d. Moon(Aristarcus, Tyco); SIRIUS(on 1st try, before sunset); JUPITER(4 moons on one side--great!). $\$80 + \$14.40 = \$94.40$ (\$18.88/)
- 4 812) 4/23/94(SAT)JHU SPRING FAIR(1:15-4:56PM) Nice sky. VENUS(23° E. of Sun; 92% lighted; 11" dia.; 142×10^6 miles--a small, writhing blob. I felt bad about image but many lookers were impressed. Acquired on 3rd try. Visible in finder after locating w/main scope.) Tried for B Ori several times w/o success. Used handtruck to great advantage moving in/out. Set up next to Roland Spectragraph sculpture. $\$73 + \$8.88 = \$81.88$ (\$22.25/)
- 9 813) 4/23/94(SAT)Fpt.(7:37-12:15AM) Nice sky. 13-d. Moon(Tyco & SW limb; Pythagoras @ 200X great!); JUPITER(4, than 3, than 4 moons). Charlie Doble & fam. $\$66 + \$20.90 = \$86.90$ (\$18.77/hr.)

TOTAL THIS PAGE = \$688.45

TOTAL THIS YEAR = \$1,712.73



KEY-MAP TO THE SKY AS THE OBSERVER FACES SOUTH.

COMPLIMENTS OF HERMAN M. HEYN, BALTIMORE'S STREET CORNER ASTRONOMER
 ASTRO INFO TELEPHONE - 889-0460

he region to the left, or east, of LEO covered by the constellation COMA BERENICES,—"Berenice's Hair." The mythical story connected with these little stars is old in the Observer's Catalogue [120]. The scene on a clear night, when there is no moonlight to outshine their twinkling, is full of charm.

The regions of ORION and CANIS MAJOR, at the extreme west, will repay us quite as well so long as these groups are in the sky. Here see column I, pp. 40 and 41; but all the stars near this right-hand border are too near the horizon for satisfactory observation. The lines of GEMINI run much more directly downward than our map can indicate; as to ORION see p. 25. If we run a line, however, from CASTOR to POLLUX and continue it onward we shall find just to the left of this line the pretty cluster, in CANCER, called PRAESEPE, or the Bee-hive [52]. We may also find it by searching just before the "sickle" of LEO. It is practically on a line, from Beta (β) in LEO to Eta (η), projected onward an almost equal distance. Among the wide double stars that may be divided by a field-glass, steadily held, are Gamma (γ) [242] in LEPUS, just below ORION; Tau (τ) in LEO [228]; and Alpha (α) [246] in LIBRA.

II. WITH A TWO-INCH TELESCOPE, note first such star clusters as that marked M 41 [67] in CANIS MAJOR; that in GEMINI marked M 35 [188]; those marked merely with little circles in MONOCEROS near the stars 30 [275], and Delta (δ) [273], and Epsilon (ε) [274]; that marked M 53 [121] in COMA BERENICES. The easiest for a small instrument is, of course, PRAESEPE [52] in CANCER.

together in the field of a two-inch, and a good glass with a steady mounting is requisite for their division. CASTOR is also a superb object. Use for each of these stars a power of from 65 to 75. Gamma (γ) in VIRGO is an easier object, not requiring powers quite so high and therefore a more beautiful pair for the beginner.

Other double or multiple stars for the two-inch are Pi (π) [44] and Delta (δ) [43] in BOOTES; Alpha (α) [246] in LIBRA; Delta (δ) [136] in CORVUS; Tau (τ) [228] in LEO; Iota (ι) [53] and Zeta (ζ) [54] in CANCER; Delta (δ) [190], and Zeta (ζ) [193] in GEMINI; Beta (β) [271] and Epsilon (ε) [272] in MONOCEROS, and 14 [72] in CANIS MINOR. The double stars further to the westward are noted on p. 45. They are here too near the horizon for satisfactory observation.

III. WITH A THREE-INCH TELESCOPE, first examine the preceding objects. Each is not only appropriate for a three-inch but it may be viewed in such an instrument under far better conditions. With eye-pieces of the same power the field of view will be larger and it will be illuminated more clearly and brightly. It is also easier, first using an eye-piece of low power, to find the objects specified. To the star-clusters just mentioned add M 46 [26], almost on a line projected from SIRIUS through the Gamma (γ) of CANIS MAJOR; and M 67 [55], between CANCER and the head of HYDRA. With eye-piece of lowest power sweep through the region of VIRGO just west of Epsilon (ε). This is a region of many nebulae too faint in our small instruments for individual classification. Add to the double-stars Alpha (α) [416], Theta (θ) [418] and Tau (τ) [410] in VIRGO; Epsilon

- 9 814) 4/24/94(SUN) Fpt.(6:33-11:02PM) No JHU Fair for me today because of afternoon clouds. Nice sky tonight, tho! SIRIUS(+/-5-min. search); 14-d. Moon(real tough to find good view!); JUPITER(4 than 3 moons). A very mello night. Moderate but steady stream of lookers. Vist by Robin Bullock w/friend; Kelly & Caroline. Spica immediately above Moon made pretty pair in finder. \$67.00 + \$7.25 = \$74.25 (\$16.57/hr.)
- 9 815) 4/25/94(MON)Fpt.(7:59-10:40PM) Mild night, nice sky, but poor seeing. A Cmi; VENUS (spotted near Adm. Fell Inn but could not get in scope); y Leo(nice at 200X); FULL MOON & JUPITER (rose almost simultaneously at 9:16PM above Rec. Pier; lookers liked but I was unsatisfied w/both images). Visited by 3 different groups of European Space Agency astronomers here for conference. \$24.00 + \$9.08 = \$33.08 (\$12.30/hr.)
- 10 816) 4/26/94(TUE)Fpt.(8:00-10:20PM) Somewhat hazy sky, then clouds, rain. SIRIUS(1st try); y LEO; a CVn; JUPITER(2+2); 16-d. Moon(good craters while it lasted).\$18.95(\$8.13/) 1-CAT
- 9 817) 5/1/94(SUN)Fpt.(4:59-6:48PM) Nice sky but a bad N. wind. My cardboard dew cap blew across the street during set-up, and I almost lost it. Sort of a bleak scene for Sunday afternoon in Fpt. VENUS (acquired fairly quickly; did not recruit lookers, as it was such a nothing image!). Searched for a CMa and a CMI without success. Why? I have no idea why I couldn't find them. Between wind, slow traffic, and discouragement over not finding the above, I packed up and went home! Strong cold wind persisted through mid-eve, so I wouldn't wanted to have been in Fpt., anyway. \$4.54 (\$2.49/hr.)
- 9 818) 5/2/94(MON)Fpt.(7:30-10:18PM) Nice sky. SIRIUS(missed it on 1st try; got it later, after first getting Procyon); PROCYON(1st try); JUPITER (3 + 1). Very quiet in Fpt., but I had some enthusiastic lookers. \$26.91 (\$9.61/hr.)
- 9 819) 5/5/94(THUR)Fpt.(8:05-10:46PM) PROCYON(1st try); y LEO(nice @ 160X); JUPITER(nice, w/3 below + 1 above; good seeing, so strips in good view). \$28.18 (\$10.48/hr.)
- 9 820) 5/13/94(FRI)Fpt.(7:32-12:04AM...night before Preakness Fest--access to sq. partially blocked by booths, but I set-up in sq., anyway). PROCYON(quickly); JUPITER(1 + 3; good show, lookers impressed!); ALBIREO(!).(Sold 9 eclipse xeroxes!)\$75.45 (\$16.62/hr.) 3-day Moon(nice!). Visit by Joel Knispel, Barbara Blom(IB's realator).
- 9 821) 5/21/94(SAT)Fpt.(7:00-02:18AM)PREAKNESS NIGHT.11-d. Moon(Tyco, Aristarchus); JUPITER (4 moons, then Io in front, then 4 again!); ALBIREO; Xi Boo(close, ≠ mags.). Pretty busy night. Some drunks, but mostly ok lookers. \$164 + \$26.01 = \$190.01 (\$26.03/hr.)
- 9 822) 5/22/94(SUN)Fpt.(6:23-12:00MN) Incredible sky! VENUS(after failing on Sirius; small gibbous blob); 12-d. MOON(Tycho & adjacent rim, nice!); JUPITER(4, then 3, then 4; great--lookers really liked!). Moderate to sometimes heavy traffic. Visit by Matthew from men's group w/wife, Frosty. \$108.00 + \$12.26 = \$120.26 (\$21.40/hr.)
- 9 823) 5/23/94(MON)Fpt.(7:45-11:15PM) Hazy sky, slightly. VENUS(w/effort due to haze in finder); 13-d. MOON(nice craters on terminator between Tycho and Aristarchus!); JUPITER (3 & 1... nice!). Moderate but steady traffic. i Cen(easy). \$52 + \$5.91 = \$57.91 (\$16.55/hr.)
- 13 824) 5/27/94(FRI)Fpt.(7:00-12:34AM) Great sky! VENUS(2nd try; then sought Mercury, but w/o success. Why?);JUPITER(acquired 15-min. before sunset; difficult in finder; no moons @ 80X); 18-d. Moon(briefly). Visit by Christine(pedicab driver) \$104 + \$19.49 = \$123.49(22.1
- 12 825) 5/28/94(SAT)Fpt.(6:05-12:27AM) Another GREAT sky! VENUS(in finder 1st try); Searched mightily for Mercury w/o success. Why? Also could not find a CMI. JUPITER(acq. 7PM; very vague; post sunset was swell--1 + 3). \$129 + \$24.82 = \$153.82 (\$24.15/hr.)
- 9 826) 5/29/94(SUN)Fpt.(7:05-12:37AM) Good sky. VENUS(several tries needed); JUPITER(4, than 3); ALBIREO(several times);z CrB(uninteresting). Busy! \$96 + \$21.99 = \$117.99 (\$21.30/hr.)
- 9 827) 5/30/94(MON)Fpt.(7:15-10:35PM) MEMORIAL DAY(pretty quiet scene). VENUS(1st try); JUPITER (1st try!at 7:25PM!; 3 moons, then 4; nice!); ALBIREO(once). This was the 2nd night (last night the 1st) I was kept company by Sharon, a rose vendor. \$33.51 (\$10.06/hr.)

TOTAL THIS PAGE = \$1,058.35

TOTAL THIS YEAR = \$2,771.08

- 9 828) 5/31/94(TUE)Fpt.(7:25-10:50PM) Good sky! VENUS; JUPITER; ARCTURUS & SPICA(before sunset); ALBIREO; n Boo; B Sco; M5. Visit by Diane Carliner & friend. \$34.64 (\$10.16/hr.)
- 11 829) 6/1/94(WED)Fpt.(7:43-11:25PM) Nice sky. ARCTURUS(easy before sunset); JUPITER(3 + 1); ALBIREO; tried for M5 w/o luck, probably because tripod had gone off level. Slow evening w/some enthusiastic lookers. Visit Ray & Myrna; Zippy & Lew! \$47.62(\$12.87/)
- 11 830) 6/3/94(FRI)Fpt.(7:23-12:00MN) Hazy sky but great seeing! ARCTURUS(before ss); JUPITER (2 + 2...nice!; since moons close in used 133X for a while). Moderate traffic. \$70.00 + \$9.56 = \$79.56 (\$17.22/hr.)
- 9 831) 6/4/94(SAT)Fpt.(8:20-01:26AM) Supper at Jimmy's w/IB, who helped me set-up. Visit by Val Smith & husband. JUPITER(2+2; very nice; used 133X for 1/2 the evening); ALBIREO. Lots of talk about the 7/16 comet/Jupiter event! +/-1/2-hr. lost to clouds mid-evening; Visit by Ross. \$106.00 + \$126.08 (\$24.58/hr.)
- 10 832) 6/9/94(THU)7:25-12:08AM. Nice sky but bad seeing. VENUS(missed the first several tries; because of bad alignment); JUPITER(nice! 2+2+dim stars on right; Red Spot due at 9:23PM but was not viewable, probably due to seeing conditions); B Sco (very nice!); ALBIERO. Visit by Susan Rudy. Moderate but steady traffic. \$76.00 + \$10.06 = \$86.06 (\$18.27/hr.)
- 12 833) 6/13/94(MON)Fpt.(7:20-11:40PM) JUPITER(1st try before sunset; incredible alignment, to-night!); 4-d. Moon(nice!); Xi Lup(= pair, nice); M 13 (barely there); B Sco (real winner); ALBIREO. \$46.00 + \$4.93 = \$50.93 (\$11.74/hr.)
- 9 834) 6/14/94(TUE)Fpt.(7:30-11:28PM). Alignment off; took 25-mins. to find a Boo. 5-d. MOON (v. good!); JUPITER (1 + 2); B Sco; ALBIREO. \$43.00 + \$6.08 = \$49.08 (\$12.36/hr.)
- 11 835) 6/17/94(FRI)Fpt.(7:40-12:42AM) Hazy but ok sky. MARITIME FESTIVAL(lookers from Cutty Sark sloop). 8-d. MOON(Copernicus on terminator--the best!); JUPITER(1+3; v.nice!); B Sco; B Cyg. Visits Mike Potter, Billy & Sally Heller. \$92 + \$10.31 = \$102.31(\$20.45/)
- 9 836) 6/18/94(SAT)Fpt.(7:50-1:10AM) Hazy but ok sky. MARITIME FEST.(lots of people in area; restricted parking till 8PM, but I got a good spot on Thames St. at 7:30PM.) 9-d. MOON (Tycho, Copernicus, Jura Mts.--great!); JUPITER(4 on one side, then 3, then 4). Sometimes heavy traffic. \$162.00 + \$25.96 = \$186.96 (\$35.01/hr.). Visit by Mike Bardoff, early; David of Viva Hse. who reported that he and Kelly married that PM and were spending the night at Adm. Fell Inn. Supper at J&S with IB, who helped me set-up.
- 9 837) 6/20/94(MON)Fpt.(7:15-11:17PM) Slightly hazy sky; cool wind(uncomfortable). ARCTURUS (1st try before ss!); JUPITER(ibid!); 11-d, Moon(Aristarchus; Tycho region). Moderate but enthusiastic traffic. \$59.99 (\$14.89/hr.) BOLIDE(1)(?) Witnessed at 9:45PM a very bright(mag. +/-6) flaming, greenish white, small comet-like object moving from approx. overhead toward SSW, terminating near Spica. Several others with me saw it. We debated as to whether it was a firework or shooting star. There was no sound. It left no trail. It seemed (felt) quite close.
- 9 838) 6/22/94(WED)Fpt.(7:15-12:17AM) Great sky! BOLIDE(Rpt. on it from Va. woman; woman from Walther Blvd. who rpt'd. it lit up whole neighborhood!). JUPITER(1st try); ARCTURUS (after many tries, which confounded me since I found J so easily!); 13-d. MOON(Tycho region doable!). Good traffic. Visit by Mike P., w/whom I adjourned to Cat's Eye. \$72.00 + \$15.03 = \$87.03 (\$17.30/hr.)
- 11 839) 6/25/94(SAT)Fpt.(7:30-01:17AM) Ok sky. JUPITER(3+1+3 stars); ARCTURUS(at 7:35PM, along with J); ALBIREO; 16-d. MOON(awesome). Good traffic. Visits by IB, Scott Diegel (WAS), Harry Blum, Michael Laupheimer, Tommy Brager & wives. \$130 + \$28.90 = \$158.90(\$27.49/)
- 10 840) 6/28/94(TUE)Fpt.(7:43-10:05PM) Ok sky, then clouds. JUPITER(2+2...nice!); ARCTURUS(day-time); ALBIREO(when J in clouds). \$22.56 (\$9.56/hr.)
- 9 841) 7/1/94(FRI)Fpt.(7:43-12:55AM) Ok sky. JUPITER(located quickly; 1+3); ALBIREO(once). Visit by Maryanne(?) dancer w/capinetmaker guy who works near S&T and knows my contacts there; Christine & Frank. \$98.00 + \$11.92 = \$109.92 (\$21.14/hr.)

TOTAL THIS PAGE = \$1,201.64

TOTAL THIS YEAR = \$3,972.72

- 10) 842) 7/5/94 (TUE) Fpt. (7:27-11:03) Slightly hazy sky. Acquired Jupiter (1st try!); Arcturus and Vega before sunset! JUPITER(2+2); ALBIREO (several times). Visitors: Mike & Peggy Potter; Sue Hess & Sandy Dalsheimer. Slow night. \$46.28 (\$12.86/hr.)
- 11) 843) 7/8/94 (FRI) Fpt. (7:35-12:37AM) Sl. haze. JUPITER (3rd sweep; 2+2); ARCTURUS. Very slow traffic 1st 2 hours. Visits: Stephen Lampretti, Ross. Stayed with Jupiter right down to the "wire", then packed up. \$75.00 + \$11.52 = \$86.52 (\$17.17/hr.) Visit Randy Nassan. Spotted Saturn rising over Memorial Stadium as I arrived home.
- 10) 844) 7/10/94 (SUN) Fpt. (7:15-11:30PM) Ok sky. JUPITER then ARCTURUS with some effort. Why? Visits: Sally Ann, Anne Odette (dancers); Hammered dulcimer busker woman. Lots of questions about comet crash! \$57.00 + \$7.91 = \$64.91 (\$15.27/hr.) This was evening of 1-month split w/IB. I felt ok but was thinking about her alot, especially narcissistically--how can she not love such a great talent as me! Wally & Pricilla.
- 75) 845) 7/11/94 (MON) CHESAPEAKE BAY FDN., W. Md. COLLEGE (7:30-10:30PM). Much nicer sky than Fpt., but still significant light pollution. 3-d. MOON; VENUS (gibbous); JUPITER; B Sco; B Cyg; M 8; M 13 (found w/great difficulty); y Del. Gave talk while setting up scope. Felt good about it, tho I obsessed about IB on drive up. Aligned so-so with magnetic compass. Gave out star map and other literature. Auspices Linda Block. \$75.00. M 57. 2/6/94 CR. REC.
- 10) 846) 7/12/94 (TUE) Fpt. (7:21-11:00PM) Sl. hazy sky. JUPITER; ARCTURUS, ALBIREO, B SCO. Lots of conversation about pending comet/Jupiter event. \$49.00 + \$4.54 = \$53.54 (\$14.67/hr.)
- 12) 847) 7/16/94 (SAT) Fpt. (7:47-11:00PM) FIRST DAY OF COMET P/SHOEMAKER-LEVY 9 COLLISION WITH JUPITER! Because of heavy haze and adverse weather report, in mid-afternoon I decided to go to a 50's+ potluck, and I cooked a batch of shrimp casserole for it. Headed for party around 5:45PM but was drawn to Fpt. because sky looked semi-dooable. Sat around Fpt. for +/- 1 hr. trying to decide what to do. Decided again to go to party and drove out of Fpt. Driving on I-95 sky again looked dooable, so I returned to Fpt. and set up! Put potluck in Pretzel Twist refrig. 8-d. MOON (nice); JUPITER (4 on one side; no signs of comet impact). Intermittent haze, with generally diminished view. LOT'S of awareness of the collision! Lots of no-contribs! Haze took out J at about 10:40PM and Moon at 10:55PM. Packed up. Gave out alot of "I SURVIVED THE COLLISION OF COMET P/SHOEMAKER-LEVY 9 WITH JUPITER!" stickers!! \$72.00 + \$22.04 = \$94.04 (\$29.20/hr.)
- 10) 848) 7/19/94 (TUE) Fpt. (7:40-11:00PM) FOURTH DAY OF COMET/JUPITER EVENT. Very hazy, touch & go sky. JUPITER (Unfortunately, a subdued image due to haze. HOWEVER, OBSERVED TWO COMET IMPACT SIGHTS, WHICH LOOKED LIKE TWO BEADY BLACK EYES STARING AT YOU FROM JUST INSIDE JUPITER SOUTH POLE! Most of my lookers could see them. Because of haze, only had a reasonably good view of Jupiter for +/- 1 1/2 hrs.) 11-D. MOON. Long visit by Diane Morningstar, who I had invited to visit. \$43.00 (\$12.91/hr.)
- 13) 849) 7/20/94 (WED) Fpt. (7:15-11:30PM) FIFTH DAY COMET/JUPITER EVENT. OK sky! JUPITER (Observed two semi-vague, sooty spots early in evening. Lost them when seeing deteriorated as J began passing over buildings. 12-D. MOON, ALBIREO. Visit by Diane M. \$83.49 (\$19.64/) Photographed by Mark Adams for article in his paper, Harborcity Crescent.
- 10) 850) 7/24/94 (SUN) Fpt. (7:49-11:02PM) Hazy sky. ARCTURUS; JUPITER (Incredible...two fairly obvious comet impact spots straddling meridian +/- 8:45PM. Followed till about 10:30PM, when trailing spot rotated out of view. Simultaneously, haze obliterated Jupiter. 16-d. MOON (for about 15-mins.) Visit by Alan Hecht & friends. I was in a good head for telescoping, tho I thought about IB off and on. \$80.21 (\$24.99/hr.)
- 12) 851) 7/30/94 (SAT) Fpt. (7:02-10:05PM) Very hazy sky. Touch & go most of evening. Totally overcast by 9:50PM. Too Bad! Lots of interest that I could not satisfy!! Lost almost an hour unable to find Jupiter or Arcturus, prob. due to misalignment! JUPITER (a hint of comet impact spots, but not sure); ALBIREO (once, when J obliterated). \$39.29 (\$12.88/)

TOTAL THIS PAGE = \$ 666.28

TOTAL THIS YEAR = \$4,639.00

STREET CORNER TELESCOPE LOG

852)8/6/94(SAT)STELLAFANE(10:00-4:00PM) Great sky! Daytime stars! Drove up w/Mike Potter and stayed at Pal-o-mar Motel. I gave "How to find stars in the daytime" talk/slide show Fri. night. With some trepidation set-up scope near Roger Tuthill's space, using magnetic compass to polar align. Spent 5 mins. looking for Sirius, w/o success. I squinched tripod a little toward east, and tried again. Found Sirius almost immediately! Had great interest, many lookers saying they did not believe you could see stars in the daytime. Over the course of the day found Venus (Once found w/scope could see naked-eye. Had a great crowd around me looking at Venus naked-eye!), Jupiter and Arcturus. I discovered that images improved when I removed dew cap. Received a number of comments on my "Total Eclipse" T-shirt. Could have sold some if I had had them with me. Next yr.!

Given the combination of 1) the appearance of my S&T article and picture, which a good number of Stellafaners had seen, 2) my Fri. night talk, which went reasonably well, and 3) my "luck" in finding Sirius, etc., under great pressure, I would say that astronomically my Stellafane trip was a major success! Icing on the cake, so to speak, was George East's telling me he still is impressed with my multi-image eclipse photo (22 years later!).

13 853)8/8/94(MON)Fpt.(7:40-11:15PM) OK sky. JUPITER(a large comet impact spot on receding limb for first hour; 3 + 1 moons, all close in). ALBIREO; 61 CYG; Theta SER (wide, = mag.); SATURN(acquired +/-10:30PM, after moving across square with help of Frank & Christine; ring quite edge-on, but lookers impressed!). \$53 + \$11.00 = \$64.00(\$17.88/)

12 853)8/9/94(TUE)Fpt.(7:43-10:13) Do-able sky, but shut down by haze. JUPITER(a large, diffuse comet spot in view early; a smaller, more intense spot coming into view at shut-down time. ALBIREO. Light traffic. \$23.00 + \$5.21 = \$28.21 (\$11.28/hr.) Visit by Tony Scott, who said he's doing great at Hpl. but that Jeff is working against him. Helen Rowe.

10 854)8/12/94(FRI)Fpt.(8:15-10:20PM) Hazy sky; poor image of Jupiter. 5-d. MOON(do-able); JUPITER(in and out of haze; dusky band near S. pole from comet hits). Slow traffic, w/lots of no-pays. Some joker touched front lens, leaving two finger prints. After loosing Moon and J. could not see Saturn naked-eye and went home. \$22.39 (\$10.76/hr.)

10 855)8/15/94(TUE)Fpt.(7:32-11:10PM) Nice sky between high cloud areas. VEGA + ARCTURUS (in daylight). JUPITER (dusky comet spot on W. limb early evening). 9-d. MOON (Copernicus sunrise. Great! This is just about my favorite sight thru the telescope). Late in afternoon I discovered I was having a VERY irregular heartbeat. Why? Combination of Paxil and beer? Contemplated going to hospital rather than work. Setup hoping telescoping would settle it down. It didn't end it, but it did make me feel better. Now(7:15am, 8/16), after some sleep, it seems ok. Visit by Rachael of NPR; Andy of BFMS. SATURN (looked good!). \$28.81 (\$7.91/hr.)

12 856)8/19/94(FRI)Fpt.(8:48-01:57AM) Late start due to indecision w/weather. Patchy haze 1st 1/2 of evening, then good sky. JUPITER (Briefly, early on; trace of dusky comet effect; 4 moons + interloping star in moons' plane). SATURN(delayed start due to cloud; GREAT! Titan close beneath; lots of disbelievers!) Visit by Mike P. Used 160X mostly on Saturn. \$117.00 + \$9.53 = \$126.53(\$24.57/hr.) 13-d. MOON (ok craters on edge).

10 857)8/20/94(SAT)Fpt.(6:20-12:00MN) Pretty hazy, but w/adequate openings. ARCTURUS (acquired after 1/2-hr. of searching and squinching tripod. Very frustrating! Why? Tripod ended up fairly radical to the east, and Arcturus dec. was right on. Must remember that orientation! JUPITER(4 moons + star), 14-d MOON(few craters on limb; Tycho; lookers still impressed). SATURN(133X due to haze; lookers impressed). ALBIREO(once for especially enthusiastic woman looker). Closed up because of clouds and went to Cat's Eye. Of course, when I came out sky was good again. \$108 + \$9.62 = \$117.62 (\$20.74/hr.)

TOTAL THIS PAGE = \$ 387.56

TOTAL THIS YEAR = \$5,026.56

- 13 858)8/23/94(TUE)Fpt.(6:46-11:16PM) Great sky, then slightly hazy. VEGA; JUPITER(ok, but not good enough to say for sure if comet stuff vis.). ALBIREO. SATURN(pretty good). 17-d. MOON(impressive). \$50.00 + \$10.82 = \$60.82 (\$13.52/hr.)
- 10 859)8/24/94(WED)Fpt.(7:10-11:15PM) Ok+ sky. VEGA(w/effort due to alignment +/-1° too far east; adjusted after locating). JUPITER(nice, but no signs of comet stuff). ALBIREO. y DEL. SATURN(real good; 2 moons, eventually). M 13(easy hop from z Her).\$57.93 (\$14.20/)
- 10 860)8/27/94(SAT)Fpt.(8:50-11:23PM)Late start due to B. Sbvota's party; closed down by hazy. ALBIREO(before Saturn avail.). SATURN(mostly vague due to haze; stayed at 80X; lookers impressed, anyway; gave up as haze blotted out completely).\$34 + \$11.00 = \$45.00(\$17.65/)
- 10 861)8/29/94(MON)Fpt.(7:10-11:32PM) GREAT SKY! VENUS(assuming crescent shape). JUPITER(some trace of comet duskiness). ALBIREO. y DEL. SATURN(4 moons!). M 11(there, but barely!). \$50.00 + \$12.21 = \$62.21 (\$14.27/hr.)
- 10 862)8/30/94(TUE)Fpt.(7:10-11:55PM) INCREDIBLE SKY! VENUS. JUPITER(3 moons, then 2!). SATURN (5 moons at 160X!!). URANUS (bright green spot). Searched for Neptune w/o success. Need better sector chart. Quiet night in Fpt. Stayed late because couldn't tear myself away from Saturn! \$38.00 + \$9.28 = \$47.28 (\$9.95/hr.)
- 10 863)9/2/94(FRI)Fpt.(7:35-01:19AM) Hazy at start but then good sky. VENUS. JUPITER(3 + 1). SATURN (3 moons; got incredibly sharp near meridian! Lots of doubters.)\$107.39(\$18.74/)
- 8 864)9/4/94(SUN) Kurt & Cathy Milam's "Deck Buster" party.(9:30-11:45PM) Went w/Dorothy. Af-she left went home and brought back scope. Lots of enthusiastic lookers. Gave out stickers and some maps. SATURN (2 moons)ALBIREO. n Cas. y And. Aligned w/compass and Polaris. Acquired Saturn at 9:30PM. No hat.
- 10 865)9/5/94(MON--Labor Day)Fpt.(4:14-11:10PM). Set up after walk w/Lorraine Rovig, during which I met Bud, Bay Cafe mgr., who ordered 5-doz. T-shirts. Intermittent clouds during daytime, but good sky after dark. VENUS(1st try). VEGA. JUPITER(before & after sunset). SATURN (sharp, but only 2 moons). Great rush of traffic when first set-up. Lull around supper, then steady and light till 10:30PM. \$95 + \$15.29 = \$110.29 (\$15.89/hr.) Visit by David Deutch, a young man who said Al Negler is his uncle. URANUS(several times).
- 10 866)9/6/94(TUE)Fpt.(6:54-10:25PM). VENUS. JUPITER. SATURN(trouble finding because of haze. Never saw it with my naked-eye, but it was ok at 133x thru haze. Lookers impressed.) Slow night. Quit when haze thickened and dimmed Saturn. \$31 + \$6.27 = \$37.27 (\$10.59/)
- 10 867)9/7/94(WED)Fpt.(6:52-10:40PM). Great sky late afternoon, then disappointingly hazy at sunset. However, as Saturn rose sky improved. VENUS. JUPITER(inferior view). SATURN (hazy at start, then quite good; 2 moons) Visit by Mary Westfall w/woman friend. Very slow night in Fpt. Visit by Phil. \$28.00 + \$9.66 = \$37.66 (\$9.91/hr.)
- 10 868)9/8/94(THU)Fpt.(7:20-11:20PM). Some haze but ok sky. VENUS just east of 3-d. MOON. Great sight down Thames St.! SATURN(2 moons). URANUS. M 13(vague). Moderate to sometimes heavy traffic. Amateur from Atlanta who has 15" Dob. \$60 + \$12.34 = \$72.34(\$18.0
- 10 869)9/9/94(FRI)Fpt.(6:38-12:40AM). Went early psyched up for Venus/Moon/Jupiter array. Took some photos but, due to street lights, am not hopeful of decent results. 4-d. MOON, VENUS. JUPITER. SATURN (murky at start but gradually cleared up; 2 moons. Lots of doubters. \$97.00 + \$19.77 = \$116.77 (\$19.33/hr.)
- 10 870)9/10/94(SAT)Fpt.(5:57-12:07AM). Great sky, then intermittent big clouds! VENUS. 5-d. MOON(rugged). JUPITER(4 moons). SATURN(4 moons; lost +/-1 hr. of Saturn because of clouds. Was peak moment of evening, too!). y DEL. y AND(nice @ 133X!). Packed up when crowd got very young and uninterested in me. \$106.00 + \$14.14 = \$120.14 (\$19.47/hr.)
- 10 871)9/11/94(SUN)Fpt.(4:38-10:29PM). Irish Festival w/Dorothy. Blue sky. 6-d. MOON(hazy at start, then great!). VENUS. ARCTURUS(for astronomer from NASA who saw my art.). VEGA. JUPITER(1+3). SATURN(2 moons). URANUS. Even w/BFMS concert on square, I had slow traffic till near sunset, then pretty good. Surprise visit by Mary W.! \$65.00 + \$10.62 = \$75.62 (\$12.93/hr.) Visit by Matt of STS&I, who said he could do briefing for my Elderhtl. class.

TOTAL THIS PAGE = \$ 950.72

TOTAL THIS YEAR = \$5,977.28

- 9 872) 9/12/94(MON) HARBORPLACE! (6:05-10:15PM) Ok sky. Met by Tony Scott. 7-d. MOON(great!). VENUS(before sunset; scope aligned perfectly!). JUPITER(briefly). SATURN(cloud problems; 2 moons. Lots of no-pays(poor folks pay but rich folks don't!). \$76/17\$18.27/hr.)
- 10 873) 9/13/94(TUE) Fpt.(6:17-11:22PM...checked at Hpl. but singers on stage). Good to slightly hazy sky. 8-d. MOON(sunrise on Clavius, Tycho, Straight Wall, Erathones, Plato; featured Eratosthenes @ 200X...once brought tears to my eyes!). VENUS. JUPITER. SATURN(3 moons). y AND(once). Quiet night in Fpt. but some enthusiastic lookers.\$64.62 (\$12.70/hr.)
- 10 874) 9/14/94(WED,...YOM KIPPUR EVE.)Fpt.(7:50-10:15PM). Questionable sky but went anyway in anticipation of sunrise on Copernicus. MOON(several hrs. past sunrise on Copernicus, but crater impressive at any magnification!). SATURN(hazy but ok). Slow night in Fpt., but quit because of clouds. \$27.43 (\$11.33/hr.)
- 10 875) 9/18/94(SUN)Fpt.(3:20-10:17PM) Daytime...good sky between intermittent, high, thin clouds. Night...slightly hazy. VENUS(1st try). ARCTURUS. VEGA. JUPITER. 13-d. MOON(incredible sight rising to left of Rec. Pier!). SATURN(suffered from mediocre seeing; 3 moons). Not alot of traffic for"daytime stars". Pace picked up late afternoon and was intense early eve. Accompanied by Bolivian musicians early eve. \$95.00 + \$17.18 = \$112.18 (\$16.14/hr.) URANUS(for Helena...on 1st try!). Also, VENUS was visible by day near MTT.
- 12 876) 9/19/94(MON)HPL.(6:10-10:10PM) Great sky! Checked out Fpt., first, but it looked bleak compared to HPL. so returned there. VENUS.JUPITER(murky). VEGA(had great alignment after adjustment!). FULL MOON (tried to avoid but lookers asked for it). SATURN(2 moons). Visit by Cal Walker & Anne Finkbinder(showed them Jupiter, y Del, B Cyg, Saturn). Lots of scarey derilicts. Would have enjoyed Fpt. more! \$66.00 + \$10.47 = \$76.47 (\$19.12/hr.) Re VEGA...I rearranged setup so a guy in wheelchair could look at Vega. Visit by Sandra, whom I gave a ride home.
- 11 877) 9/20/94(TUE)Fpt.(6:05-8:30PM) Great sky all day, then clouds moved in from the south. VENUS(thru clouds, mostly). JUPITER(4 moons). ALBIREO. SATURN(briefly). Very slow night in Fpt., plus bad sky, so went home. \$10.89 (\$4.50/hr.). Visit by Lorna and Hiko, who have retired on a boat in Fla.
- 10 878) 9/30/94(FRI)Fpt.(6:27-12:40AM...night before Festival. Easy parking at meters.Mediocre sky. Couldn't find either V or J before sunset, probably due to bad calculations. VEGA. SATURN(intermittently dimmed by haze; 2 moons). Very young crowd. \$64.83 (\$10.42/hr.)
- 12 879) 10/03/94(MON)Fpt.(7:10-10:10) Ok sky w/intermittent high clouds. SATURN(3 moons). Mu Cepheus (Garnet star...kind of reddish, but not as I imagined it would be). Slow night. \$24.00 + \$5.26 = \$29.26 (\$9.75/hr.)
- 11 880) 10/6/94(THU)Fpt.(6:53-8:50PM) Ok sky. Slowest night in memory! SATURN(3 moons). URANUS(nice and bright!). 2816 Cep(nice tripple!). \$12.97 (\$6.65/hr.) Visit by Melissa, Meridith's daughter.
- 13 881) 10/7/94(FRI)Fpt.(6:45-12:30AM) Good sky. Very hvy. traffic mid eve! 3-d. Moon + Venus + Jupiter nicely arrayed in SW. 3-D. MOON. VENUS. JUPITER(noticeable duskiness at S. pole). SATURN(2-moons). y Del. \$105.00 + \$10.42 = \$115.42 (\$20.07/hr.)
- 10 882) 10/8/94(SAT)Fpt.(5:00-11:15PM) Ok sky, then closed down by permanent-looking clouds. Too bad! Accompanied by Bolivian musicians (last night, too) who draw a good crowd, which helps me, I'm sure. VENUS(thin crescent). 4-d. MOON(fine!). SATURN(2 moons, barely). Ok traffic for daytime Venus(hard to spot in finder, even). Heavy for Sat. Lots of doubters. Received a \$20.00 contrib.! \$157.00 + \$23.18 = \$180.18 (\$28.83/hr.)
- 10/10/94(MON....Columbus Day) Great sky but did not feel like setting up(cold). However, checked out Hpl. and founds goodly number of people, so would have been ok there.
- 10 883) 10/12/94(WED)Fpt.(5:30-11:02PM) Sl. hazy sky. Tall ships in Fpt., which may have helped business. 8-d. MOON(Plato!). VENUS(1st try tho low in sky w/haze!). SATURN(3-moons). B Cyg. y Del. Gold! \$46.00 + \$12.60 = \$58.60(\$10.60/hr.)

TOTAL THIS PAGE = \$ 829.02

TOTAL THIS YEAR = \$6,806.30

- 10 884)10/15/94(SAT)Fpt.(4:30-12:15AM) Nice sky, then sl. hazy. VENUS(1st try; 27° from Sun; but then couldn't find Vega for the life of me!). 11-d. MOON(Tyco, Gassendi). SATURN (3 moons). Slow for Venus and early eve., but good mideeve. \$194.00+\$17.08=\$211.08(\$27.24/)
- 10 885)10/16/94(SUN)Fpt.(2:45-6:15PM) Great sky. VENUS(1st try.). VEGA(twice). 12-d.MOON. Bad experience. Slow traffic(little interest, plus I didn't recruit like with Saturn). I got bored and tired. By 6PM I had had it and left, just a moon and Saturn were becoming available! \$20.95 (\$5.99/hr.)
- 10 886)10/18/94(TUE)FPT.(6:55-11:30PM) Ok sky but unsteady. SATURN(3 moons). 14-d. MOON(Tyco). URANUS(bright!). ALBIREO. y AND. M 45(!, in finder). Bleak scene in Fpt., but somehow managed to draw a goodly number of lookers. \$66.00 + \$7.84 = \$73.84 (\$16.12/hr.)
- 13 887)10/21/94(FRI)FPT.(6:47-01:12AM) Intermittent clouds. SATURN(2 moons). 17-d. MOON(great!). Slow early, then good traffic. Visit by Kay Donahoe and her friend, Mary.\$110.25 (\$17.17/)
- 80 10/17-21/94 Six(6) roundtrips to Elderhostel class at Cromwell Br. Holiday Inn
- 10 888)10/23/94(SUN)Fpt.(6:50-10:04PM) Sl. hazy sky w/some clouds. SATURN(1 moon). ALBIREO. Generally quiet, but with sudden bunches of lookers. \$51.00 + \$4.18 = \$55.18 (\$17.03/hr.)
- 11 889)10/24/94(MON)Fpt.(6:28-9:35PM) Ok sky but unsteady. Very light traffic in Fpt. SATURN (2 moons). ALBIREO(1X). \$22.00 + \$3.32 = \$25.32 (\$8.14/hr.) Visit by Andre Papendreau.
- 10 890)10/25/94(TUE)Fpt.(7:17-9:43PM) LEE'S CORNER(!). Had to park some distance from Square, so I went for Lee's. Prob. did a bit better than had I been in the Sq. SATURN(very sharp image; 2 moons). Slow traffic. \$26.00 + \$5.19 = \$31.19 (\$12.78/hr.) Two women lookers said they had bought Spike T-shirts from me.
- 112 10/28/94 One(1) roundtrip to Thurgood Marshall Elem. Sch., Montgomery Co., Md.
- 12 891)10/28/94(FRI)Fpt.(6:47-12:10AM) Great sky; cold. Very slow till +/-9PM, then intermittent traffic. SATURN(2 moons) ALBIREO. \$87.00 + \$4.90 = \$91.90 (\$17.05/hr.)
- 10 892)10/29/94(SAT)Fpt.(6:33-12:40AM) Lots of Halloweeners parading around. Fun to watch! Another great sky. SATURN (2 moons). Lots of doubters, plus lots of no-pays. \$121.00+\$21.42 = \$142.42 (\$23.27/hr.)
- 10 893)10/30/94(SUN)Fpt.(6:15-8:15PM STD. TIME) Quiet scene. Very few Halloweeners. Mild temp. Great sky till clouds came. Visit by Nancy from CODA. SATURN(1 moon). \$26.19 (\$13.10/hr.)
- 10 894)11/02/94(WED)HPL.(5:40-10:00PM) Great sky but poor seeing--probably local conditions. SATURN(3 moons). Slow traffic; lots of down time. \$51.00 + \$13.36 = \$64.36 (\$14.86/hr.)
- 10 895)11/04/94(FRI)FPT.(6:05-12:00MN) Great sky early, then haze + intermittent clouds. SATURN(3 moons, early). ALBIREO. M 42 (upon loosing Saturn).\$80.00+\$12.57=\$92.57(\$15.64/)
- 4 896)11/7/94(MON)ROTUNDA!(5:01-7:37PM) Great sky! 4-day MOON. SATURN(very sharp; 2 moons). Moderate traffic; lots of no-pays. \$47.00 + \$8.05 = \$55.05 (\$21.17/hr.)
- 12 897)11/8/94(TUE)FPT.(6:25-8:20PM) Ok sky early; closed down by clouds. SATURN(1-moon). 5-day MOON(nice!). Very quiet in Fpt. \$22.03 (\$11.53/hr.)
- 4 898)11/10/94(THU)ROTUNDA(4:57-8:23PM) Sl. hazy sky; sl. unsteadiness. 7-d. MOON(rugged!). SATURN(2-moons). Lots of no-contribs. Lots of comments on WTC lights per article in this morning's SUN. \$38.00 + \$14.68 = \$52.68 (\$15.36/hr.)
- 4 899)11/11/94(FRI)ROTUNDA(4:56-7:15PM) Good sky. 8-d. MOON(Eratosthenes). SATURN(2 moons). Lots of no-contribs. Fewer comments on spotlights situation. Gave out a few protest address slips. \$37.00 + \$9.81 = \$46.81 (\$20.18/hr.)
- 10 900)11/11/94(FRI)FPT.(7:53-11:23PM) Arriving late from Rotunda was afraid of having trouble parking. But, was enough sapce for me on Adm.'s Cup corner. Heavy traffic from the start! 8-d. MOON(Eratosthenes). SATURN(2-moons). Cold temp.! Quit as crowd got younger and cold overcame me. 4 x \$5.00 contribs. \$93.00 + \$8.12 = \$101.12 (\$28.89/hr.)

TOTAL THIS PAGE = \$1,222.94

TOTAL THIS YEAR = \$8,029.24

- 10 901) 11/14/94 (MON) Fpt. (6:03-9:35PM) START OF MY 8TH YEAR OF "STREET CORNER" TELESCOPING! Hazy sky. SATURN (1 moon, then none). 11-d. MOON (Tyco, Aristarchus). Visit and talk with Dandelion. More crazies around tonight than usual. \$29.47 (\$8.34/hr.)
- 12 902) 11/19/94 (SAT) Fpt. (5:06-12:06AM) GREAT SKY; MILD TEMP. SATURN (maybe 3 moons). 16-d. MOON (Mare Crisium, etc.). S. Balto. Blue Star (several times, as was set-up on E. corner of square). i Tri. (1X). M 42 (1X). M45 (1X). Visit by Mary Jane & Ken; Joe & Mary (dancers). Sometime heavy traffic. No comments on lights problem. Gave out lots of stickers and numerous maps. Visit Joe Leavett. \$150 + \$21.56 = \$171.56 (\$24.51/)
- 10 903) 11/25/94 (FRI) Fpt. (4:49-11:28PM) Disappointingly small crowd for day after Thanksgiving. Poorly-attended XMAS tree lighting event. Few families. Dull scene. Cold breeze, but ok sky. SATURN (2 moons). ALBIREO (once). M 42 (after loosing Saturn). Had beer with Kathi, a new Fpt. resident, after stint. \$92.00 + \$27.09 = \$119.09 (\$17.92/hr.)
- 10 904) 11/26/94 (SAT) Fpt. (4:49-10:53PM) Very good sky. SATURN (as sharp an image as I've ever seen from Fpt.; one moon. M 45 (1X). ALBIREO (1X...very low). M 42 (started upon loosing Saturn; gave up because of cold). Visits by Nancy Lloyd & Sharon; Walt Shook; Dr. Walker & Ann Finkbiner. \$115.00 + \$14.66 + \$129.66 (\$21.40/hr.)
- 10 905) 12/1/94 (THU) HPL. (4:45-9:23PM) VERY GOOD SKY. Bleak scene in Hpl. However, I had occasional rushes of people. SATURN (two moons; image deteriorated badly Light St. Pavillion. Gave it up due to poor image, even tho lookers were still impressed! M45 (1X); M42 (1X). Parked on the Pratt St. driveway w/sign in window; no ticket. \$88. + \$12.53 = \$100.53 (\$21.71/)
- 10 906) 12/2/94 (FRI) HPL. (4:43-10:30PM) GREAT SKY! Bleak scene early, a rush mid-eve. Some good families. Had worst case of roudy, jittery, Black, teen-age males ever, but I handled them pretty well, tho it was no fun! SATURN (3-moons; deteriorated over Light St., terrible over Hyatt, a little better toward end.) M 42 (GREAT! I can hype it real well!!). Gave out lots of stickers, maps. \$105.00 + \$27.44 = \$132.44 (\$22.91/hr.)
- 10 907) 12/8/94 (THU) HPL. (4:29-8:40PM) OK sky. My right to be in HPL challenged by Off. Dennis Rhinehart, Balto City Police Dept. Insisted I leave unless I could show him a permit. Said he would arrest me and confiscate equip. for 30-days if I did not leave. I tried to explain my right to be there, but w/o success. I summoned HPL. police. Lt. Green assured Rhinehart I was ok. However, Rhinehart warned that he's arrest me if I was there again w/o permit in my pocket. Will talk to Jeff Trueman about this, tmw.! SATURN (1-moon, except looker might have seen 3). 6-d. Moon (grt!). y Ari (1X). Very cold. light traffic. Visit by Michael Siepe. Set-up on top level. \$48.00 + \$5.16 = \$53.16 (\$12.69/hr.)
- 10 908) 12/20/94 (TUE) HPL. (4:40-8:59PM) Great sky. No problem with police. Setup in Ampitheater. SATURN (1 moon). M42 (once). Slow traffic. Long periods w/no activity. Tony Scott on scene doing balloons. Boring evening. \$38.00 + \$19.92 = \$57.92 (\$13.44/hr.)
- 10 909) 12/21/94 (WED) HPL. (4:07-8:59PM) Great sky. SATURN (acquired before sunset with effort, but it was vague till ss; 2-moons). Slow traffic till +/- 8PM. Visits by Jim (J. Pat's bartender) & family, and Shipleys (Jane, Rosie, Elsie). \$68.00 + \$17.10 = \$85.10 (\$17.51/hr.)
- 12 910) 12/26/94 (MON) HPL. (4:35-8:40PM) Mild temp.; great sky. Juggler Mike Rosman working when I arrived. Lots of people around. Tony Scott working. SATURN (good image till over Hyatt; 1 moon). Good traffic w/lots of families. However, +/- 8PM large gps. of semi-roundy inner city kids appeared. I closed down because I felt somewhat threatened. Lg. gps. looked thru scope. Drove to Fpt. to survey scene. Pretzel Twist closed, some strollers, lots of parking. Headed home. \$105.00 + \$21.88 = \$126.88 (\$31.02/hr.)
- 4 911) 12/27/94 (TUE) ROTUNDA (4:45-8:00PM) Was afraid to try HPL. after last night. Mild, good sky. SATURN (2 moons; trouble finding due to alignment unknowns). M42 (1X). Moderate but enthusiastic traffic. \$56.00 + \$12.85 = \$68.85 (\$21.18/hr.)
- 4 912) 12/28/94 (WED) ROTUNDA (4:48-7:53PM) Clouds early, then ok sky. Mild temp. SATURN (acq. 1st. try thru clouds!; 1-moon). Lots of no-contribs. Tripod aligned v. slightly E. of paving joint. Had some sympathetic comments on WTC lights. \$58.00 + \$5.45 = \$63.45 (\$20.60/hr.)
- 1 3) 12/30/94 (FRI) HPL. (4:49-9:45PM) Cold! / Clear. SATURN (followed to rooftop; lost @ 8:30pm). M42 (nice, for 1-hr.) Families/kids. ok scene. \$106.00 + \$20.96 = \$126.96 (\$25.55/hr.)

TOTAL THIS PAGE = \$1,264.07

TOTAL THIS YEAR = \$9,293.31

1425

1/9/94 SP 3-copies "Night Watchman" art. (JHU)	\$ 00.15
1/14/93 STA Pen (JHU)	\$ 00.93
1/15/94 SP 1-copy HST optics summary in Science (Pratt)	\$ 00.20
SP 1/17/94 3-copies of Van Gogh cartoon for VG's for talks (JHU)	\$ 00.15
TEL 1/21/94 bill of 1/13/94 (889-0460)	\$ 1.21
BOOK 1/26/94 Ottwell Astronomical Calendar '93 (Pratt)	\$ 00.27
STA 1/28/94 typewriter ribbon (Staples)	\$ 2.78
POST 1/25/94 10 stamps	\$ 2.90
POST 2/16/94 3-stamps	\$ 0.87
SP 2/16/94 5-copies planisphere art. for J. Tomney (JHU)	\$ 0.25
SP 2/20/94 10-copies mnemonic (Staples)	\$ 1.15
POST 2/25/94 10-stamps	\$ 2.90
SP 2/25/94 (Dir. of Finance) ck#2542	\$ 20.00
STA 2/25/94	
TEL 2/26/94 bill of 2/13/94 (889-0460)	\$ 4.89
POST 3/1/94 article to S&T	\$ 0.75
SP 3/4/94 3-copies precession materials for article (JHU)	\$ 0.20
POST 3/3/94 5-stamps	\$ 1.45
STA 3/9/94 typewriter ribbon (Staples)	\$ 2.78
SP 3/11/94 15-copies magazine arts. for precession article (JHU)	\$ 0.75
SP 3/11/94 9-copies (ibid)	\$ 0.45
STA 3-copies parking signs (Blvd. Hdw.)	\$ 0.15
SP 3/12/94 7-copies Planisphere art. for ASTRONOMY mag. (JHU)	\$ 0.35
POST 3/14/94 Planisphere art. to ASTRONOMY mag.	\$ 0.75
STA 3/14/94 Stationery (Stouffer)	\$ 3.00
POST 3/15/94 precession art. to five newsletters	\$ 1.45
POST 3/16/94 5-post cards	\$ 0.95
TEL 3/16/94 FAX outline of Precession art. to S&T (Blvd. Hdwe)	\$ 1.50
BOOKS 3/17/94 1-yr. sub to SPY GLASS NETWORK	\$ 5.00
SP 3/17/94 4-copies revised precession art. (JHU)	\$ 0.20
SP 3/19/94 (Stouffer)	\$ 3.00
SP 3/19/94 4-copies precession art. mat. (JHU)	\$ 0.20
POST 3/21/94 10-stamps	\$ 2.90
SP 3/21/94 2-copies of precession art for clubs (Blvd)	\$ 0.10
STA 3/24/94 2-pens (Harvey's Hallmark)	\$ 2.92
SP 3/25/94 4-copies letters to S&T (JHU)	\$ 0.20
SP 3/25/94 15-copies planisphere face with ecliptic pole (JHU)	\$ 0.75
SP 3/26/94 13-copies planisphere materials (JHU)	\$ 0.65
TEL 3/27/94 bill of 3/13/94	\$ 3.80
STA 3/30/94 box of staples (Dawns)	\$ 3.94
SP 3/30/94 4-copies Frost astronomy poems (JHU)	\$ 0.20
POST 3/31/94 10-stamps	\$ 2.90
SP 4/1/94 Stoufer	\$ 3.00
SP 4/2/94 Stoufer	\$ 3.00
STA 4/9/94 Stoufer	\$ 3.00
TEL 4/28/94 tel. bill of 4/13 (889-0460)	\$ 3.54
SP 4/28/94 Stoufer	\$ 3.00
SP 4/29/94 2-copies Harbroplace docs. (JHU)	\$ 0.10
POST 4/29/94 5-stamps	\$ 1.45
TEL 5/8/94 FAX 5/10/94 eclipse info to Eve Heyn at Gannett	\$ 2.00
SP 5/8/94 Sunday Sun w/eclipse article	\$ 1.58
PHOTO 5/9/94 film for eclipse photo (Service)	\$ 4.20
PHOTO 5/9/94 cable release (Goopers)	\$ 7.35
SP 5/13/94 2-copies eclipse poster materials (Hdw.)	\$ 0.10

	This page	P. 2	P. 3	TOTAL
SP =	\$ 29.73	12.08	28.42	\$ 70.23
Tel =	16.94	12.66	28.34	\$ 57.94
Books =	5.27	—	67.94	\$ 73.21
Sta =	29.50	70.90	7.57	\$ 107.97
Post =	19.27	23.90	15.42	\$ 58.59
Photo =	11.55	24.05	—	\$ 35.60
Legal =	—	—	25.46	\$ 25.46
Subs =	—	—	20.00	\$ 20.00
Sub Total =	\$ 112.26	\$ 143.59	\$ 193.15	\$ 449.00
Auto =	(1425 miles)			
Total =				

NOT FOR DISTRIBUTION

POST 5/9/94 stamps	\$ 2.90
SP 5/19/94 Time Magazine w/article on Jupiter/Comet collision	\$3.10
SP 5/23/94 3-copies Governor's Conf. contracts (JHU)	\$ 0.15
POST 5/23/94 10-stamps	\$ 2.90
STA 5/24/94 Scotch tape (Staples)	\$ 2.39
TEL 5/24/94 bill of 5/13/94 (889-0460)	\$ 1.28
POST 5/25/94 eclipse photo to BAS News Letter	\$ 0.75
SP 6/1/94 6-copies of DAYTIME STARS art. for S&T (JHU)	\$ 0.30
POST 6/1/94 mail article	\$ 0.23
POST 6/3/94 misc. SC mail	\$ 5.80
SP 6/14/94 12-stick-on notes (Staples)	\$ 3.87
SP 6/21/94 2-copies SUMMER '94 star map mats. (JHU)	\$ 0.10
POST 6/23/94 10-stamps	\$2.90
SP 6/27/94 4-copies Comet Shoemaker-Levy-9 letter to editor(JHU)	\$ 0.20
STA 6/27/94 pocket calculator (Staples)	\$ 9.44
STA 7/1/94 2-typewriter ribbons (staples)	\$ 5.56
SP 7/1/94 stick-on notes (Staples)	% 3.88
SP 7/2/94 10-copies "I survived..." art (JHU)	\$ 0.50
SP 7/2/94 8-copies (ibid)	\$ 0.40
POST 7/6/94 mail original handouts to TSU for Gov's. Conf.	\$ 0.75
STA 7/6/94 rubber stamp ("I survived crash of comet into Jupiter")(Modern Stamp)	\$20.06
SP 7/11/94 2"x 3" and 4"x6" post-it-notes (Staples)	\$ 8.06
SP 7/12/94 purchase by Sally Ann Shames of 6 ea. 4"x6" post-its w/comet	(\$20.00)
OST 7/20/94 mail tax reduction form Homeowners	\$ 0.52
TEL 7/21/94 bill of 7/13/94 (889-0460)	\$ 4.97
PHOTO 7/22/94 film for Stellafane talk slides (Dark Rm)	\$14.91
POST 7/27/94 mail mini-poster to Barbara Silber	\$ 2.90
STA 8/3/94 copy of tabloid w/Jupiter story (Super Fewsh)	\$ 1.04
STA 8/4/94 flashlight + batteries (Radio Shack)	\$ 5.71
STA 8/12/94 X-acto blades (Visual Systems)	\$ 1.80
TEL 8/21/94 bill of 8/13/94 (889-0460)	\$ 4.43
POST 8/23/94 letter to M. Populaire	\$ 0.95
SP 8/24/94 Stick On Notes (Staples)	\$ 3.87
POST 9/2/94 stamps + postage for letter to L. Kemble	\$ 3.30
PHOTO 9/9/94 color slide film (24ea.) (Dark Rm)	\$ 9.14
STA 9/11/94 Post-it Notes + white out (Staples)	\$ 6.78
STA 9/12/94 (Stouffer)	\$ 3.00
SP 9/18/94 contrib. to Greg(musician)	\$ 1.00
SP 9/19/94 contrib. to sweeper at Hpl for turning off light	\$ 1.00
STA 9/19/94 Stouffers	\$ 3.00
STA 9/20/94 pen for marking eclipse slides (Visual Systems)	\$ 1.38
TEL 9/22/94 bill of 9/13/94 (889-0460)	\$ 1.98
SP 9/25/94 Winter '94 star map prep. + Peter Eckles flier prep (JHU)	\$ 1.00
SP 9/30/94 6-copies SEE VENUS IN THE DAYTIME sign (JHU)	\$ 0.30
STA 10/3/94 3"x5" file cards (Rite Aid)	\$ 0.73
SP 10/7-8/94 contrib. to Bolivian musicians	\$2.00
STA 10/10/94 Scotch tape, typewriter ribbon, Post-it notes (Staples)	\$10.01
SP 10/10/94 8-copies astronomical bios/Elderhostel (JHU)	\$ 0.40
SP 10/11/94 6-copies Keplen & moon items for Elderhostel (JHU)	\$ 0.30
SP 10/13/94 7-copies Famous Astronomers list (Elderhostel) (JHU)	\$ 0.35
SP 10/19/94 6-copies Boorstein on Gallileo (Elderhostel) (JHU)	\$ 0.30
SP 10/18/94 contrib to Fpt. derelict	\$ 1.00

PAGE TOTAL = \$143.59

TEL 10/23/94	bill of 10/13/94	\$ 3.30
SP 10/30/94	contrib. to Fpt. derelict	\$ 1.00
LEGAL 11/2/94	5-copies arts. on lights for Chandler Robbins	\$ 0.25
POST 11/2/94	clippings mailed to Chandler Robbins re lights	\$ 0.52
SP 11/3/94	1,200 ea. Post-it Notes (Staples)	\$ 5.76
LEGAL 11/6/94	15-copies "Photonic 'Boom Box' Over Balto." flier (JHU)	\$ 0.75
POST 11/8/94	10-stamps	\$ 2.90
LEGAL 11/9/94	parking for Md. Port Commission meeting at World Trade Ctr.	\$ 6.00
LEGAL 11/10/94	10-copies SUN article of 11/10/94 (JHU)	\$ 0.50
LEGAL 11/10/94	6-copies C. Robbins letter (JHU)	\$ 0.30
LEGAL 11/13/94	21-copies SUN arts. of 10/21 et al for mailing(JHU)	\$ 1.05
LEGAL 11/14/94	15-copies SUN arts. on lights (JHU)	\$ 0.75
POST 11/14/94	stamps	\$ 5.16
SUBS 11/14/94	Intl. Dark-Skies Association membership (ck.#2969)	\$20.00
LEGAL 11/15/94	7-copies lights materials (JHU)	\$ 0.35
BOOKS 11/16/94	1-copy Project STAR test book (ck#2570)	\$24.95
LEGAL 11/17/94	12-copies NYT INDEX Materials (JHU)	\$00.60
LEGAL 11/18/94	15-copies light pollutions materials (JHU)	\$ 0.75
LEGAL 11/19/94	FAX (2 pages) to NY Audubon Soc. (Hopkins Store)	\$ 3.15
LEGAL 11/23/94	9-copies lights materials (JHU)	\$ 0.45
POST 11/23/94	lights materials to Mark Adams, Harbor Crescent	\$ 0.52
LEGAL 11/24/94	2-copies Torrey C. Brown letter (U.S. Post Office)	\$ 0.50
LEGAL 12/27/94	21-copies articles and other lights materials (JHU)	\$ 1.05
POST 12/28/94	mail lights mats. to J. Tomney	\$ 0.52
LEGAL 12/28/94	28-copies of lights materials (JHU)	\$ 1.40
POST 11/25/94	10-stamps	\$2.90
LEGAL 11/30/94	3-FAX to Roylance of City Council Res. (Hopkins Store)	\$3.15
TEL 12/1/94	bill of 11/13/94 (889-0460)	\$3.92
BOOKS 12/1/94	Kendall/Hunt Pub. Co. (ck.#2573) bal due.	\$ 5.33
SP 12/1/94	contrib. to HPL. sweeper for turning off spotlight	\$ 1.00
POSTAGE 12/2/94	10-stamps	\$ 2.90
SP 12/2/94	contrib. to Hpl. sweeper for turning off spotlights	\$ 2.00
SP 12/4/94	Post-it Notes (Staples)	\$ 5.66
STA 12/4/94	1-typewriter ribbon (Staples)	\$ 2.78
LEGAL 12/6/94	18-copies letter/mats. for Md. Port Comm. mtg. (JHU)	\$ 0.90
LEGAL 12/6/94	FAX of letter to Roylance(Hopkins Store)	\$ 1.58
LEGAL 12/6/94	parking for Md. Port Comm. mtg.	\$ 1.75
STA 12/9/94	3 ea. rubber fingers (Towson Stationers)	\$ 0.79
LEGAL 12/9/94	3-copies Benarick letter &encl. (Kinko)	\$ 0.23
BOOKS 12/9/94	lea. S2000 + lea. H1995 + shipping (Sky Pub.)	\$ 24.66
BOOKS 12/13/94	Science Friday tape on science-education (ck#2575)	\$12.95
SP 12/20/94	contrib. to Hpl. sweeper to turn off lights	\$ 1.00
STA 12/20/94	Stauffers	\$2.00
SP 12/21/94	Stauffers	\$ 9.00
SP 12/21/94	contrib. to Tony Scott for turning out lights	\$ 2.00
STA 12/26/94	Stauffers	\$ 2.00
TEL 12/28/94	bill of 12/13/94 (889-0460)	\$21.12
BOOKS 12/30/94	1-copy of ASP questionnaire (JHU)	\$00.05
SP 12/30/94	contrib. to Hpl. sweeper to turn off lights	\$ 1.00

PAGE TOTAL = \$ 193.15

1995

Not for Distribution

- 10 914)1/9/95(MON)4:45-6:10PM. Nice sky; mild temp. 8-d. MOON; SATURN(1 moon). Depressingly slow, + lots of no-contribs. Visit by Tony. \$7.00 + \$2.60 = \$9.60 (\$6.76/hr.)
- 12 915)2/18/95(SAT) Fpt. (7:25-11:44PM). Clear, unsteady sky. Accompanied by Merle Ann A., who really enjoyed the scene, the Pretzel Twist pretzels, Swiss chocolate from the General Store, and the Irish music at the Cat's Eye (where we did a waltz). First night out with new gloves from Eve--could manipulate scope ok with them on! M 42 (impressive, as always). MARS (N. polar cap seeable for me and M.A., but missed by +/-50% of general viewers. I felt good being out again; good level of enthusiasm. However, Mars is no fun for me. \$72.85 (\$16.90/hr.)
- 9 916)3/11/95(SAT)HPL.(5:10-10:50PM) Nice sky w/some turbulence; mild tem.(gloves not worn!). 11-d. MOON (Tycho, Copernicus, sunrise on Jura Mts....great! Used 160X often.) MARS (polar cap sometimes vis.). M42(once). Heavy traffic early, moderate mid-eve., slowing by 10pm. Lots of contributors, for a change. \$177.00 + \$42.21 = \$219.21 (\$38.66/hr.)
- 9 917)3/12/95(SUN)Fpt.(3:34-7:50PM) Great sky; mild temp. RIGEL!(3rd try. Not impressive. Went to Moon.) 12-d. MOON (Lookers impressed, even when relatively low in daytime. Tycho, Gassendi, Copern. Used 200X often after dark.) MARS(polar cap easy at 160x and 200x during twilight; still doable after dark). Visit Jane Keifer. Traffic slowed quite a bit with arrival of night. \$49.00 + \$9.48 = \$48.48 (\$11.38/hr.)
- 9 918)3/13/95(MON)HPL.(5:22-10:00PM) Another great sky; mild temp. 13-d. MOON (Tycho, Copern., Aristarchus...sometimes at 200X). MARS (tough, but most lookers saw polar cap). Mars 9° due N of Moon. Moon above WTC at set-up time. \$85.00 + \$16.00 = \$101.00 (\$21.81/hr.)
- 9 920)3/15/95(WED)HPL.(5:31-9:45PM) Good transparency but poor seeing. Mild temp. 15-d. MOON (marginal craters on limb; Tycho, aristarchus. Had to work hard to make it interesting. Rising azimuth of 85.2° had it rising just to right of WTC, OK!). SIRIUS (2nd try in daylight; just vis. in finder.) MARS (often, but poor seeing made difficult). Visit by Christine/Frank and F's. mother, grandmother, and more! \$88.00 + \$9.73 = \$97.73 (\$23.10/hr.)
- 9 919)3/16/95(THU)HPL.(6:17-10:20PM) Good but unsteady sky; very mild temp. MARS (polar cap difficult). FULL MOON(rose blood red; Tycho). Arrived to find John Walsh performing. He agreed to let me set-up with him. Very slow traffic at start, even the HPL. teeming with people. Visit by Merle Ann. Lots of young lookers, to whom I gave many mnemonics. Intermittent clouds toward end of stint. \$78.00 + \$9.93 = \$87.93 (\$21.87/hr.)
- 9 920)3/17/95 (FRI...ST. PATRICK'S DAY) FPT.(6:55-10:45PM) Ok sky but bad seeing. Very cold wind. Had Bret help me move scope so could be sheltered by kiosk. MARS (poor). 17-d. MOON (Acq. for a few mins. +/-7:30PM down Thames St., then lost it behind Rec. Pier for 50-mins. Mare Crisium + good craters.) Very slow start, then ok traffic, then very slow again as wind continued and crowd got younger. Lots of young people. Big lines outside the bars. NEXT YR. GO TO HPL. IF AT ALL POSSIBLE! \$40.00 + \$7.63 = \$47.63 (\$12.44/hr.) DID NOT USE GREEN FILTER BECAUSE--1) VIEW WAS NOT PLEASING AND 2) IT DID NOT SEEM NECESSARY. IMPORTANT: RISING FULL OR NEAR FULL MOONS ARE MUCH MORE ACCESSIBLE AT HPL. WHEN RISING ANGLE GREATER THAN +/-95°. IS GOOD IN FPT. +/-BETWEEN 85° AND 95°.
- 9 921)4/7/95(FRI)Fpt.(7:15-12:02AM) Good sky; chilly temp. w/ wind. Slow start, then moderate traffic. 7-d. MOON (lots of craters; sunrise on Ptolemaeus). MARS(once). Visit by Kelly & Caroline. Lots of no-contribs. I felt physically good, tho cold. \$52.00+\$8.81 = \$60.81(\$12.72/) Parking is becoming ever more difficult in Fpt. Notably young crowd.
- 9 922)4/8/95(SAT)HPL AUDITION(5:45-6:10PM) Cloudy sky. Used Viva House bull horn. Helpful! Gave out lots of mnemonics. Invited 12-yrs. olds & under to view flag on boat. Did Moon thru finder, briefly. No fun event, but Jeff & Gideon seemed friendly. \$6.88 (\$16.51/hr.)
- 9 923)4/15/95(SAT)Fpt.(7:23-12:43AM) Nice sky, then hazy. Chilly; wind early. SIRIUS(1st try). MARS(I could see shading & cap but not lookers). M42(1X). y LEO; i Cnc. Failed to find 17 Hya.15-d. MOON(rose at 8:16pm but did not acquire till 9:45PM, shortly after which it was eclipsed by street lamp for 10-mins. Hazy view, but lookers impressed. Visit by Hurley x. \$67.00 + \$12.82 = \$79.82 (\$14.95/hr.) Lots of people came along who had seen Saturn thru my scope last year and before, and they were anxious to see it again. It looks like I have a real problem/challenge ahead of me to make Saturn without rings interesting!

- 11 924) 5/3/95(WED)FPT.(8:07-10:31PM) Mild; ok sky. Was VERY depressed when I arrived in FPT. and hesitated to set-up. Finally did, and now feel somewhat better for doing so. 4-d. Moon (thin but nice). MARS(no features); y Leo(ok at 200X). Moderate to slow traffic. Visit by Ted Rouse. Closed up when lost Moon. \$27.10 (\$11.29/hr.)
- 9 925) 5/5/95(FRI)FPT.(9:15-11:45PM) Late start due to clouds. Mild. 6-d. MOON(Aristotle and Eudoxus on terminator!). Light traffic. Visit by Terry (Coda) and daughter Maliea. \$27.08 (\$10.83/hr.) After I had disassembled scope I spotted Jupiter over the Rec. Pier, however I decided not to set-up again. Next time out will anticipate it!
- 9 926) 5/6/95(SAT)FPT.(7:15-1:10AM) Great sky! 7-d. MOON(Hipparchus and Albategnius). JUPITER! (accessible at 11:12PM; acquired ½ later when lost Moon. 1 & 3. Fuzzy image for 1st hr.; starting to clear when I left). Visit by Stephen Lampredi, who suggested I gesture toward scope when hawking. It definitely seemed to help! \$98.00 + \$16.70 = \$114.70 (\$21.16/hr.)
- 9 927) 5/7/95(SUN)FPT.(6:43-10:25PM) Great sky! 8-d. MOON(started before sunset; Archimedes, Apennine Mts.; used 200X often). SIRIUS(1X daytime). MARS(no detail). \$58.21 (\$15.73/hr)
- 30 928) 5/8/95(MON) TOWSON ELDERHOSTEL TALK(7:30-9:00PM) Gave slide show; telescoped 9-d. MOON (Copernicus on terminator--sunrise on Copernicus--terrific!) Talk in Cockeyville.
- 10 929) 5/11/95(THU)FPT.(9:15-10:23PM) Late start due to clouds. Was challenged by cop who said his supervisor was questioning my "Contributions Welcomed \$1 Suggested" hat cards. Cop asked for card, which I gave him, to take to his super. Returned in 5-min., returned card, saying super will check with someone else. 12-d. MOON(Tycho, Schickard, Aristarchus). Intermittent clouds, then all clouds. Too bad, because interest was good! \$20.05(\$17.74/)
- 9 930) 5/12/95(FRI)FPT(8:07-10:07PM) Great trouble parking because of Preakness Fest. Finally, w/Bret's ok, parked behind Pretzel Twist. 13-d. MOON(Tycho, Aristarchus, Copernicus). Closed down by big cloud, mid-evening! \$25.00 + \$7.80 = \$32.80 (\$16.40/hr.) Visit by dancers Bill & Marcy and Frank & Drew.
- 6 931) 5/15/95(MON)PEABODY ELDERHOSTEL(10-12MN) Nice sky. 16-d. MOON(Mare Crisium, etc.;ok!). JUPITER(2 + 1). J & Moon very close. Set-up at E. end of plaza. Acq. both as they rose above houses. Started on Moon while still in tree. Lookers were my class + student passers-by. I wished I had of been in FPT!
- 9 932) 5/20/95(SAT)FPT.(9:56-2:05AM) Was very tired after having spend all day at Scout Expo. But weather was great and Jupiter was to have 4 moons on same side. Had much trouble parking. Took an hour. Finally got spot on Thames right across from Square. Lots of people. This is Preakness day. JUPITER(Visible by +/-9:45PM; set up and acquired 9:56PM; 3 moons, the hours later 4 on same side...VERY nice; was quite murky for 1st hr., however). a CVn(once). Lots of lookers who contributed. Good people! \$117.00 + \$13.00 = \$130.00 (\$31.33/hr.)
- 9 933) 5/22/95(MON)FPT.(9:16-12:27AM) Supper w/Mary Lou K. at Jimmy's, after which she visited w/me at scope for a while. Great sky. y LEO. y VIR(close @ 200X...2.5"!). JUPITER(As good as I've seen it!; 2+2; sharp moon shadow toward end; gave out lots of stickers. Long visit by Stephen L. Good Mon. night in FPT.! \$48.00 + \$5.50 = \$53.50 (\$16.82/hr.) Visits by Optical Soc. of America Conference participants.
- 12 934) 5/23/95(TUE)FPT.(9:00-11:11PM) Dissapointing sky. Hazy. 1669 CRV(nice, tight = double). Couldn't find N Boo, 24 Com; Why? JUPITER(acq. 9:35PM; 4 moons same side; hazy, unpretty view; did not do much recruiting!). Shut down due to haze. Vist by Christine & Frank who said they're engaged. We went to Duda's for beer. \$20.03 (\$9.19/hr.)
- 9 935) 6/4/95(SUN)FPT.(7:35-10:47PM) Surprisingly good traffic! 6-Day MOON (lots of craters!). JUPITER(3+1; nice, but big trouble w/clouds). Lost Moon over Adm. Fell Inn; shut down shortly thereafter because of clouds. \$60.00 + \$5.33 = \$65.33 (\$20.42/hr.!)
- 9 936) 6/8/95(THU)FPT.(8:08-9:38PM) Delayed setting up because of clouds. 10-Day MOON(nice.... Tycho, Copernicus, Jura Mts.) Continually interrupted by clouds. Finally gave up, but arriving home found sky perfectly clear! \$10.00 + \$5.71 = \$15.71 (\$10.47/hr.)

Page total = \$564.51

Year total = \$1,396.45

- 9 937) 6/13/95(TUE)FPT.(9:19-9:45PM) Nice night but many slow moving clouds. Spotted Jupiter and decided it was due for a hole in the clouds, and set up scope. But hole never happened. I never saw Jupiter again. Too bad, because all 4 moons were to be bunched on one side! \$00.05 (from someone who said he was always glad to see me, even if he couldn't look thru the scope)
- 9 938) 6/16/95(FRI)FPT.(8:12-01:17AM) Nice sky. JUPITER(Acq. @ 8:30pm with effort; 2 + 2; lots of bands @ 133X). 18-day MOON (after midnight). Moderate to heavy traffic. Visit by Mike Potter. Many, many policeman in area. \$94.00 + \$13.51 = \$107.51(\$21.16/)
Lots of inquiries about Jupiter's Red Spot!
- 9 939) 6/17/95(SAT)FPT.(7:48-2:20AM) Nice sky but bad seeing. ARCTURUS(acq. 7:53PM on 2nd try). JUPITER(turbulent, rippling image; moons sometimes twinkling; 2+2, eventually 1+2) Sometimes heavy traffic. Visit by Isabel with Francis. She looked happy but heavier then she's ever looked. She and Francis seemed pretty cozy. Her visit was disconcerting, but I guess I just have to live with and get over loosing her. They looked at Arcturus, sat on bench a while, came back for J., then left. They'd had supper at Berthas. Whew! \$139.00 + \$19.39 = \$158.39 (\$24.26/hr.)
- 9 940) 6/18/95(SUN)FPT.(5:26-11:57PM) Great sky. Failed to find Arcturus in 3 hrs. of looking! Why? Shifted tripod and refocused many, many times to no avail. When located after dark was 1/2° off. At home found polar wedge slightly off. Maybe that was cause of problem. Had a good number of potential lookers, too. Took break from search to look at freighter and fishermen across water. JUPITER(Great! 4 on right at start, transit by Europa, then 1+3; sometimes at 200X!). Visit by Mike Potter; Gerry Bain & son, Paul, who works at Lisa's; Christine (pedicabber). \$62.00 + \$5.43 = \$67.43 (\$10.34/hr.) J's Red Spot was on meridian early evening. Looked hard at 200X. Saw hollow, maybe, but no Spot, per se!
- 9 941) 6/19/95(MON)FPT.(8:45-12:25AM) Cloudy sky till sunset, then fine. Desert @ Jimmy's w/ Merle Ann, who helped me unload. JUPITER(4 moons on right; shut down when I began transit). Ann Boo(nice close =). Heavy traffic early, then moderate to quiet. \$58.52 (\$16.12/)
- 10 942) 6/20/95(TUE)FPT.(8:33-9:28PM). Cloudy/hazy at set-up, but I was hoping it would dissolve with sunset, but it didn't. JUPITER(vague, then nothing). ARCTURUS(same). Too, bad, because lots of interest. \$7.72 (\$8.42/hr.)
- 9 943) 7/2/95(SUN)FPT.(4:57-12:34AM) Finally, a usable sky! Lots of strollers; Andean music. ARCTURUS(took 36 mins. to find because tripod pointing too far W!; sometimes blocked by clouds). JUPITER(acq. 8:15PM; incredible sight w/4 moon on right all night!). Visit by Lynn DeWitt. Lots of mention of movie "Apollo 13"! \$119.00 + \$22.71 = \$141.71(\$18.60/)
Visit by Karen & Kerry from Canada who said CBC did program on SC telescopists. Lots of inquiries re Mir-Atlantis visibility, but I had no info. Did not see it. 4-day MOON (Atlas & Hercules). Visit by the Romano family. Tony reported that Vicki has pancreatic cancer. She looked good but prognosis is not good.
- 9 944) 7/3/95(MON)FPT.(5:27-12:10AM) Ok sky but erratic seeing. Could NOT find Arcturus in daytime, a really bad, enervating experience! Why, I do NOT know. Also could not find Jupiter before seeing it with eye. This is BAD news. I must fix this problem. Lost lots of contribs. because of problem. 5-d. MOON. JUPITER(1+3, then 3; Ok.) B Cyg; B Sco. Visit by Mark Steiner, who stayed whole evening. We adjourned to Whistling Oyster, which we closed up. \$75.00 + \$20.21 = \$95.21 (\$14.17/hr.)
- 12 945) 7/6/95(SAT)FPT.(5:10-12:45AM) Intermittently hazy sky. Finally shut down by clouds. ARCTURUS(Scope checked at home and rechecked at set-up, yet still took 10 mins. to find and then was reading 1° low, tho Hour reading right on mark.) 11-d. MOON (Tycho). JUPITER (2+2, background star). Enthusiastic lookers! \$138.00+\$21.58 = \$159.58(\$21.05/)
- 9 946) 7/9/95(SUN)FPT.(4:57-11:27PM) Good sky. ARCTURUS(Found quickly. This morning I check alignment of tripod "wedge" with N-pointing leg strut, discovering wedge was waymisaligned. Corrected situation and now feel fairly confident problem is corrected. Whew!) 12-d.MOON(Great!...Tycho; Aristarchus at 200X). JUPITER(Terrific! All four in right.) Slow for Arcturus; good traffic after sunset. Visit by Bea, Eric, and Susie; Merle Ann in late eve.(We spent night together.) \$77.00 + \$16.61 = \$93.61 (\$17.02/hr.)

Total this page = \$889.73

Total this year = \$2,286.18

- 9 947) 7/11/95(TUE)8:43-11:40PM. Hazy sky but good seeing. Hesitated to set-up because of way sky looked. Glad I did, because had good traffic. JUPITER(3 moons, then 4; nice, as always!). 14-d. MOON(just shy of full; rough bottom edge, plus Tycho; lookers impressed) Visitors included Cathi, Pacho, & Dave w/Sparkies from France; Stephen; Becky P.; Frank & Christine. I photographed rose sellers and other locals. \$56.00 + \$5.17 = \$61.17(\$20.74/)
- 9 948) 7/12/95(WED)8:17-9:15PM Ok at start, then clouds. Closed down, went home and unloaded and changed clothes, and went to dance. JUPITER(R. Spot due at 8:58PM, but no sign of it. \$3.00.
- 11 949) 7/14/95(FRI)7:59-12:28AM)Fpt. Hazy sky; fair seeing. JUPITER(one 1st try 1/2-hr, till ss; 3 moons, then 4). ALBERIO (once). 17-d. MOON (terminator slicing Mare Crisium; nice!) Very hot; humid. J. started looking poor over Adm's. Cup. Visit by a young man who said he bought a Meade refractor from Nature Co. after (next day!) seeing Saturn thru my scope. Loves his scope! \$97.00 + \$10.31 = \$107.31 (\$23.90/hr.)
- 9 950) 7/15/95(SAT)Fpt.(8:23-10:20PM) Ok sky, then hazy, then no sky. JUPITER(1 + 3). Visit by Gwenn; Lucy from Harford Co. A.S. Hot, humid night; took canteen + paper towel roll with me! \$40.00 + \$4.87 = \$44.87 (\$23.01/hr.)
- 10 951) 7/18/95(TUE)Fpt.(8:17-11:06PM) Nice sky but only fair seeing. JUPITER(Nice! 3 moons in triangle on L, 1 on R). Lot's of lookers mistaking J's stripes for Saturn's rings! Used 133X, mostly. Moderate, then slow traffic. \$41.00 + \$10.91 = \$51.91 (\$18.41/hr.)
- 9 952) 7/19/95(WED)Fpt.(8:40-11:44PM) Good sky. JUPITER(saw Red Spot Hollow on centerline at 10PM. Was scheduled for 9:44PM. Very pale. First real sighting in several years!) 39 Oph (ok; yellow & green). URANUS (nice!). Visits by Starr Belsky & Mike Potter. Closed up Bertha's with Starr. Nice 22-d. Moon rising as we left B's! \$43.26(\$14.14/)
- 10 953) 7/20/95(THU)Fpt.(8:20-11:25PM) Ok sky, then hazy. Quit because of haze. JUPITER(2+2). Visits by Ross; Louise Zamoski(+husband, Jack & son Tom & wife) \$43.98 (\$14.23/hr.)
- 10 954) 7/23/95(SUN)Fpt.(6:43-11:53PM) Nice sky but so-so seeing. ARCTURUS(1-min. search; "Star in the Daytime"). JUPITER(ok; 3, then 4, all on the right). Good traffic early and mid. evening; slow toward end. URANUS. Two (only) people mentioned hearing Heidi Hamil's aside about me Fri. evening on NPR. \$82.00 + \$16.23 = \$98.23 (\$19.03/hr.)
- 9 955) 7/26/95(WED)Fpt.(8:12-10:24PM) Ok sky, some haze; shut down by clouds. JUPITER(3 on L, Calisto above...Nice!). ALBIRO. Visit by Mike P. Several people mentioned NPR report. Adjourned to Bertha's, but no dancers appeared. \$24.00 + \$7.31 = \$31.31 (\$14.23/hr.)
- 9 956) 7/29/95(SAT)Fpt.(7:26-01:11AM) Ok sky but bad seeing! ARCTURUS(w/some effort; why?). JUPITER(4 on L; 3 on L; 3 on L + 1 on R; unsharp image due to seeing). ALBIRO. T Ser (nice = double!). SATURN! (real sad w/o ring!; Titan vis.). Visit John, Sally, Gail S. Sometimes heavy traffic! \$122.00 + \$12.67 = \$134.67 (\$23.42/hr.) Visit by Jack Eisenberg, who heard Heidi Hammel about me on NPR; wants to send her photo; visit Bruce Burdett (Nat. Instrument Co.) and his wife (also worked there).
- 10 957) 7/31/95(MON)Fpt.(7:49-12:25PM) Nice sky but poor seeing. 4d.MOON(terminator about 90 miles past Secchi-Taruntius....the Mt. Marilyn region. Couldn't use 200X Mt. M. search because still daylight.). JUPITER(2+2; vague spot @ 9:40PM). B Sco. T Ser. SATURN. URANUS(lots of trouble finding; why?). \$66.00 + \$5.86 = \$71.86(\$15.63/hr.) Visit by guy wearing Edmund Halley (himself) T-shirt.
- 9 958) 8/1/95(TUE)Fpt.(8:00-10:50PM) Noticeable haze at start grew till had to shut-down. 5d. MOON (Great!Theophilus-Cyrillus-Catharina. Secchi still somewhat viz.). JUPITER (2+2; Nice!). Visit by Woody & wife & Lindsay. W. heard NPR spot and E-mailed supportive msg.; he has co-authored a computer graphics handbook. \$45.31(\$15.99/)(71 stickers)
- 9 959) 8/2/95(WED)Fpt.(8:00-11:00PM) Ok sky, ok seeing, but increasing haze. 6-d. MOON(Fine! Aristotle & Eudoxus). JUPITER(4 on L; Great!). B Sco. T Ser. Visit by woman who looked at M last night thru Bloomberg scope and said my image much superior! Still getting comments on NPR mention...good comments! \$51.66 (\$17.22/hr.) (66 stickers)
- 10 960) 8/3/95(THU)Fpt.(8:00-12:37AM) Great sky! 7-d. MOON(not quite 1/4th; Aristillus & Autolycus; Archimedes on term; Wonderful!). JUPITER(ibid.!). B Sco. t Ser. y Del. Stayed late cause couldn't leave J and nice sky. \$64.00+\$8.65 = \$72.65(\$15.73/)(106 stick.)

Total this page = \$861.19

Total this year = \$3147.37

- 9 961) 8/4/95(FRI)FPT.(7:43-9:47PM) Good sky, but then storm arrived. Supper at Jimmy's w/Starr Belsky. Following packing-up, we went to J. Pats., talked, and did a waltz. Nice time! 8-d. MOON(Eratosthenes at 133X was a show stopper!). JUPITER (3, then 4 moons). Lots of traffic. Too bad about storm! \$42.00 + \$4.99 = \$46.99(\$22.81/) (72 stickers = 65.3_{tea}.)
- 10 962) 8/7/95(MON)FPT.(9:07-12:07am) Late start due to clouds. Spent time talking w/Robbin B. and Reina. Convicted to set-up when some people on nearby bench said they came from Reisterstown to see me! Ok sky with occasional haze. 11-d. MOON(Tycho, Aristarchus, Schickard; ok!). JUPITER(1 + 3; nice). t SER. \$49.48 (\$16.49/hr)
- 9 963) 8/10/95(THU)FPT.(7:55-8:17PM) Lots of clouds when I setup, but I was hopeful it would clear. When it seemed to be getting worse, I packed-up to go visit M.A. When I got there, sky was very nice! Oh well!! JUPITER(1st try; 1 moon). \$1.00 (\$2.78/)
- 9 964) 8/11/95(FRI)FPT.(7:38-01:03AM) Ok sky but bad seeing throughout night. Lots of lookers wanting to know how to see the meteor shower(Perseids). JUPITER(1+2, eventually 1+3; bands suffered from bad seeing, never really sharp. 15-d. MOON (doable craters on NE limb). SATURN(kind of a blob, with no sign of rings; 2 moons; lots of interest in the no rings situation; I gave out a good number of my new Saturn w/o rings handout). Sometimes heavy traffic. Late visit by Terry of Coda; we adjourned to "The Oyster", then walked to end of peier; nice time). \$111.00 + 13.58 = \$124.58 (\$22.99/hr.)
- 10 965) 8/12/95(SAT)FPT.(7:50-02:10am) Another ok sky with bad seeing, until near quitting time. Several hrs. of Andean music. Generally nice scene in Fpt. JUPITER(4 on left!). 16-d. MOON (Mare Crisium & Langrenus great!; terminator still +/-1-day from Mt. Marilyn; most lookers very impressed.) SATURN (started low & murky but improved w/time; definitely saw thin; luminescent ring after a while; lookers liked). ALBIREO. Visit by Terry and Malia and her friend, Cheryl; Jerry Baines. \$162.00 + \$17.26 = \$179.26 (\$28.27/hr.)
- 9 966) 8/13/95(SUN)FPT.(7:30-12:30AM) Great seeing(finally!). Strange phenomena in sky at sunset, noticed by lookers. Most of sky covered by a silvery-white sheen, except for a 10° wide avenue of blue running from NW to SE. Sheen seemed not to have affect view of Jupiter & moons thru scope. Very unusual! Before setting up attended BFMS concert, along with Jim P. and Bill T. Joined by Terry & Malia, who I treated to a sandwich supper at Jimmy's. T is genuinely interest in telescoping, and I'm starting to show her the ropes. JUPITER (1st try; great stripes; 2+2). ALBIREO(1X). 17-d. MOON (Term. on W wall of Mare Crisium, giving a bite-out-of-the-edge effect; saw a small, triangular-shpaed mountain SW of Secchi...Mt. Marilyn?). SATURN(Titan peached on tip of thin, diagonal ring; incredible!) Very quiet scene, tonight, in Fpt. Trouble making myself leave cause Moon & Sat. so great! Some very enthusaistic lookers. \$57.00 + \$13.57 = \$70.57 (\$14.11/hr.) Visit Dave E./Cathy.
- 12 967) 8/14/95(MON)FPT.(8:07-10:05PM) Hot, humid, hazy night; seeing ok, but transparency poor. JUPITER(2+2). Packed-up as J got more emeshed in haze & lights. I couldn't bring myself to recruit lookers for it. Adjourned to The Oyster w/Stephen. \$22.80 (\$11.62/hr.)
- 9 968) 8/15/95(TUE)FPT.(8:00-12:32AM). Moderately hazy; good seeing. JUPITER(3, then 4). B Sco. URANUS(little green dot!). SATURN(delayed a few mins. by floodlight on Rec. Pier for "Homocide" filming. I was worried they'd stay on all night! Ring easily seen by lookers.) 19-d. MOON(Wunderbar!) Visit by Terry's tenant, Carolyn, and her two young boys. Came on urging of Terry! \$40.00 + \$8.74 = \$48.74 (\$10.75/hr.)
- 10 969) 8/16/95(WED)FPT.(8:05-12:53AM) Expected to be off, tonight, thanks to Hurricane Felix, but sky was great. JUPITER(3, then 4 on L). SATURN(acq. 10:30PM; nice!). URANUS(on 1st. try for some Italian lookers). 20-d.MOON(acq. about 12:30am). Visit by Bonnie & husband (Viva Hse. servers); Mike P. Still lots of comments on NPR mention! \$66.62 (\$13.87/hr.) ~~Not from Mass. man that he saw very many Perseids. Escaped moonlight by getting into a shadow.~~
- 11 970) 8/18/95(FRI)FPT.(7:50-10:02PM) Somewhat hazy sky; shut down by clouds & wind. JUPITER(4 then 3). Ok traffic. \$35.00 + \$0.93 = \$35.93 (\$16.33/hr.) Visit by Mike P.

TOTAL THIS PAGE = \$645.97

TOTAL THIS YEAR = \$3,793.34

- 12 971) 8/19/95(SAT)FPT.(6:00-01:50AM) Great sky, but gusty breeze thru mid-evening. STAR IN THE DAYTIME (Vega, after several tries; not much passerby interest). JUPITER(Terrific! 3 on left, then four). URANUS(bright!). ALBIREO. Visit by Merle Ann; Mary Lou K. Sometimes heavy traffic. \$149.00 + \$19.92 = \$168.92 (\$21.57/hr.) SATURN!(3 moons; sometimes at 160X). Rpt. from Nature Co. worker that there've been many holdups at Hpl., lately. ALL THE LIGHTS AROUND THE SQUARE WENT OFF FOR A FEW MINS. DUE TO SOME G&E WORK NEARBY. COULD SEE ALL OF CYGNUS, BUT COULDN'T SEE MILKY WAY. WAS NICE WHILE IT LASTED! Visit by Mooge with a "special" woman friend. 23-d.MOON rising as I left Fpt. Visit by Lisa Kelly(Lydia's oldest) and husband!
- 9 972) 8/20/95(SUN)FPT.(6:34-11:40PM) Good sky. VEGA(1 1/4-hrs. before ss:moderate interest). JUPITER(Beg. at 7:30PM; 2+2). SATURN (2 moons). Attended BFMS concert late afternoon. Assisted in setup by Terry & Gary. Visit by Ted & Judy Chernak! \$76.00+\$10.98 = \$86.98 (\$17.05/hr.) Visit by Dorothy Minor(Stephen's girlfriend.) Two rpts., one from Assateague, one from Catonsville of heavy meteor activity last night!
- 13 973) 8/22/95(TUE)FPT.(7:48-11:05PM) Great sky all day, then 80% clouds tonight! JUPITER(4 on right; nice when it was seeable!). SATURN(murky to so-so; Titan at ring tip). Lost lots of lookers because of clouds. \$36.00 + \$8.39 = \$44.39 (\$13.52/hr.) Visit by Zippy & Lou. Z. showed me a big diamond ring on her left hand and asked, "What do you think of this?" Turns out Z. and L. are engaged! I congratulated them and said, "Make sure you invite me to your wedding."
- 9 974) 8/23/95(WED)FPT.(7:30-11:53PM) Great sky all day, no clouds tonight. But, seeing was no too spectacular. JUPITER. URANUS(Searched for often but found only once. Why??). SATURN(1 lookers impressed!). Jupiter over bldgs. & into lights pretty soon after acq. Visits by Mike P. and Starr B. RED STAR(While searching for U found reddist star I've ever seen. Dec. -21.5. Not listed in S&T 2/89 red star list.) \$70.00 + \$9.70 = \$79.70. (\$18.18/hr.) Visit Billy McComiskey's wife, Ann, and two boys. After stint adjourned to Bertha's where I met Mike, Starr, and other dancers.
- 9 975) 8/24/95(THU)FPT.(7:37-8:40PM) Great sky all day; clouds moved in toward sunset. Too bad, because good interest. JUPITER(ok thru haze; 2 moons easy, one hard). \$14.31 (\$13.67/)
- 9 976) 8/25/95(FRI)FPT.(7:45-01:37AM) Very good sky. JUPITER(2+2; nice). URANUS(found once; failed to find once...nice!) SATURN(3-moons...Titan, Rhea, Dione). Supper with M.A. at J's. Visit by Enith, Debbie Pickett's sister + daughter Jenifer; Terry, Malia & Gary. Lots of no contribs. \$121.00 + \$6.62 = \$127.62 (\$21.75/hr.)
- 9 977) 8/26/95(SAT)FPT.(7:45-12:37AM) Hazy sky. Shut down by haze. One of my most taxing stints ever, thanks to haze, Jupiter in the lights, loud music from the Andeans, Emergency vehicles parked nearby, heavy traffic. Whew! JUPITER (touch & go with haze & lights). SATURN (Touch & go with haze but occasionally good. Lookers impressed.) Visits: Gail (coda), Becky Pepkowitz, \$106.00 + \$20.08 = \$126.08 (\$25.91/hr.)
- 10 978) 8/29/95(TUE)FPT.(7:24-10:55PM) Ok sky at ss, but then haze moved in. 3-Day MOON(briefly; term. just past Secchi. Nice!). JUPITER(1+3, but touch & go w/haze & lights.) ALBIREO(1X in lieu of J). SATURN(acq.9:40pm; ok, but diminished by haze. Very quiet in Fpt. Pebbles tossed my way by two small boys who looed thur scope but resented my shooing them away, afterwards. Some enthusiastic lookers. Sat night with new "rings edge-on" Saturn stickers. \$30.43 (\$8.65/hr). Purchased astronomy book from derelict
- 12 979) 8/31/95(THU) FPT.(7:25-9:45PM) Scheduled for HPl., tonight, but chose not to go due to holdup spree there. Hazy sky, which finally shut me down. 5-Day MOON(good!). JUPITER(3 + maybe 1 in front). A good number of people out for a Thu night. \$40.95/\$17.5
- 13 980) 9/2/95(SAT)FPT.(6:30-01:37AM)....after driving Merle Ann to Dulles Airpt. Great sky, except for intermittent clouds for 1st hr. of Saturn. 7-Day MOON (Excellent!). JUPITER(3+ 1; nice). ALBIREO(1x while Saturn in clouds). SATURN(eventually 3 moons; very sharp @ 133X; lookers impressed!). Very busy, but time sometimes seemed to go very slow! \$186.00 + \$16.38 = \$202.38 (\$28.42/hr.)

TOTAL THIS PAGE = \$ 921.76

TOTAL THIS YEAR = \$4,715.10

Calendar Notes

PERSEID METEORS. Light from the waning gibbous Moon will play havoc with the annual Perseid meteor shower, which is due to peak before dawn on the morning of August 12th or 13th. Nevertheless the Perseids have been so unusually active in recent years that they will be well worth monitoring anyway.

Each of the last several years has seen a brief, intense new peak in the shower lasting just a couple of hours. This new peak has arrived between 0 and 4 hours after Earth crosses the orbit plane of Periodic Comet Swift-Tuttle, the Perseids' source. (The 130-year comet itself swung through our part of space in early 1993.)

If the pattern continues this year, the peak should arrive within two or three hours of 16^h Universal Time August 12th. This timing favors predawn observers in Hawaii, Alaska, and possibly the West Coast. The past performance of a couple hundred meteors observed per hour should be greatly reduced this year by moonlight if by nothing else.

About 12 hours later comes the Perseids' lesser, longer-lasting, "traditional" peak, producing up to 100 meteors per hour when conditions are ideal. Europe will be favored for this peak on the morning of the 13th, though North America and Asia should do nearly as well. Some Perseids can be seen for many days before and after.

The methods for making useful meteor observations are described in the August 1994 issue, page 72, and August 1993, page 49. More about the Perseid outbursts is in January 1995, page 108; January 1994, page 34; and August 1993, page 43.

Jupiter's Red Spot. Here are the Universal dates and times when the center of the Great Red Spot should transit (cross) Jupiter's central meridian.

July 1, 1:04, 10:59, 20:55; 2, 6:51, 16:46; 3, 2:42, 12:38, 22:33; 4, 8:29, 18:25; 5, 4:20, 14:16; 6, 0:12, 10:07, 20:03; 7, 5:58, 15:54; 8, 1:50, 11:45, 21:41; 9, 7:37, 17:32; 10, 3:28, 13:24, 23:19; 11, 9:15, 19:11; 12, 5:06, 15:02; 13, 0:58, 10:53, 20:49; 14, 6:45, 16:40; 15, 2:36, 12:32, 22:28; 16, 8:23, 18:19; 17, 4:15, 14:10; 18, 0:06, 10:02, 19:57; 19, 5:53, 15:49; 20, 1:44, 11:40, 21:36; 21, 7:31, 17:27; 22, 3:23, 13:19, 23:14; 23, 9:10, 19:06; 24, 5:01, 14:57; 25, 0:53, 10:48, 20:44; 26, 6:40, 16:36; 27, 2:31, 12:27, 22:23; 28, 8:18, 18:14; 29, 4:10, 14:06; 30, 0:01, 9:57, 19:53; 31, 5:48, 15:44.

August 1, 1:40, 11:36, 21:31; 2, 7:27, 17:23; 3, 3:18, 13:14, 23:10; 4, 9:06, 19:01; 5, 4:57, 14:53; 6, 0:49, 10:44, 20:40; 7, 6:36, 16:31; 8, 2:27, 12:23, 22:19; 9, 8:14, 18:10; 10, 4:06, 14:02, 23:57; 11, 9:53, 19:49; 12, 5:45, 15:40; 13, 1:36, 11:32, 21:28; 14, 7:23, 17:19; 15, 3:15, 13:11, 23:06; 16, 9:02, 18:58; 17, 4:54, 14:49; 18, 0:45, 10:41, 20:37; 19, 6:33, 16:28; 20, 2:24, 12:20, 22:16; 21, 8:11, 18:07; 22, 4:03, 13:59, 23:54; 23, 9:50, 19:46; 24, 5:42, 15:37; 25, 1:33, 11:29, 21:25; 26, 7:21, 17:16; 27, 3:12, 13:08, 23:04; 28, 9:00, 18:55; 29, 4:51, 14:47; 30, 0:43, 10:38, 20:34; 31, 6:30, 16:26.

These predictions assume the Red Spot is at Jovian System II longitude 42°. If it has moved elsewhere, it will transit 1½ minutes late for every 1° of longitude greater than 42°, or 1½ minutes early for every 1° less than 42°.

Variable-star maxima. July 8, Chi (χ) Cygni, 194632, 5.2 (see chart, October 1991, page 374); 9, R Camelopardalis, 142584, 8.3; 10, S Carinae, 100661, 5.7; 10, RT-Cygni, 194048, 7.3; 11, T Herculis, 180531, 8.0; 21, X Centauri, 114441, 8.0; 21, V Canum Venaticorum, 131546, 6.8; 27, R Leporis, 045514, 6.8; 31, T Centauri, 133633, 5.5.

August 3, V Bootis, 142539, 7.0; 6, T Sagittarii, 191017, 8.0; 10, R Virginis, 123307, 6.9; 11, T Normae, 153654, 7.4; 11, R Draconis, 163266, 7.6 (see chart, July 1993, page 70); 17, R Pegasi, 230110, 7.8; 20, R Horologii, 025050, 6.0; 29, R Leonis Minoris, 093934, 7.1; 30, R Aurigae, 050953, 7.7; 30, S Herculis, 164715, 7.6.

The data above are, in order: the day of the month near which the star should be at maximum brightness; the star's name; its designation number, which gives rough right ascension (first four digits) and declination (boldface if southern); and the star's typical visual magnitude at peak brightness. The actual maximum may be brighter or fainter and many days early or late. All predictions are by Janet Mattei using recent data of the

American Association of Variable Star Observers, 25 Birch St., Cambridge, MA 021

Minima of Algol. July 3, 20:33; 6, 17:21; 14:10; 12, 10:59; 15, 7:47; 18, 4:36; 21, 1:25; 25, 22:13; 26, 19:02; 29, 15:50.

August 1, 12:39; 4, 9:27; 7, 6:16; 10, 3:05; 12, 23:53; 15, 20:42; 18, 17:30; 21, 14:19; 24, 11:07; 27, 7:56; 30, 4:45.

These are the Universal dates and times when the eclipsing variable star Algol (β Persei) should be at its dimmest, magnitude 3.4 instead of its usual 2.1.

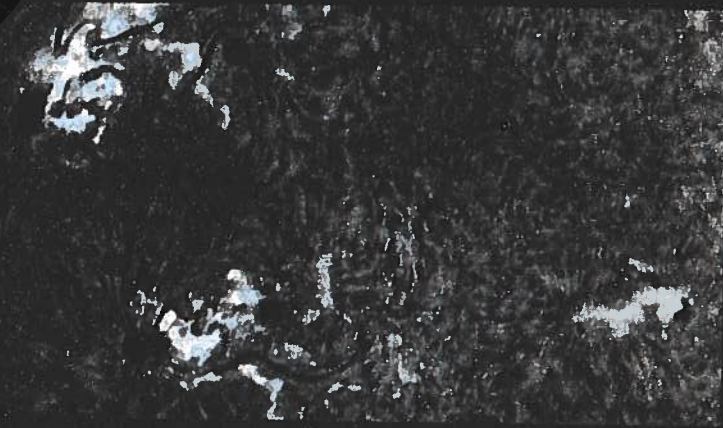
Universal Time (UT). To convert a UT time and date to a standard time and date in North America, subtract the following hours: to get Eastern Standard Time, 5; CST, 6; MST, 7; PST, 8; Alaska, 9; or Hawaii, 10. To obtain daylight saving time, subtract one hour less than these values. If you get a negative number of hours, add 24; in this case the result is on the date before the UT date given.

For example, 6:45 UT August 9th is 1:45 a.m. on the 9th EST, and 10:45 p.m. on the 8th PST.

You may find it easier just to remember when 0:00 UT happens in your time zone. This is on the previous date at 7 p.m. EST, 6 p.m. CST, 5 p.m. MST, or 4 p.m. PST. When daylight saving time is in effect: 8 p.m. EDT, 7 p.m. CDT, 6 p.m. MDT, or 5 p.m. PDT.

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- 4 981) 9/3/95(SUN) KURT & CATHY MILAM'S "DECK BUSTER (8:32-11:20PM) Great sky! JUPITER (briefly; 2+1; somewhat murky). 8-d. MOON(Copernicus sunrise...terrific! Lookers awed by view at 135X and 200X.). SATURN(moved scope with help of a woman to acq.; 3 moons; wowed lookers!). yDEL & RT CAP (had good enough polar alignment at second loc. to find "deep sky" objs.!). Several STSci astronomers among lookers. Accompanied to event by Dorothy H. Cut thumb when collapsing tripod leg. Immediately upon arrival, was asked by several kids who were there last yr. if I had my telescope! No Hat.
- 9 982) 9/4/95(LABOR.DAY) FPT.(6:52-11:58PM) Very good sky. 9-d.MOON(Tycho, then Jura Mts. on terminator. Awesome!). JUPITER(2+2; nice!). Some enthusiastic lookers, including two men who had seen Moon thru binocs, noticed a "thin thread" on edge and wanted to know what they'd seen(Jura Mts.). Young crowd toward end. \$61.00 + \$9.57 = \$70.57 (\$13.84/hr.) SATURN(good!).
- 9 983) 9/5/95(TUE)FPT.(7:24-12:10AM) Sl. hazy sky, ok seeing. Evening of Cal Ripken's tying of Lou Gehrig's consec. games record. I hoped the excitement would spill over into FPT., but it didn't. Very quiet scene. 10-d. MOON(Not nearly as sensational as last two nights!). JUPITER(1+3; ok). URANUS(1st try, for a change!). SATURN(Lots of people said they heard on NPR this morning that something special was happening with the rings at 9PM this eve. None could tell me exactly what they heard. Acq. S at 9:15, and it looked same as last night; 2 moons.). \$66.00 + \$7.35 = \$73.35 (\$15.39/hr.)
- 10 984) 9/6/95(WED)...Cal Ripken's #2031 record game night)FPT.(7:35-11:55PM) Clear but unsteady sky. 11-d. MOON (somewhat impressive). JUPITER(good). SATURN(good...2 moons). Sought U three times w/o finding. Why? Tony Ramano had a bite w/me at Jimmy's and stayed the eve. with me. His wife Vicki died just yesterday. \$44.00 + \$6.44 = \$50.44 (\$11.63/hr.)
- 9 985) 9/7/95(THU)FPT.(7:47-12:29AM). Clouds at sunset, then ok, then great sky! 12-d. MOON(Fine!) JUPITER(2+2; nice while it lasted!). SATURN(murky then great! 2 moons at ring tip.). Stopped in at Adrian's Cafe to see Michele's exhibit(didn't like too much). Found Mary Slicher & friend. Visited with them. Saturn inspired lots of skepticism. I'm tired and hoping for a cloudy night! \$65.00 + \$10.07 = \$75.07 (\$15.96/hr.)
- 9 986) 9/10/95(SUN)FPT.(4:40-11:20PM) Great sky! BFMS concert(Irish). VEGA(Lots of trouble finding; Gave up at one point and went for Jupiter, which I found immediately! POLARIZING FILTER: enhanced contrast, but Vega ok w/o it...nicer w/o. Found V after J. Eventually tripod kicked accidentally by looker, lost V, went to J and stayed w/it.) JUPITER(Greatly enhanced by POLARIZING FILTER! Detected Ganymede w/15mm 38-mins. before ss.)Removed filter as sky darkened.) URANUS, NEPTUNE. M 13. M 57. M 31 (thanks to great alignment was able to do them all!) SATURN (Wonderful...2 moons). Visits: Matt, Ed & Martha; N.J. man who said he has been turned on to binocular astro. by seeing Moon thru my scope. Call this afternoon from N.J. woman wanting binocular astro. book recommendation, having looked thru scope 2 wks. ago. 15-d. MOON(fine!). \$67.00 + \$12.15 = \$79.15 (\$11.87/hr.) Visit by Dawn Culberson
- 13 987) 9/11/95(MON)FPT.(5:53-10:30PM) Nice sky, but forced to pack-up by strong, cold, southerly wind. Very quiet in FPT. but occasional knots of lookers. Started early to try to see y Lyr (mag. +3.24) w/ or w/o polarizing filter. Found a Lyr but not y. Tried with both 80X and 135X. Observed Ganymead @ 6:25PM, 57-min. before ss, @ 80X w/p. Jupiter great @ 6:30PM w/polarizer. VEGA, JUPITER, URANUS, SATURN, 16-d. MOON. \$29.00 + \$5.64 = \$34.64 (\$7.50/hr.)
- 9 988) 9/17/95(SUN)FPT.(6:30-11:58PM)Clouds all day. Tel. weather saying rain tonight. But sky suddenly cleared at 5:30PM, and I went to FPT. Nice sky! JUPITER(w/polarizer till sunset; 4 moons on L). ALBIREO(once). SATURN(Acq.8:20PM; V.good...3 moons). Quiet night but continuous stream of lookers. Some send friends! \$87.00 + \$9.67 = \$96.67 (\$17.68/hr.)
- 14 989) 9/27/95(WED)FPT.(6:40-10:33PM) First doable sky in 10-days! Accompanied by Tony R. First went to Hpl. but found other performers. 3-d. MOON(nice+helped by polarizer). JUPITER(3 moons). SATURN(+/-7:40). Moderate traffic. Some enthusiasm.\$39.17 (\$9.28/hr.)
- 5 990) 9/28/95(THU)NORTHWOOD ELEM. SCH.(Talk in morning, telescope evening). Great sky. 4-d. MOON, JUPITER (murky), SATURN(low in E. but nice). At least 100 kids w/parents/siblings. Long line. Tough gig! Gave out J & S stickers. Everyone seemed to enjoy. No hat.

TOTAL THIS PAGE = \$ 519.06

TOTAL THIS YEAR = \$5,234.16

- 9 991) 9/29/95(FRI)FPT.(6:45-1:38AM) Great sky! Eve of FPT. Festival. Parking ok at covered meter. Setup close to P. Twist due to booth in my reg. spot. 5-d. MOON, JUPITER, SATURN. Adult crowd early, then very young. \$125.00 + \$23.09 = \$148.09 (\$21.52/hr.) Got unexpectedly COLD. I was bordering on hypothermia! Lots of the kids were v. cold. Visits by Cathy Lemon and Bonnie Miller.
- 9 992) 9/30/95(SAT)FPT.(6:19-11:31PM) FESTIVAL DAY! Drove down w/Merle Ann in separate cars and waited out spaces on Aliceanna St. bet. Bond & Bway. Moved scope to square w/hand-truck. Setup same loc. as last night. Ok sky, then good. 6-d. MOON(polarizer did good before ss). JUPITER (briefly; nice). SATURN(Titan just above ring on left; lookers saw three moons). Very young crowd--same type of crowd as late on regular week-end night. Tonight, however, it was that way early! Slow traffic; lots of no-contribs. Closed up early for lack of traffic. Stuff watched by Greg while I went for car. Visit by Geri Bell & friend; Elaine, Irish dancer, who says she's not dancing because of back trouble! Some rowdiness around me, but no damage done. \$83.00 + \$16.18 = \$99.18 (\$19.09/hr.) Visit by 2 teenaged boys who live at 726 E. 36th (across st. from me!). They were there with their father, who was part of the city clean-up crew (in orange T-shirts).
- 9 993) 10/2/95(MON)HPL.(5:35-10:57PM) Great sky! Accompanied by Tony R. Met Tony Scott upon arriving. He's now employed by water taxi co. to entertain waiting passengers! 8-d. MOON (Began w/polarizer, which did good!; Tycho, Erathones on terminator...nice!) SATURN(2 moons easy). Too many no contribs, many of whom could well afford it! Lots of police on scene, many of whom had a look. Should have left at 10:30PM. \$91.00+\$11.89=\$102.89(\$19.16/hr.) Tonight, began suggesting to all lookers w/glasses to remove them when looking at Moon and Saturn thru RKE 15mm eyepiece.
- 10 994) 10/6/95(FRI)FPT.(6:58-7:40PM) Balmy temp. Closed down by clouds from Hurricane Opal. JUPITER(ok, but near light; 4 moons). 12-d. MOON (good craters on terminator; only got one decent look). If sky had cooperated, would have been good night. \$5.00 (\$7.17/hr.) Adjourned to M.A.'s.
- 9 995) 10/7/95(SAT)FPT.(8:20-11:48PM) Started late because of wedding of Nancy and John. Balmy temp. Fast moving clouds with holes. For +/-1 hr. mid-eve. had clear sky. Finally quit bec. clouds. FULL MOON(Tycho). SATURN(w/Titan). Some enthusiastic lookers. Visit by John & Sally. Would have had very good night \$-wise if not for clouds! \$75.71 (\$21.82/hr.)
- 9 996) 10/8/95(SUN)FPT.(6:25-11:32PM) Day of the visit of the Pope, but only one group of 3 lookers who were in town for event. Pristine sky! JUPITER(1st try; 4 moons on left; Great!). SATURN(acq'd. 6:50PM; 5-moons on right; 4 (Titan, Rhea, Tethys, Dione) in a small arc on E and slightly below ring, + one dim (?) farther out.) 14-d. MOON (+/- 10 hrs. past full). Visit by family from NJ who looked 2 yrs. ago and called late afternoon to see where I'd be. They took Polaroids. Visit by Myra and Buzzy H. Generally light traffic. \$47.00 + \$9.54 = \$56.54 (\$11.06/hr.)
- 12 997) 10/9/95(MON)HPL.(5:25-10:14PM) Accompanied by Tony R. Good sky. JUPITER(1st try before ss.). VEGA(w/effort). SATURN(3 moons close on L). 15-d. MOON (some craters on E limb). Visit by Kathleen (Irish dancer). Some enthusiastic lookers. \$64.00 + \$15.19=\$79.19(\$16.46/hr.)
- 10 998) 10/10/95(TUE)HPL.(6:15-8:20). Ok sky, then clouds. Started packing up, at which point it cleared again. But continued out, as I was very tired and needed an early night. JUPITER (Fuzzy, w/1+3). SATURN (1 moon). Accompanied by Tony. \$18.39 (\$8.84/hr.)
- 14 999) 10/11/95(WED)FPT.(6:35-11:11) With Tony. Good sky. JUPITER(only for focus). SATURN(4, maybe 5 moons!). 17-d. MOON (ok). Some enthusiasts, \$39.00 + \$4.75 = \$43.75 (\$9.50/hr.)
- 12 1000) 10/12/95(THU)FPT.(6:43-12:20AM) Tony. Great sky! JUPITER(briefly). SATURN(at least 4 m's). i Tri(ok). y And(Great!). 18-d. MOON(nice). M 45. Warm evening, w/lots of people out! Lou Feinberg on scene, playing music. "Straw Man lookalike dancing to him. Upon arriving home noticed that Betelgeuse appeared as bright as Rigel! \$69.00 + \$6.77 = \$75.77 (\$13.51/hr.)
- 9 1001) 10/16/95(MON)FPT.(7:08-10:13PM) "Million Man March" day. Good sky; cold(40'sF). SATURN (3 moons). JUPITER(twice, briefly). Quiet scene. More derelicts than tourists! \$34.52(11.17

TOTAL THIS PAGE = \$ 739.03

TOTAL THIS YEAR = \$5,973.19

- 12 1002) 10/17/95(TUE)HPL.(6:17-10:12PM). W/Tony. Great sky! SATURN(1st try in daylight!; 2 moons). JUPITER(twice, briefly). Am. Assoc. of Lab. Animal Vets lookers. I felt enthusiastic, tonight. \$73.00 + \$6.50 = \$79.50 (\$20.28/hr.)
- 12 1003) 10/18/95(WED)HPL.(6:17-10:30PM). Tony. Exquisite sky! JUPITER(4 moons, stripes). SATURN(3 moons; couldn't see Enceladus). Many appreciative lookers, including a group from Iceland. \$72.00 + \$8.86 = \$80.86 (\$19.16/hr.)
- 12 1004) 10/19/95(THU)FPT.(tried Hpl. but found performer)(6:41-11:53PM) Tony.Exq. sky! SATURN (4 moons). JUPITER(briefly). 51 Peg(Passersby aware of rpt. of Jupiter-size planet discovered orbiting this star; tried locating 51 several times but not sure I did.) M 31 (for looker, once). \$66.00 + \$4.90 = \$73.90 (\$14.20/hr.) M 45 (once).
- 9 1005) 10/23/95(SUN)HPL.(6:05-10PM) Parked in front bldg. Great sky. Lots of strollers at sunset, but number dropped rapidly toward dark. By end of stint was as quiet as I've seen Hpl. JUPITER(4 moons on top). SATURN(2 moons?). y And(twice). 51 Peg (Could not find for lookers but did for self. Dull, yellowish.) Visit by Charlie, harmonica player, & wife, Mary. Some enthusiastic child lookers. \$72.00 + \$10.61 = \$82.61 (\$21.07/hr.)
- 2 1006) 10/24/95(MON)FPT.(6:22-10:22PM) Went to Fpt. instead Hpl. thinking it would be reasonably busy + more fun. Was neither! Great sky!! JUPITER(4 moons, briefly). SATURN(4 moons!). y And. 51 Peg(a good amt. of inquired; however am still not sure I have it actually). Accompanied by Tony. \$32.00 + \$8.26 = \$40.26 (\$10.07/hr.)
- 9 1007) 10/26/95(THU)FPT.(6:20-10:53PM) J. Walsh at Hpl. Ok to sl. hazy sky. Tony. 2-d. Moon. SATURN(2 moons). Peg 51?(several searches but not confirmed!). Lots of no-contribs(ugh!). Very young crowd, mostly. \$38.00 + \$5.91 = \$43.91 (\$9.64/hr.) A no fun night!
- 10 1008) 10/28/95(SAT)FPT.(6:26-12:44AM) Ok sky. Big Halloween scene--nice! 5-d. MOON(lookers impressed). SATURN(3-moons; followed 3 hrs. beyond due S; had to re-collimate). JUPITER (once--yukky). V. busy early eve.; slow later. Packed up when cloud arrived. Visit by Bob Jacobson. \$137.00 + \$12.45 = \$149.45 (\$23.71/hr.)
- 9 1009) 10/29/95(SUN)FPT.(5:20-9:26PM...end of DST) Ok sky. 6-d. MOON(rugged!). SATURN(3 moons; sensed ring is dimming). 51 Peg(?). Quiet scene but steady traffic. \$39+\$7.68=\$46.68(11.37)
- 9 1010) 10/30/95(MON)FPT.(6:18-8:37PM) Shut down by haze, mercifully, as was v. slow. 7-d. MOON (Great!; located Crater Busching easily). SATURN(3 moons). y And. B Cyg.\$22.65(\$9.78/hr)
- 10 1011) 11/4/95(SAT)FPT.(5:30-1:05AM) Great sky. Cold(trouble w/fingers...need better gloves; moved scope to leeward of Pretzel T. to escape wind.) Busy, early, lull mid-eve., Busy late eve. Visit by Merle Ann(who rpted. nobody in Hpl.). 12-d. MOON(good). SATURN(2 moons; adequate rings; lookers impressed). M 42 (several times...even w/Moon and lights!). Visit by Bill (O'Connor's friend) and 1/2-do. of his friends. \$124.00+\$10.94=\$134.94(\$17.80/hr.) SATURN(Can still see shadow of ring on planet.) a Bri(appears to have faded slightly--is about same as B Ori.) Lots of looker comments(excited) on Hubble photo of M 16 which appeared in SUN and other newspapers a few days ago.
- 4 1012) 11/6/95(MON)ROTUNDA(5:05-9:00PM) Increasing high clouds toward sunset, but went out, anyway. Touch & go w/clouds at start, but then good sky. Gave out new "I SAW....SATURN RINGS EDGE-ON ROTUNDA" sticker! Moderate traffic. A \$20.00 contrib.! Visit by Bob Turk (TV weatherman); Michael Rosa, HST astronomer. \$64.00 + \$9.04 = \$73.04 (\$18.63/hr.). Tony.
- 5 1013) 11/9/95(THU) BRYN MAWR SCHOOL 4TH GRADES(7-8:00PM), after two postponements. Lots of kids and parents. Kind of an anarchic scene. SATURN(3 moons; I was not happy w/collimation, but was afraid to try to improve it). CONSTELLATIONS(Kids had star maps and red flashlights; pointed out Pegaseus, S. Triangle, Cassopeia, Polaris. Everyone (but me) seemed pleased. Cold, but not uncomfortably so; hazy sky. Next time I should circle items on star map ahead of time. Had long list of objects but only got to one! \$100.00 (Ch. rec.)
- 4 1014) 11/10/95(FRI)ROTUNDA(5-6:00PM) Increasing clouds forced shutdown. Spent 1/2 hrs. having pizza and talking w/Tony. Came out to clear sky, but decided to not head for Fpt. Too much work, + no urgent near for \$\$\$. SATURN(1 moon). \$11.94. (\$11.94/hr.)

TOTAL THIS PAGE = \$ 939.74

TOTAL THIS YEAR = \$6,912.93

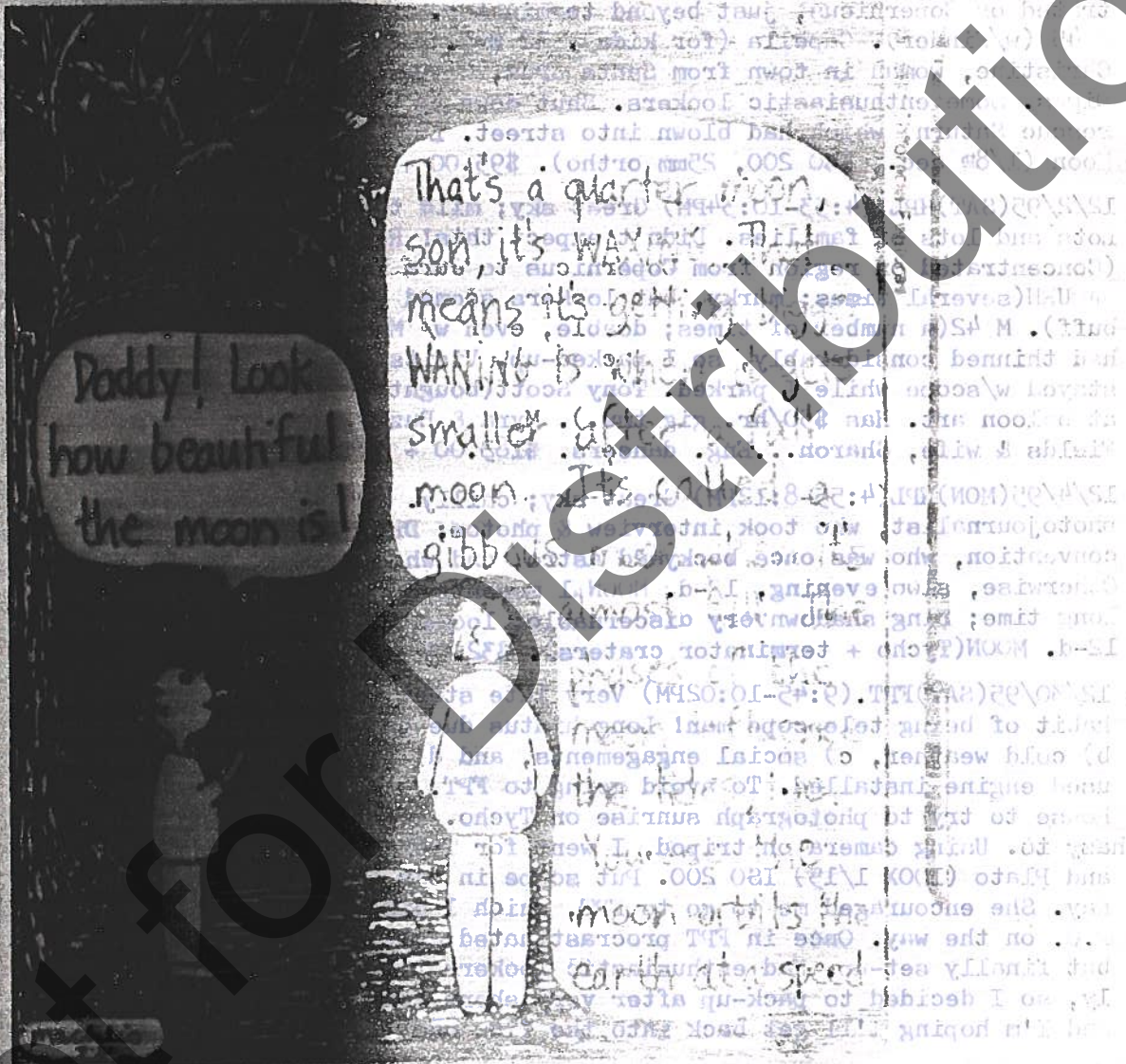
- 10 1015) 11/17/95(Fri)FPT.(6:50-8:55PM) Clear at sunset, but gradual build-up of clouds forced close-down. SATURN(ring barely visible--sun set on ring in 2 days). y AND(1X... nice!). Would have had decent evening if been able to stay. Interest beginning to grow just at shutdown time! Because of thin rings, I had trouble hawking at first, but was emboldened when I found that lookers were enjoying view! \$12.20 (\$5.86/hr.)
- 1016) 11/30/95(THU)ROTUNDA(4:35-7:55PM) Very clear, then sl. haze. 8-d. MOON(Plato, Eratosthenes, Straight Wall...so much detail I got confused about what to show!). SATURN (no ring...except in my imagination; ring shadow ok; 2 moons; some lookers liked). Slow night because I did not feel like recruiting. Why? \$27.57 (\$8.26/hr.)
- 9 1017) 12/1/95(FRI)FPT.(5:35-12:20AM) Mild temp. Clear but turbulent sky w/poor seeing. Inundated early evening by lg gp. of kids in Fpt. to sing carols. 9-d. MOON (concentrated on Copernicus, just beyond terminator. Used 133X. SATURN (blob w/1 moon). M 45 (w/finder). Capella (for kids). 32 Eri. y Ari. M 42 (often). Long visit by Christine, woman in town from Santa Cruz, CA on business trip. Visit by Deborah Diggs. Some enthusiastic lookers. Shut down by cold wind. Had to ask passer-by to rescue Saturn, which had blown into street. Lost coordinates card! Photographed Moon (1/8th sec., ISO 200, 25mm ortho). \$95.00 + \$21.10 = \$116.10 (\$17.20/hr.)
- 9 1018) 12/2/95(SAT)HPL.(4:53-10:34PM) Great sky; mild temp. "Lighted Boats"Parade at Hpl. Lots and lots of families. Didn't expect this! Ran out of all handouts! 10-d. MOON (Concentrated on region from Copernicus to Jura Mts. at 80X; sometimes did 135X.) SATURN(several times; murky, but lookers seemed to enjoy.). y Ari(once, for astro buff). M 42(a number of times; doable, even w/ Moon & lights!). By 10:30PM crowd had thinned considerably, so I packed-up. Visits: Tony R. met me when I arrived and stayed w/scope while I parked. Tony Scott(bought me coffee; he says he's doing great at balloon art. Has \$50/hr. gig tmw.). Myra & Buzzy. Leonard Greenebaum. Christopher Fields & wife, Sharon...Eng. dancers. \$183.00 + \$24.75 = \$207.75 (\$36.53/hr.)
- 9 1019) 12/4/95(MON)HPL(4:55-8:12PM) Great sky; chilly. Visit by Max Godsey, U.S. Marine photojournalist, who took interview & photos; Dr. named Darell, in town for epilepsy convention, who was once backyard astro, and who contrib. \$5. Is from Chapel Hill. Otherwise, slow evening, w/occasional moments of interest. SATURN(clearest view in a long time; ring shadow very discernable; lookers appreciated it after I explained). 12-d. MOON(Tycho + terminator craters). \$32.09 (\$9.78/hr.)
- 9 1020) 12/30/95(SAT)FPT.(9:45-10:02PM) Very late start due to procrastination. Am out of the habit of being telescope man! Long hiatus due to a) semi-closed window of opportunity, b) cold weather, c) social engagements, and d) car in sho this past week getting a used engine installed. To avoid going to FPT., tonight, I even set-up in front of house to try to photograph sunrise on Tycho. (It was just beginning. Sky was too hazy for it. Using camera on tripod, I went for Tycho (80X...1/15, 1/30; 100X 1/15, 1/8) and Plato (100X 1/15) ISO 200. Put scope in car and talked on phone for a while with Kay. She encouraged me to go to FPT, which I did, mailing film to processor at main P.O. on the way. Once in FPT procrastinated again (partly waiting for parking space) but finally set-up. Had enthusiastic lookers immediately. However, haze thicked rapidly, so I decided to pack-up after very short stint. However, I felt ok doing it again, and I'm hoping I'll get back into the flow soon into the New Year. \$5.37 (\$19.18/hr.)

TOTAL THIS PAGE = \$ 401.08

TOTAL THIS YEAR = \$7,314.01

QUALITY TIME

GAIL MACHIN



THE SUN

WEDNESDAY, JULY 21, 1992

So, what is the average speed of the Moon as it orbits the Earth? (assume for the moment the Moon's orbit is circular and at its average distance from Earth)

miles/hour

Kilometers/hour

1/9/95 SP contrib to Hpl. sweeper for turning off lights	\$ 1.00
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1/30/95 SP 6-star maps for SSIP (JHU)	\$ 00.30
2/2/95 SP 10-copies SPRING '95 star map prep. (JHU)	\$ 00.50
2/7/95 SP Balto. Co. Library visit for C. Deaver project	\$ 00.75
2/9/95 STA posterboard + X-acto blades for Christine (Towson Art Supp)	\$ 5.04
2/13/95 SP 8-copies March sky maps for SSIP (JHU)	\$ 0.40
2/13/95 SP 4-copies robotics mats. for C. Deaver (JHU)	\$ 0.20
2/15/95 SP 7-copies C. Deaver robots mats. (JHU)	\$ 0.35
2/17/95 STA rt bus fare to MSEA presentation	\$ 2.50
2/24/95 SP 21-copies Robotics project (JHU)	\$ 1.05
2/25/95 SP art supplied for C. Deaver Robotics proj. (\$ 6.18
2/27/95 POST mail eclipse poster to Jim Mannemann re Deaver proj.	\$ 1.24
3/1/95 TEL (bill of 2/13/95)	\$ 0.38
3/8/95 SP 1-copy Galileo's telescope info (JHU)	\$ 00.05
3/11/95 SP tip to HPL. worker to switch off lights	\$ 1.00
3/11/95 STA parking at Stouffers	\$ 3.00
3/12/95 STA 2-copies LOADING MOORE PRINTING parking sign (JHU)	\$ 00.10
3/12/95 SP 25-SPRING '95 Star maps (JHU)	\$ 1.25
3/12/95 SP 4-copies Flammarion M51/Van Gogh materials (JHU)	\$00.20
3/13/95 SP tip to HPL. worker for switching off lights	\$ 1.00
3/13/95 STA Stouffers	\$3.00
3/15 SP tip to HPL. worker for lights	\$1.00
3/15/95 STA Stouffers	\$3.00
3/15/95 SP tip to Tony Scott for getting soda for me	\$1.00
3/16/95 SP tip to HPL. derelict	\$1.00
3/16/95 STA Stouffers	\$3.00
3/23/95 SP 5-copies moon map for SSIP flier (JHU)	\$0.25
3/24/95 BOOKS "Light & Color" (Gramp's Attic Books)	\$4.20
3/25/95 TEL (410-889-0460) bill of 3/13/95	\$4.01
3/27/95 7-copies April Sky Calendar for SSIP (JHU)	\$ 0.35
4/8/95 SP Stouffers	\$3.00
4/17/95 SP 3-copies crater info. (JHU)	\$ 0.15
4/19/95 25-copies SATURN AND HIS ANSES (JHU)	\$1.25
4/24/95 POST 10-stamps	\$3.20
4/25/95 TEL bill of 4/13/95 (889-0460)	\$0.66
4/27/95 SP 6-copies SUMMER '95 STAR MAP prep. (JHU)	\$ 0.30
4/27/95 SP 5-copies Elderhostel class prep (JHU)	\$ 0.25
4/27/95 SP 7-copies SSIP May sky map prep. (JHU)	\$ 0.35
5/2/95 STA White Out (Rite Aid)	\$ 2.41
5/5/95 SP 10-copies Elderhostel prep. (JHU)	\$ 0.50
5/13/95 SP 1-copy SCOUT EXPO-mats for Tomney (Ameco)	\$ 0.05
5/15/95 SP 12-copies Elderhostel prep. (JHU)	\$ 0.60
5/15/95 BOOK Kalmbach Pub. Co. (ck.#2597) 100 Questions/Astronomy	\$17.95
5/15/95 SP Folk Arts Network listing for 1995 (#2598)	\$ 5.00
5/22/95 SP contribs. to Fpt. derilicts	\$ 1.25
5/27/95 TEL bill of 5/13/95 (889-0460)	\$ 0.66
6/17 SP Post-it Notes (Staples)	\$ 3.66
6/19 SP loan (?) to Buster in Fpt.	\$ 6.00
6/20SP 2-copies mats. for David Perkins (JHU)	\$ 0.10
6/20/95 POST letter to Perkins in Poland	\$ 0.50
6/23/95 POST letter to Dan Rodricks	\$ 0.32
6/23/95 SP 3-color copies of Katadhin sunrise photo (Copy Cat)	\$ 1.53

STREET CORNER TELESCOPE EXPENSES

Page 2 of 3

6/24/95 SP	4-copies biographic article ¹⁹⁹⁵ (Amoco)	\$000.21
6/24/95 TEL	bill of 6/13/95 (889-0460)	\$ 1.82
6/27/95	STA ream 8 1/2 x 14" paper; Scotch tape (Staples)	\$ 6.28
6/28/95 SP	2-copies City Paper announcement (Amoco)	\$ 0.10
6/28/95 PHOTO	1-roll B&W film for Fpt. photo session	\$ 3.43
6/28/95 SP	17-copies Saturn's ring mats. (JHU)	\$ 0.85
7/2/95 SP	contrib. to Andean musicians in Fpt.	\$ 1.00
7/4/95 SP	23 copies Governor's Conf. outline (JHU)	\$ 1.15
7/6/95 PHOTO	process Fpt. photos for City Paper	\$ 8.57
7/11/95 STA	X fine Sharpie black pen (Visual Systems)	\$ 1.04
7/14/95 SP	5-copies eclipse photos for Chris Baldock (JHU)	\$ 0.25
7/14/95 POST	letter + photos to Chris Baldock	\$ 0.64
7/15/95 SP	Post-It Notes (1,200/ea.) (Staples)	\$ 5.99
7/18/95 SP	contrib. to Fpt. performer	\$ 1.00
7/19/95 SP	contrib. to Fpt. derlict	\$ 0.50
7/21/95 TEL	bill of 7/13/95 (889-0460)	\$ 1.62
7/23/95 SP	2-copies "Mt. Marilyn" moon maps area (JHU)	\$ 0.10
7/29/95 SP	contrib. to man who sweeps area for Bret (Pretzel Twist)	\$ 1.00
7/19/95 STA	Horizons Cycles (bicycle repair + new tire)	\$15.50
8/5/95 SP	Post-it Notes (Staples) (1,200/ea.)	\$ 3.66
8/7/95 SP	contrib. to Fpt. sweeperman	\$ 1.00
8/9/95 SP	4-copies Saturn without rings mat. (JHU)	\$ 0.20
8/10/95 STA	10-copies TONIGHT SATURN! sign preparation (JHU)	\$ 0.50
8/12/95 SP	contrib. to Fpt. sweeper	\$ 1.00
8/15/95 STA	typewriter ribbon (Office Depot)	\$ 2.79
8/15/95 BOOKS	for Terry (Sky Obsvs. Guide + Facts About Astronomy (Bibelot)	\$11.45
8/15/95 BOOKS	9-Nat. Geographic mags/w astronomy arts. (Goodwill)	\$ 2.36
8/16/95 SP	5-copies "Mt. Marilyn" LOST MOON refs. (JHU)	\$ 0.25
8/17/95 SP	1-copy Heidi Hammel letter (Amoco)	\$ 0.05
8/17/95 POST	mail H. Hammel letter/poster	\$ 1.24
8/20/95 SP	contrib to woman derlict w/children	\$ 1.00
8/22/95 PHOTO	color xerox of Mt. Katahdin, Lunar Eclp. (Md. Reproductions)	\$ 7.35
8/25/95 SP	Paid back by Buster on "loan"	(\$ 1.00)
8/25/95 SP	contrib. to Fpt. sweeper	\$ 1.00
8/26/95 SP	Post-it Notes, (1,200 ea. (Staples)	\$ 6.29
8/26/95 STA	#10 envelopes (Staples) 500 ea.	\$ 3.59
8/27/95 SP	4-copies "Saturn in the Buff" art. (JHU)	\$ 0.20
8/27/95 SP	4-copies NYCTOPHOBIA definitions (JHU)	\$ 0.20
8/28/95 TEL	bill of 8/13/95 (889-0460)	\$ 1.12
8/28/95 SP	1-RUBBER STAMP (Saturn...rings edge-on) (BAUMGARTEN)	\$18.01
8/29/95 BOOKS	1-ASTRONOMY ed. by C. Ronan (Fpt. derelict)	\$ 5.00
8/30/95 SP	5-copies 9/95 Star charts for Irene Joell (JHU)	\$ 0.15
9/1/95 SP	9-copies MAGI & I logo prep. (JHU)	\$ 0.45
9/2/95 SP	contrib. to Pretzel Twist workers for water	\$ 1.00
9/4/95 SP	(ibid)	\$ 1.00
9/4/95 SP	contrib. to derelict	\$ 1.00
9/5/95 SP	1-RUBBER STAMP--Saturn rings edge-on Harborplace (Baumgarten)	\$18.01
9/8/95 BOOKS	Universe at your Fingertips (Astro. Soc. of the Pacific)(ck2607)	\$24.95
9/10/95 SP	3-copies of Todd Gross mats. for Tomney (JHU)	\$00.15
9/11/95 STA	1-flashlight for vis. acq. experiment lab (Radio Shack)	\$ 2.72
9/12/95 SP	6-copies SOLAR ECLIPSE (annular) (JHU)	\$ 0.30
9/13 POST.	originals to D. Peck for xeroxing for 9/23 talk	\$ 1.01
9/12 SUB.	S&T sub '96 (ck.#2608 to BAS)	\$24.00
9/14/95 STA	flashlight/batteries for demonstrations (Radio Shack)	\$ 5.55
9/14/95 STA	4-sheets RED tissue paper for demos. (Harvey's)	\$ 1.05

\$199.65

9/18/95 SP 1000 ea. POST-IT NOTES (Staples)	\$ 6.29
9/18/95 STA Typewriter bibbon (Staples)	\$ 2.78
9/22/95 SP 5-copies "Credo" for MAGI & I talk (JHU)	\$ 0.25
9/26 STA 5-sheets red tissue paper for 9/28 talk (Harvey's)	\$ 1.32
10/1/95 TEL bill of 9/13/95 (889-0460)	\$ 1.83
9/30/95 SP tip to Greg for watching my stuff in Fpt. while I got car	\$ 5.00
10/2/95 STA Stouffers	\$ 3.00
10/2/95 SP tips to HPL. sweepers for dousing lights	\$ 2.00
10/4/95 STA 6-sheets red tissue paper for Bryn Mawr talk (Harvey's)	\$ 1.58
10/9/95 STA Stouffers	\$ 3.00
10/9/95 SP Drink at Hpl. for Tony's help.	\$ 1.35
10/9/95 SP tip to sweeper for dousing lights	\$ 1.00
10/10/95 SP tip to sweeper for dousing lights	\$ 1.00
10/10/95 STA Stouffers	\$ 3.00
10/11/95 SP 1000 ea. POST-IT NOTES (Staples)	\$ 6.29
10/11/95 STA SCOTCH Removable Tape (Staples)	\$ 2.35
10/16/95 SP 4-copies Crater Busching for Ms. Busching, Fpt. lookers(JHU)	\$ 0.20
10/17/95 SP tip to Hpl. sweeper for dousing lights	\$ 1.00
10/17/95 SP Stouffers	\$ 3.00
10/18/95 SP tip to sweeper (ibid)	\$ 1.00
10/18/95 SP Stouffers	\$ 3.00
10/20/95 SP 10-copies "Telescope Exhibitor" art. for Tony (JHU)	\$ 0.50
10/23/95 SP tip to Hpl sweeper (ibid)	\$ 1.00
10/25/95 TEL bill of 10/13/95 (889-0460)	\$ 1.88
10/28/95 STA rubber cement/thinner (Visual Systems)	\$ 12.97
10/31/95 SP 1000 ea. POST-IT NOTES (Staples)	\$ 6.29
10/31/95 STA Correction fluid (Staples)	\$ 3.97
10/30 SP I SAW SATURN....ROTUNDA stamp (Baumgarten)	\$ 18.01
11/11 STA Posterbd. for new dew cap (McCrory)	\$ 1.87
11/13 SP 5-copies SIGNS FOR NEW DEW CAP (JHU)	\$ 0.25
11/14/95 BOOKS SKY-GAZER'S ALMANAC '96; OBSV'S. HNBK.'96 (S&T)(ck.#2616)	\$ 23.86
12/2/95 SP tip to Hpl. sweeper for lights	\$ 1.00
12/2/95 SP Stouffers	\$ 2.00
12/4/95 SP tip to Hpl. sweeper for lights	\$ 1.00
12/4/95 SB Stouffers	\$ 2.00
12/5/95 TEL bill of 11/13/95 (410-889-0460)	\$ 2.60
12/12/95 STA rubber fingers + correction type film (Towson Stationery)	\$ 2.09
12/23/95 TEL bill of 12/13/95 (889-0460)	\$ 0.56

Page Total = \$132.09

$$\text{Year} = \$ 100.39$$

$$+ 199.65$$

$$+ 132.09$$

$$= \$ 432.13$$

$$\text{Milage} = 1035 \times \$0.30 = 310.50$$

$$T = 742.63$$

1996

Not for Distribution

- 9 2/18/96 (Sun) HARBORPLACE (1:42-5:50PM) Cold, but Amphitheater kind of balmy mid-afternoon. Trouble in late afternoon with fingers! VENUS IN THE DAYTIME! (Trouble locating because I set -4° dec instead of $+4^\circ$! Gibbous phase. Inferior image because daytime viewing. However, lookers impressed. Lots of families w/kids, so I gave out many star maps, mnemonics. Visit by Mary Lou Kenedy & Brian & friend, who helped me pack-up. \$120.00 + \$21.40 = \$141.40 (\$34.21/hr.)
- 1021)
- 9 2/25/96(SUN) FPT.(3:10-8:35PM) Windy but mild. Mixture of blue sky & high, thin clouds. Wanted to go to HPL. but found juggler working. Lots of strollers. Asked Bret to call police about young guys throwing long tosses with some kind of whistling missile which kept falling near scope. Policeman came rapidly and stopped them. First time in going-on 9 yrs. that I had to actually call for police help! VENUS (found easily; almost a half "moon"; penetrated fairly thick clouds). 7-day Moon (along w/Venus; polarizing filter improved). B Mon; M 42, σ Ori; M 45. Lots of enthusiastic lookers. Visit Jane Bates. \$71.00 + \$19.77 = \$90.77 (\$16.78/hr.)
- 1022)
- 9 3/4/96(MON) HPL.(12:44-5:15PM) Clear; chilling wind. No trouble w/ fingers. VENUS IN THE DAYTIME! (Found on first try. Small $\frac{1}{2}$ -moon. Fuzzy image due to seeing conditions. At 1:00 PM spotted naked eye by sighting up tube. Seemed $\pm 30^\circ$ from Sun. I invited some lookers to do the same, but only a few saw it. Had rush of traffic at start, then it was slow-going. From 2:45PM till 5:10PM, at which time I noticed lots of women in tennis shoes coming from work, place was pretty empty. Looked for B Ori without success.) A significant number of lookers were repeaters from previous stints in HPL, FPT. and Chas. Vil. Visit by Herb Mittenthal. \$33.00 + \$14.24 = \$47.24(\$10.45/hr) (Parking cost \$10.00!)
- 1023
- 9 3/10/96(SUN)HPL(12:28-6:22PM) Clear & cold. Bad wind chill mid-afternoon. VENUS IN THE DAYTIME(acquired immediately; 80X all the way; small "half moon"; well received by most lookers; invited some to try for naked eye sighting, which a few succeeded with; late in afternoon when V was easily naked eye a earlier looker returned excitedly reporting that he could now see it!). Gave out lots of Comet Hyakutake maps, though few had heard of it yet. Visits: Will Wirley, who took over while I went for soup; Tony Scott; Merle Ann. Good traffic for most of afternoon. Moved car from Pratt St. to Stouffers after being warned of ticketing by guard. \$130.00 + \$17.08 = \$147.08(\$24.93/) Lot's of lookers asked my opinion as to whether Pluto is a planet or asteroid. This was because the question was aired on Dan Rather's TV new several night ago after Hubble discovered it is smaller than our moon. Visit by Julian Hecht and children.
- 1024)
- 9 3/11/96(MON)HPL(12:07-5:25PM) Nice sky, mildly cold wind. Hoped for another good day, but it was very slow. Only good moment was mid-afternoon when a group of Texans came by with kids and contributed well. Crowd seemed to be picking up as I was leaving. VENUS IN THE DAYTIME. Left feeling really down about this stint. \$41.79 (\$7.89/hr.) Gave out ± 55 Comet Hyakutake maps.
- 1025)
- 9 3/12/96(TUE)HPL(5:17-8:40PM). First went to Rotunda, but place looked so untelescope-like that I went to HPL. Great sky but bleak scene, which pretty much stayed that way. Maybe one person commented on comet article in this morning's paper. VENUS(after sunset good at 133X with filter). M 42(I worked hard to hype it and lookers seemed to appreciate it; its MTT was 18:18, so it was kind of lowish, even at start). Felt nervous about going to HPL at night but it seemed ok. Some police around. \$38.94 (\$11.50/hr.) Visit by attendee, Britny(w/mom) of one of my BCCC talks; Tom Wargin and another BAS member on way to monthly mtg. at Sc. Ctr.; Science Ctr. professionals.
- 1026)
- 9 3/13/96(WED)HPL(4:36-7:08PM) Mild temp.; slightly hazy sky. VENUS. Bleak scene at HPL. Lots of no-contribs. Got discouraged, packed up and went dancing. \$31.27 (\$12.35/hr.)
- 1027)
- 9 3/16/96(SAT)FPT(2:25-7:56PM) Great sky but mildly cold breeze; closed down by clouds. VENUS(fairly easy to spot naked eye). Lots of people concerned about Pluto—whether its a planet or an asteroid! Lots of no-contribs. Visit: Kate Walsh & David. Gave out good number of Comet Hyakutake maps. \$72.00 + \$17.82 = \$89.82 (\$16.29/hr.)
- 1028)

TOTAL THIS PAGE = \$628.31

TOTAL THIS YEAR = \$628.31

you go back without some foreground reference points it can be quite hard to find.

**Clear Skies,
Craig in Tampa**

OFFLINE 1.36 * (28 02'17" N....82 25'50" W)

— DCI Pro/DCIQMail/Chauncy 0.7k

*** Origin: Nordevald Software = The Home of DCI = 813/961-0788 (1:377/3.0)**

To: VINCENT JUNG Num: 7415 Date: 1/26/1996
From: KEN HENRIKSSON Re: Time: 1:28 pm
Subj: PLANETS IN DAYLIGHT Prvt: N Read: N

Answering a msg of <Thu Jan 25, 96>, from Vincent Jung to Deborah Crain:

Hi Vincent,

No you don't really need anything special at all, except a location reference. Venus and Mercury both are perfectly visible during daylight provided that you know where to look (infact Venus can actually look BETTER during daylight, depending on it's phasé!). I use Skymap or Distant Suns to get their coordinates and then simply swing the scope up to the right RA &

**Dec,
and I'm in action.**

A couple of hints about aligning your scope: You'll need to be perfectly polar aligned, which you'll prob have to do the night before, or if

you are observing from a location where it's not convenient to leave the scope

out all night, mark the positions of you tripod legs the night before and re-setup during the daylight using these guides. Or if you have digital

setting circles you can use them instead. However if you wish to set up during daylight with digital setting circles, you can use the Moon (if it's

up) and sun as your two alignment "stars", but in this case you have to know the exact time at your location as well, and you may have to do a bit of wide

field sweeping.

Another point to note is that the two planets are sometimes very close

to the sun so be carefull, even a momentary view of the sun through your scope

can cause permanent blindness, and damage to the optics of your scope.

Ken H.

- 9 1029) 3/22/96(FRI)FPT(9:15-11:35PM) Temp. mid 30's w/very bad wind chill. Unpleasant, but I was kept very busy with many lookers at COMET HYAKUTAKE, positioned to lower left of a Bos. Arrived in Fpt. +/-8PM, spotted it w/binocs +/-9PM and set-up. Heavy traffic periodically. Everyone could see Comet H. naked eye, as well. Almost every looker contributed \$1! Comet looked like a small comet w/ tail pointing to left. Early on it passed by numerous bright stars. Was occulting a star when I first acquired it, and I was startled to notice star appearing from behind it! Even tho there was still plenty of interest, I packed-up because of cold. \$80.00 + \$7.08 = \$87.08 (\$37.32/hr.!) Thru scope it looked like a little comet with tail pointing to the left. Used 80X.
- 9 1030) 3/23/96(SAT)FPT(8:15-12:40PM) Chilly, but much less windy than last night; tolerable situation. COMET HYAKUTAKE (Japanese speaker says pronounced YA-KU-TA-KA). Image not as good as last night...maybe due to slight haze. Also, few background stars. More difficult to know if right focus for lookers. Heavy traffic! Visit by Merle Ann and her cousin, Jackie. Traffic slowed after midnight. During rush made several trips to my car to unload dollar bills. After packing up drove to Geist Rd. for photo session. Thru scope image was of small comet with bright spot in head and tail pointing to left. Rapid motion evident whenever stars appeared. \$204.00 + \$19.19 = \$223.19 (\$51.85/hr.!) Visit by someone who left Bloomberg scope because line too long (Catherine). Duesto haze, I believe less viewer satisfaction tonight.
- 9 1031) 3/24/96(SUN)FPT(4:50-10:40PM) Nice sky. Milder temp., alot less wind. 4-day MOON. VENUS(about 50%). COMET HYAKUTAKE(acquired by eye 7:15PM; better appearance tonight than last night, plus more background stars...but not enough!) Pretty good traffic right from start. Filmed by Channel 2. Visits by John & Sally; Bobby Rapaport and Carey Reis. \$147.00 + \$15.46 = \$162.46 (\$27.82/hr.) Left for Geist Rd. for comet photo session. Visit by Lenore(JHU math,dancer, and her friend.)
- 9 1032) 3/26/96(TUE)FPT(7:25-8:35PM). Great sky w/6-day Moon. Didn't want to be there but had to because of mention on Marc Steiner Show, Mon. Some people, incl Michael (of Barclay St.) showed as result of program. However, desire to photography Comet H. again (!), drove me to pack-up early. COMET HYAKUTAKE(Very close to N. celestial pole; awkward but doable; large fuzball w/bright spot in center; I showed all lookers one of my Comet H. slides in a viewbox, which they appreciated; first night out with "dayglow" stickers) \$25.00 + \$2.85 = \$27.85 (\$23.88/hr.!)
- 9 1033) 3/30/96(SAT)FPT(5:29-10:12PM) Hazy sky. 10-d MOON(Tycho). COMET HYAKUTAKE (Acq. at 7:15 PM by sweeping at +59°. In NW sky. Bedeviled by haze. Finally gave up. Only one star was in field with it all evening, which was disappointing.) Ok traffic, but nothing like lastweek. \$67.00 + \$5.25 = \$72.25 (\$15.31/hr.)
- 9 1034) 3/31/96(SUN)FPT(1:50-5:10PM) Hazy sky. VENUS IN THE DAYTIME(acquired immediately; ½-moon, getting bigger). Lots of discussion about Comet H. Showed lookers slide, which wowed many. Visit by Jerry Klauber(nice reunion!). No possibility of doing comet after dark due to haze, so I packed up. Sold 2 comet photo prints.\$32.40(\$9.71/)
- 9 1035) 4/3/96(Wed)FPT.(6:15-9:22PM) Good sky till just before end. TOTAL LUNAR ECLIPSE (Moon to rise 6:26PM totally eclipsed; set-up on corner across from Adm. Fell in hopes of catching it early.However learned from passerby that I was missing it, so I moved--w/help of Bob & Catherine Potter--to usual spot. Finally spotted it at very end of totality rising above Rec. Pier. Beautiful sight! Lookers impressed both thru finder and at 80X.)COMET HYAKUTAKE(dec +49°; found immediately; same fuzball, but w/star in field; hardly any motion over several hrs.) VENUS(discovered by accidnet that was very close to the Pleiades; great sight in finder!) Sold 2 comet photos! \$47.00 + \$6.35 = \$53.35(\$17.1.
- 9 1036) 4/11/96(Thu)FPT.(7:37-10:23). Initially good sky, then intermittent clouds. VENUS(getting bigger; markedly less than ½). a Cma and aCMI (daylight). COMET HYKUTAKE(acq. +/-8:15PM in twilight; bright coma with focusable nucleus; lost in clouds several times; finally lost in tree, but it was almost ready to hit roof, anyway; lots of comet interest). i Cnc. Visits:Scott Randall, from Pa. visiting Bob Cotter's lab; Brian Flowers, old friend of Eve's; Rich Della, used to work for John. \$34.49 (\$12.48/hr.)

TOTAL THIS PAGE = \$ 699.07

TOTAL THIS YEAR = \$1,327.38

- 9 1037) 4/12/96(Fri)FPT.(7:40-10:50PM) Good sky. VENUS. COMET HYAKUTAKE(acq.8:15PM in twl.; nice scene w/comet between two stars; could see some tail when scope slewed; went beneath roof at 9:55PM...too bad!). Visit by Terry Kemp. \$80.68 (\$25.51/hr.)
- 9 1038) 4/14/96(SUN)FPT.(2:43-5:38PM) VENUS IN THE DAYTIME(I didn't recruit lookers; buffeted by continuous cold wind; not a fun time; packed up for supper at Jimmy's0. (7:43-9:23PM) VENUS (till time for comet). COMET H.(acq. 8:25PM; very bright nucleus ...brightest its been! lost at 9:22PM below roof). Sold 4 comet photos.Visits: Viola Blum, Shield E, Gail S; Helen Hollingsworth. \$47.67 (\$10.43/hr.)
- 9 1039) 4/18/96(THU)FPT.(7:28-9:43PM) Good sky at start, then thickening haze. Quit because of boredom + haze. VENUS (getting bigger!). COMET H. (unable to find...prob. because too low). Slow to moderate traffic. Sold 1 comet photo. \$20.77 (\$9.24/hr.)
- 9 1040) 4/27/96(SAT)FPT.(4:48-11:37PM) Generally good sky. VENUS(markedly crescent!). 9-d. MOON(Copernicus...in the last stage of sunrise, but it was very good at 133X!). y Leo(close; poor image). Better than avg. traffic for daytime Venus. Moderate to sometimes heavy night traffic. Cold wind forced move to Kiosk area.\$89.35 (\$13.11/hr)
- 9 1041) 4/28/96(SUN)FPT.(3:50-6:02PM) Hazy, intermittently cloudy sky. Cold wind! VENUS. SIRIUS(once). Quiet in FPT. Maybe should have stayed home! \$10.86 (\$4.93/hr.)
- 10 1042) 5/4/96(SAT)FPT.(4:20-8:51PM) Adverse weather rpt. but ok sky, so I set-up. VENUS. (Slow traffic most of afternoon. Started picking up in eve., but clouds came.) \$37.09 (\$8.21/hr.) Venus at dec +27.7°--highest this century.
- 2 1043) 5/5/96(SUN) SHERWOOD GARDENS (1:30-3:30PM) 3" refractor. SUN(No spots. +/-33% streaming clouds at start, but cloud cover increased to where I had to pack up.) Nice time. Good interest. Families with kids. People I know. (no hat).
- 10 1044) 5/10/96(FRI)FPT.(6:37-9:43PM) Intermittent clouds, then all clouds. VENUS. Lots of people around for Preakness Fest. week-end. \$23 + \$6.00 = \$29.00 (\$9.36/hr.)
- 10 1045) 5/14/96 (TUE)FPT.(6:13-9:25PM) Cold wind! Hazy but doable sky. VENUS(nice!). Kind of bleak scene. Slow traffic. Pi Boo(nice, close). \$17.12 (\$5.36/hr.)
- 10 1046) 5/18/96(SAT) FPT.(4:52-8:15PM) PREAKENSS DAY. Quiet scene till close to sunset, at which time I had to leave to attend Marc Steiner's birthday (50th) party (w/Merle Ann). VENUS(slight trouble finding, as closer to Sun...+/-30° elong.... and haze) Visit by Kay Knabe, owner of Fantasy Airlines shop. She borrowed a Comet H. photo to scan for T-shirt. Hopefully, we'll work together! Comment on news rpts. of newly discovered asteroid zipping past Earth a twice dist. of Moon! \$24.26 (\$7.18/hr.)
- 10 1047) 5/19/96(SUN)FPT.(6:17-10:45PM) Late set-up due to heat. Also, am learning that a long Venus/daytime stint is not cost effective! VENUS(Wasted ½-hr. trying to locate. Why? Haze? Later, a drunk British sailor kicked tripod out of alignment, and it took me an hour to again find V!Why? Lost lots of lookers!) 2-d. MOON (Thin but nice!)After loosing Moon then Venus, I searched for a good double, but didn't come up with anything. Quit in disgust, even tho still lots of people around. All around bad night! Visit by Judy Meyers(suffering from breakup w/boyfriend); Laurie DeWitt.\$25.20 (\$5.64/hr.) Sold six comet note cards.
- 9 1048) 5/20/96(MON)FPT.(6:30-10:28PM). Nice sky.Hot. Visitors from Am. Geophysic Union Convention(solar plasma, geochem,aurora studies). VENUS(lost around 9:30PM). 3-d. MOON (lost before Venus). Sold several comet photos. 24 Com (nice). \$21.36(\$5.38/hr.)
- 9 1049) 5/22/96(WED)FPT.(6:55-11:45PM). Nice sky; pleasant temp. Many police on scene, "making a presence" reportedly. VENUS(looked big!). 5-d. MOON(great...sunrise on Theophilus; lost Moon 10:11PM). 70 Vir; 24 Com(nice); Xi Lup(nice!); ALBIROO(great!). Visits: Mark, Woody, Alan Hecht. Most lookers payed! \$32.00 + \$8.43 = \$40.43 (\$8.37/hr.)
- 9* 1050) 5/23/96(THU)FPT.(7:10-10:30PM) Sky started nice, then clouds moved in. Lots of interest but blocked by clouds. Light out of St. Mary Star of Sea Church "star"! Interesting visits by Prof. N.F. Ness of Bartol Res. Inst. and by Steve Mueller(?), a biologist who just purchased a Meade SCT "10. VENUS(fist try!). 6-d. MOON(good!). An unusually adult crowd, tonight. Too bad...then clouds! Sold 6 comet note cards.\$19.12(\$5.74/hr.)

TOTAL THIS PAGE = \$ 462.91

TOTAL THIS YEAR = \$1,790.29

19. The Astro-1 Crew

Crew photos around Astro logo

During the Astro-1 mission, the ultraviolet telescopes and their pointing system will be operated by the science crew. The science crew is composed of mission specialists who are NASA astronauts and scientists and payload specialists who are scientists from the instrument teams. One mission specialist also serves on the orbiter crew.

The orbiter crew are highly trained members of NASA's astronaut corps skilled in shuttle operations. They are responsible for maneuvering the orbiter to specific observation positions two to three times every orbit.

During the mission, the crew will take turns working 12-hour shifts so that observations can be conducted around-the-clock.

Mission Specialists: Dr. Jeffrey A. Hoffman and Dr. Robert A.R. Parker. Hoffman and Parker are career NASA astronauts and professional astronomers who have dedicated their careers to developing space astronomy capabilities in the shuttle environment.

Payload Specialists: Dr. Samuel T. Durrance, Dr. Kenneth H. Nordsieck and Dr. Ronald A. Parise. For Astro-1, Drs. Durrance and Parise will work in orbit while Dr. Nordsieck works at the Payload Operations Control Center, at the Marshall Space Flight Center in Huntsville, Alabama.

Orbiter Crew: Commander Vance D. Brand, Pilot Guy S. Gardner and Mission Specialist John M. (Mike) Lounge.

20. Crew Training

Photo of crew training

Years of preparation are required before a crew is ready to fly a mission. All the crew members have been trained so that their activities are coordinated to make the best use of the brief time in space. Much of the science training took place in the laboratories of the scientists who designed and developed the Astro-1 instruments and in the Payload Crew Training Complex (PCTC) at the Marshall Space Flight Center in Huntsville, Alabama. The PCTC contains a full-scale mock-up of the space shuttle where the crew members can practice using the equipment they will operate in space.

The Astro-1 crew members also undergo extensive training at the Johnson Space Center in Houston, Texas. Their training includes learning how to live and work in the weightless environment of space.

- 9 1051) 5/25/96(SAT)FPT.(6:20-12:17AM) Very adverse weather rpt. but very nice sky at start, then intermittent clouds, then nice sky again! Cool wind. 8-d. MOON(just short of $\frac{1}{4}$; all lookers impressed; sunrise on Eratosthenes; started on Moon 2hrs. before ss, with good assist from polarizer). VENUS(briefly after ss). Lots of enthusiastic lookers. Visits by Merle Ann, Mitch "Halley's Comet Expo". No sign of Jupiter, even at quitting time, Too bad! Sold 5 comet cards. \$84.00 + \$17.31 = \$101.31 (\$17.02/hr.)
- 9 1052) 5/30/96(THU)FPT.(7:15-11:55PM.) Great sky; cool. VENUS(trouble finding, why? Lost lots of lookers while trying. 10-days from IF; very thin! Hit treeline @ 8:50PM). 13-d. MOON(Tycho, Aristarchus, and points between.) \$40.75 (\$8.73/hr.) Sold $\frac{1}{2}$ cards.
- 10 1053) 5/31/96(FRI)FPT.(6:56-11:48PM). Great sky! MY STOOL WAS STOLEN! AS I PREPARED TO LEAVE, I DISCOVERED IT WAS MISSING, WHY? A PRANK? THEFT? IF THEFT, THEY GOT A VERY RICKETIE ITEM! VENUS(Almost immed.; 16° elong. from Sun; very thin! Hit trees at 8:45PM). 14-d. MOON(just short of full; Tycho & Aristarchus; Copernicus noticed by lookers.) Lots of no-contribs. Young crowd as evening wore on. \$62.00 + \$11.15 = \$73.15 (\$15.02/hr.)
- 10 1054) 6/1/96(SAT)FPT.(7:48-12:35AM) Hazy, then great sky. VENUS(As I set-up mid-square for Moon and Jupiter, I only held it for +/-15 mins.; good interest). 15-d. MOON(At 50X for a while, then 80X; rose +/-6hrs. past full; edge craters + Tycho). JUPITER!(acq. at 11:30PM; 2 moons on each side; nice!; gave out stickers!). \$72.00 + \$7.61 = \$79.61 (\$16.64/)
- 10 1055) 6/15/96(SAT)FPT.(7:23-12:37AM) Hazy, then good sky. ARCTURUS(1st try! Collimated on, in daylight; used polarizer, too.). 70 Vir. B Sco. ALBERIO(filler-in's after sunset and until Jupiter). JUPITER!(Acq. 10:30PM; 3+1; lookers loved; gave out Day-glo stickers!). Visits by Dan & Elaine Lowenthal; Dawn Culberson; Mooge & Pamela. Lots of early lookers came back after 10:30PM for Jupiter! Sold 2 comet cards. \$76.00 + \$5.98 = \$81.98 (\$15.66/)
- 12 1056) 6/21/96(FRI)FPT.(7:38-2:00AM) Hazy, then clear, but bad seeing for Jupiter. 5-day MOON (Mostly in daylight, but was nice! Theophilus, et. al.). ALBIRO (After loosing Moon and before Jupiter). JUPITER (acq. 10PM. Murky, but rapidly improved, except that seeing often made into a writhing blob! 2 moons, then 4.) HALE-BOPP(Searched for w/o success.) Visits: Scott Diegel, WAS; Frank Pratkan w/Machelle and daughter, Ruby(a real genius kid!); Terry and Malia(also a very bright child!), for a long stay. Sold 5 comet cards. \$99.00 + \$6.16 = \$105.16 (\$16.51/hr.)
- 10 1057) 6/22/96(SAT)FPT.(7:45-10:10PM) Hazy at start. Then sky looked ok. Finally shut down by clouds. Too bad, because there was lots of interest. Many people came back for Jupiter ten o'clock show, only to be disappointed. ARCTURUS (1st try, thru thick haze!). 6-day MOON. Sold 4 comet cards. \$31.70 (\$13.12/hr.)
- 10 1058) 6/23/96(SUN)FPT.(6:28-11:10PM) Magnificent sky! 7-day MOON (Awesome!). ARCTURUS(once in daylight). JUPITER(Acq. little before 10am; beautiful; 2 + 2 + pseudo star.) Good traffic & enthusiasm. No comet cards, as sold out last night! Had to leave earlier than I wished due to jury duty tomorrow AM. I was in a great mood, having received an order for 10 ea. 8"x12" comet photos this afternoon! \$51.00 + \$11.36 = \$62.36 (\$13.28/hr.) Visit by Katie McFarland, old friend of J. Picket.
- 9 1059) 6/26/96(WED)FPT.(7:11-11:53PM) Very good sky; mild. 10-day MOON(Tycho, Gessendi, Jura Mts.). B Sco(twice, as example of star thru scope). JUPITER(2+2; pseudo star gone). Failed to find Comet H-B. Visit by 3 Viva Hse. girls. 6 comet cards. \$57.27(\$12.40/) Visit: Rita (dancer).
- 9 1060) 6/27/96(THU)FPT.(7:30-11:40PM) Good, then hazy sky. ARCTURUS(45 min. before ss, with some effort). 11-d. MOON(Tycho, Aristarchus, Copernicus). JUPITER(3+1; pretty bad seeing, maybe due to parked police cars). Adjourned to Oyster w/Steven L. and Rennie. I was depressed, big effort to articulate. Sold 6 comet cards. \$45.15(\$10.83/hr.)
- 10 1061) 6/28/96(FRI)FPT.(7:50-11:25PM) Closed down by clouds & intense wind which made me very cold. Hazy sky. ARCTURUS(w/o finding till I repositioned tripod; then found immed.). 12-d. MOON(Tycho + terminator craters; good!). JUPITER (murky; 4 + 0). Lots of interest. Visit by dancers (John & Cindy), whose family bought T-shirt. The first! Sold 10 comet note cards! \$57.55 (\$16.04/hr.)

TOTAL THIS PAGE = \$ 735.99

TOTAL THIS YEAR = \$2,526.28

- 12 1062) 7/5/96(FRI)FPT.(6:40-1:23AM) Nice sky. ARCTURUS(Great trouble finding in daylight; 1) mental arithmetic miscalculation and 2) bad focus.) ALBIREO(Just before Jupiter.) JUPITER(Acq. 9pm. 3+1, + numerous background stars. Thought I saw shadows of I & II on J, but RASC chart says not! What were those black dots, then?). Visits: Mike Potter, Tony Scott, Lori Shallenberger, Dorothy Talbot. 2 H_s cards. \$78 + \$11.01 = \$89.01(\$13.25/19-d. MOON(Acq. +/-12:30am; nice!). Upon arriving home spotted SATURN low in the east!
- 9 1063) 7/6/96(SAT)FPT.(6:20-2:05AM) Very nice sky. Almost overwhelmed by sound system of a Bolivian pan pipe player for 1st 4 hrs! ARCTURUS(Trouble finding, till I realigned tripod. Discouraging!). ALBIREO(briefly). JUPITER(Acq. 8:55pm. 4 then 3, then 4 moons + background stars. Nice!). 20-d. MOON. SATURN! (Acq. +/-1:15am. Lookers very excited. Me too!). Unable to acq. Hale-Bopp. Visit: Eliasberg, briefly early; M. Potter; Dark-room Dave & his wife. Sold 8 comet cards. \$144.00 + \$17.92 = \$161.92 (\$20.88/hr.) URANUS!(Several times. Am thinking it will become more important to me after Jupiter moves east of it in a few years. May become my main late summer feature!)
- 18 1064) 7/10/96(WED)FPT.(7:35-12:07AM) Beautiful sky! ARCTURUS(2nd try.). JUPITER(Acq. 8:40pm; 1 + 3; 3 black spots in N. Equatorial belt rotating w/planet; ??). URANUS(twice). Visit Terry Kemp & Gary, Busy night. Sold 2-cards. \$61.00 + \$7.14 = \$68.14(\$14.38/hr.)
- 10 1065) 7/13/96(SAT)FPT.(7:25-8:40PM) Week-end of Hurricane Bertha! Hazy but ok sky at start. Then shut down by clouds. Too bad, as lots of people in Fpt.! ARCTURUS(Bad time finding. Acquired after re-leveling.) Sold 1 comet card. \$8.00 (\$6.41/hr.)
- 10 1066) 7/16/96(TUE)FPT.(7:02-11:02PM) Murky sky early, then intermittent haze. ARCTURUS(Moderate trouble finding.) JUPITER(Spent +/-15 min. waiting for it to cut thru the haze as it rose; 1+3.) Lots of no-contribs. Quiet in Fpt. I was in a bad mood and did not recruit very energetically. \$14.13 (\$3.53/hr.)
- 13 1067) 7/19/96(FRI)FPT.(7:49-12:54AM) Clear sky but poor seeing in aftermath of afternoon storms. Strong N. wind. ARCTURUS(1st try, for a change; thanks to excellent alignment!). JUPITER(Acq. at sunset. 4 moons on left. Great! Strips somewhat fuzzy.) SATURN(Spotted at 12:30AM, but I left it alone because of poor seeing.) Slow start, with lots of no-contribs. Better later on. \$ comet card sold. Visit Linda(Coda). \$85+\$5.92=\$90.92(\$17.90/) Visit Charlie Doble & his brother Leonard. C'd been in Hawaii & done some telescoping.
- 10 1068) 7/20/96(SAT)FPT.(6:56-01:00AM) Very good sky, tho not 100% steady. 5-d Moon(Piccolomini; Theophilus on terminator; gave up for Jupiter.) JUPITER(Great just after ss; then ok; 2 + 2). HALE-BOPP(maybe! Saw a dim patch where it was supposed to be.). SATURN(Acq. 12:25AM; unsteady, but improving as I left.) \$ comet cards. \$142+\$15.52 = \$157.52(\$25.95/) Visit: Wendy (dancer); Sue(dancer) & astronomer husband.
- 9 1069) 7/21/96(SUN)FPT.(5:50-9:45PM) Great sky till I arrived, then increasing clouds. Viewing hit & miss between clouds. 6-d. Moon(Theophilus, etc.). ARCTURUS(2nd try). VEGA(1st try!) JUPITER(hit & miss, but great for brief moments could see!; 2+2; Callisto way off plane!) Vistis: Kept company by Ken, a long-time Fpt. acquaintance; Mike Potter, with whom I adjourned to Cat's Eye Pub. 2 comet cards. \$14.35 (\$3.66/hr.)
- 10 1070) 7/23/96(TUE) WESTERN MD. COLLEGE FOR CHESAPEAKE BAY FDN.(7:45-9:37PM). Slightly hazy but OK sky. +/-15 students + Linda Block & Sam Hill. Fairly good group. Begin with def. of astronomy & desc. of scientific method. 8-d. Moon (Lots of craters!). Talked about Moon's craters & lack of same on Earth. Demonstrated "Handy-Hand" method with Moon/horizon. Read opening sentences of Galileo's "Starry Msg.", then showed JUPITER (good stripes; 3 on L.). Payment check to be mailed.(recorded on "Misc. Income" sheet.)
- 12 1071) 7/24/96(WED)FPT.(7:47-11:28PM). Hazy but doable sky. 9-d. MOON(Sunrise on Copernicus about 1/3 through at start. Nice!). JUPITER (Start delayed due to haze, then ok. 1+3). Semi-quiet night, but w/a few very busy periods. \$59.00 + \$5.04 = \$64.04 (\$17.37/hr.)

TOTAL THIS PAGE = \$ 668.03

TOTAL THIS YEAR = \$3,194.31

- 10 1072) 7/26/96(FRI)FPT.(7:34-02:07AM) Ok sky, but two 20-min. cloud interruptions. Night of bomb explosion at Atlanta Olympics. 11-d. MOON (Tycho). JUPITER (3+1). SATURN (Acq. delayed 20-min by clouds; murky at start, but great after clearing "Darth Vader tower! Some strong doubters!). Visit by Merle Ann; Mary Slicher. 3 comet cards. Bolivian musicians, early. Lou (one man band) hassled by police. \$97.00 + \$19.65 = \$116.65 (\$17.81/hr.)
- 11 1073) 7/27/96(SAT)FPT.(7:13-11:46PM) Drifting high clouds problem from start. Sit. improved for a while after sunset, but then it got worse & worse. Finally had to give up. Too bad, because lots of people out and much interest in me. Hi % of lookers contributed. VEGA(1st try, 1-hr. before ss!). 12-d. MOON (Tycho and terminator craters. Impressive! Eventually had to do thru fairly thick, streaming clouds, which lookers didn't seem to mind but which discouraged me!). JUPITER(1+3; Great! Nip & tuck w/clouds. Lots of interest in J, but clouds did it in while Moon was still doable.) Visit: Andy Kane, Richard Galloway. 3-comet cards. \$119.00 + \$14.61 = \$133.61 (\$29.38/hr.)
- 12 1074) 8/1/96(THU)FPT.(7:10-12:40AM) Clouds & haze at start, but then good sky. VEGA(+/-5th sweep.). JUPITER(2+2; sometimes clear view). 17-d. MOON(Sea of Crisis + Cleomedes; breathtaking view!). SATURN(Acq. 11:40PM; ^{5:45PM}murky but improving as I left). Sometimes busy. Visit by Margot Kelly's (Space Grant) daughter. 1-comet card. \$72.00 (\$13.10/hr.)
- 9 1075) 8/3/96(SAT)FPT.(8:54-2:08AM) Real odyssey of a day! Bad weather rpt., so I decided to go to Sheppards Twn. dance. Couldn't find company, so late afternoon I dropped that idea. Some Sun early eve. but still bad rpt. Night of Ravens opening game. Collected \$5 tip for helping someone park in front of house. Cycled around stadium and took some photos. Eventually I noticed sky was clearing! Fence sat for a while but then loaded scope and headed for Fpt., not really expecting to do much. Got a good parking spot in 5-mins. Sky clear at set-up and only got better during evening! Lots of lookers. JUPITER(2+2). 19-d. MOON (Great at 133X!). SATURN(Lookers awed!). I had been depressed and lonely most of the day, but in Fpt. I happily noticed I was very up and feeling very strong. (Voice was strong. Am noticing that when I'm even least bit depressed, my voice falters...goes up a 1/2 octave! No fun!). Gave out many Perseid announcements. Lots of generous contributors. 4 comet cards. \$134.00 + \$15.34 = \$149.34 (\$28.55/hr.) Visit Laurie DeWitt. (In other words, it looks like my depression is very situational--at home during the day I was depressed; immediately upon arriving in Fpt. I wasn't!)
- 9 1076) 8/4/96(SUN)FPT.(6:43-11:13PM). Sl. hazy sky. Quit upon arrival of intermittent clouds, as well as slow traffic. VEGA(Acq. after several sweeps and refocusing.) JUPITER(3+1; very noticeable dark spot in N. Belt, +/-10:30PM, rotating w/planet.) Several families w/good kids. 0 comet cards sold! \$63.00 + \$5.62 = \$68.62 (\$15.26/hr.)
- 10 1077) 8/5/96(MON)FPT.(7:33-11:53PM). Good, but sl. hazy sky. Unexpectedly, I felt somewhat depressed and had to make a special effort to keep my patter upbeat. Voice was ok. VEGA(3rd sweep after correcting for time error). JUPITER(Great! 2+2, close-in.). URANUS(Bright, unmistakable!). SATURN(Low, hazy. Briefly.) 1-comet card. \$52.93 (\$12.21/hr.)
- 10 1078) 8/6/96(TUE)FPT.(8:05-11:37PM). Hesitated to set-up because of clouds in W. Eventually did, which was good decision. Heavy traffic early eve. JUPITER(3+1, then 1+1). URANUS (once). 57 Aql (bright, wide, vertical double). SATURN(briefly). 1 comet card. Felt depressed for 2/3'rds eve. Big effort to act enthusiastic. Maybe my telescope act is finally becoming just a "job"! \$54.00 + \$6.93 = \$60.93 (\$17.23/hr.)
- 12 1079) 8/10/96(SAT)FPT.(7:15-12:10AM). Clear but turbulent sky. Interest slowed as crowd got younger. VEGA(2 sweep...a pleasure!). JUPITER (1+3 spread wide.). Still unable to find Hale-Bopp. SATURN(bright but unsteady). Very little mention of the Mars meteorite with signs of life which has been getting such a big play in the press. VISITS: Judy, a friend of Pete Eckles, who was happy to learn he's doing ok. John Byrnes & wife, John being my old sidekick from the Harbor Tunnel proj. Shannon, a girl relative of Kirk Milam. \$92.00 + \$10.21 = \$102.21 (\$20.79/hr.)

TOTAL THIS PAGE = \$ 756.29

TOTAL THIS YEAR = \$3,950.60

- 10 1080) 8/13/96(TUE)FPT.(8:10-12:30AM) Cloudy all day, then sudden clearing near sunset. Very good sky! JUPITER(2+2, then 1+2; RED SPOT...first sighting w/my scope in several years! w/effort, could even see some red!). URANUS (Distinct green dot.). SATURN (best view yet, this year!). VISITS: Louise Z.(her B.D., with her kids). Dancers Andy, Mike (astronomer w/woman astronomer from Penn State), Charlotte & Ellen. Great night in Fpt., except for some hassle from little kids, early.\$61.52 (\$14.21/hr.) A good number of passersby said they saw me on Dan Rodricks TV show on Mars. Nick Nadolny finally gave me the photo her took of me several years ago. VISITS: Intern'l. Cake Decorators conventioners!
- 12 1081) 8/15/96(THU)FPT.(7:47-12:00MN) Early clouds, but then ok sky. Visit by Laura Danly w/friends. Laura leaving STScI next week for teaching job at Pamona College. Says "politics" (cancellation of Project Astro funding by STScI) is reason. She bought a comet card. I'll miss her alot! VEGA(for Laura & friends on first try!). JUPITER (1+3, 1+2; Red Spot went by and was noticed by pregnant woman looker w/o my prompting. Amazing!). 1-comet card. \$51.00 + \$4.66 = \$55.66 (\$13.19/hr.) VISIT: Jerry Grey(Loyola Col. ref. librarian)w/husband celebrating 26th(?) wedding anniversary.
- 10 1082) 8/16/96(FRI)FPT.(8:29-12:05AM) Late start due to clouds, then hazy sky. Humid air and chilling wind made for unpleasant evening. JUPITER(4 on left, tho I was too uncomfortable to really enjoy!). ALBIREO(once). SATURN(trouble finding because of haze). VISITS: Bob & Catherine Potter. \$43.00 + \$7.09 = \$50.09 (\$13.90/hr.)
- 9 1083) 8/18/96(SUN)FPT.(6:57-12:18AM) Good sky. Spent 40-min. looking for Jupiter. Realigned tripod toward W and found it quickly. JUPITER(Red Spot vis. early; 3+1 wide spread-- nice!). URANUS(once). SATURN(10:30PM...lookers' enthusiasm lifted me out of depression!). \$65.00 + \$4.72 = \$69.72 (\$13.03/hr.) 4-d. MOON (briefly).
- 10 1084) 8/19/96(MON)FPT.(7:35-11:35PM) Sl. hazy sky. Unpleasant, humid wind late eve. 5-d. MOON(good at 133X). JUPITER(Acq. at sunset). SATURN(sl. hazy view, but lookers impressed!). VISITS: Chris, amateur photographer who works for Artog. and who took lots of photos w/twin lens of me & lookers. Carl Schottler, who may write art. on Chicago convention 28-yrs. later. First night out with new "dew cap", which is blue and sl. longer than old one. Worked good. \$57.00 + \$5.78 = \$62.78 (\$15.70/hr.)
- 12 1085) 8/20/96(TUE)FPT.(7:41-11:43PM) Hazy sky. 6-d. MOON(sometimes thru clouds; maria prominent). JUPITER(3+1; 2 dark spots in NEB). SATURN(delayed by haze). VISIT: Reenie. Problem w/depression; effort required to maintain patter. \$56.25 (\$13.96/hr.) 1-c.card VISITS: Brennan Jensen; Richard Elsberry(said my comet pic. on employees' door to planetarium at Science Ctr.).
- 11 1086) 8/22/96(THU)FPT.(7:28-12:57PM) Sl. hazy sky, humid, moderate seeing. 8-d. MOON(Tycho; late eve. sunrise on C. beginning!). JUPITER(3, 4, 3; lookers impressed). SATURN (murky at first, but then great!). Lots of enthusiastic lookers.\$74+7.26=\$81.26(14.83/ VISITS: Star Belaky(before I set-up). 5 young people from STScI, for whom I found URANUS. Joey...used to work at Nature Co.
- 10 1087) 8/25/96(SUN)FPT.(7:20-11:48PM) It doesn't get much better than tonight! Great sky, heavy traffic, lots of families with good kids, some big bill contribs.! 11-d. MOON (Terminator near Schickard awesome at 135X). JUPITER(2+2, wide). URANUS(Once; 1st try!). SATURN(Acq. 10PM; 2-moons; lookers overawed!). \$127.00+\$5.52 = \$132.52(\$29.65/)
- 16 1088) 8/26/96(MON)FPT.(7:53-10:42PM) Hazy but ok early; shut down by clouds...which we dis-appearing after I packed up. Bleak scene, but as soon as I set-up I had interest. 12-d. MOON(fine!). JUPITER(2+2; not bad!). \$45.00 + \$6.16 = \$51.16 (\$18.14/hr.)
- 10 1089) 8/30/96(FRI)FPT.(7:33-12:18AM) Back from day in Philly at Cezanne show w/Marta! V. good sky. JUPITER(sensational w/2 on L, 2 shadows, 1 on R!). SATURN(1st night w/new RKE 12mm eyepiece--definite improvement over 15mm!). 16-d.MOON(awesome!). VISIT by Terry & Melia(on roller blades!). Enthusiastic lookers!! \$132.00+8.10=\$140.10(\$29.49/)

TOTAL THIS PAGE = \$ 761.06

TOTAL THIS YEAR = \$4,711.66

- 12 1090) 8/31/96(SAT...Labor Day week-end)FPT.(7:28-01:05AM). Clear, but unsteady sky(prob. thanks to Hurricane Edouard). JUPITER(3+1, then 1+1). SATURN(Titan close beneath right tip of ring; nice! New occular, at 166.6X, seems to be no prob. w/lookers.) 17-d.MOON (impressive!). Sometimes very busy. VISITS: Andrea Halpern w/Mark Vidor; Joell(?). Loud Bolivian music, early. Unpleasant! \$173.00 + \$12.23 = \$185.23 (\$33.00/hr.)
- 1091) 9/1/96(SUN) KURT MILAM'S "DECK BUSTER" BACKYARD PARTY(7:45-9:30PM). On grass. Clear sky. JUPITER(Beautiful w/3 + 1 bright moons. However seeing was not very good. Image ok at 80X but blurry at 136X. Cleaning occular made no difference. I guess, looking low over the city was problem. Saw Saturn rising but decided to leave it be, as Merle Ann wanted to leave, plus I was not all that thrilled with telescoping there. Lots of looker but it didn't seem as important to them as to lookers in Fell's Pt. NO HAT
- 10 1092) 9/2/96(MON...Labor Day)FPT.(6:55-11:57PM). Hazy, then clear. JUPITER(3+1; very nice.). SATURN(A bit unsteady but nice). y AND(great!; B star very green!!). VISITS: Poet MIMI Zannino, who gave me a tape w/poem she wrote about Jupiter's 4 moons and me...and to whom I gave a comet photo as thanks. Jerry Bane, with whom I adjourned to Oyster for beer. Quiet night but steady traffic. \$67.00 + \$4.82 = \$71.82 (\$14.28/hr.)
- 12 1093) 9/7/96(SAT)FPT(7:04-12:53AM). Nice sky, following Hurrican Fran. JUPITER(3, then 4). SATURN(Lots of skeptics @ 166X; cleared tower 10:15PM). y AND(once). Visit by Jack Eisenberg, who took photos. Later I noticed a violent scuffle behind me in square, Jack and a woman fighting, with a big crowd chasing Jack. Police arrived immediately. Woman had objected to Jack's photographing her when she was kissing someone. Nobody was arrested. I don't know J8s exact status, yet. VISIT: Myra/Buzzy. \$155+\$14.36=\$171.33(\$29.47
- 10 1094) 9/9/96(MON)FPT(7:28-10:33PM). Hazy, but doable. JUPITER(2, then 3, then 4). SATURN(prett; murky; still, lookers impressed.). Could have stayed later but was being oppressed by exhaust from idling EMR vehicle. VISITS: James P. Hennessey, a tugboat hand and poet, w/ whom I traded a comet pic for his poem "Awe Struck"; Mike Baumann, who wanted copies of photos J. Eisenberg took of his boy looking thru scope. \$18.75 (\$6.09/hr.) I'm beginning to feel that each time I go out with my telescope I will experience a new, interesting, unforeseen adventure! (Another way to look at this is that even if I only make \$18.00+ and, to boot, give away a comet picture, enough interesting and unusual things happen while I'm there to make it all worth while!)
- 10 1095) 9/13/96(FRI)FPT.(7:47-1:00AM)Rosh Hashana(Supper at Andrea's. Didn't want to go to any service, nor simply go home and watch TV, so went telescoping.) Very clear but somewhat turbulent sky. JUPITER(1+3). SATURN(2° above trees @ 8:48PM; hit tower @ 9:58; cleared tower 10:08. Lots of skeptics!). Long visit by Cris(works at Artog. and Larry). Lots of no contribs. Cold (55°F). \$62.00 + \$62.00 + \$8.98 = \$70.98 (\$13.60/hr.). Val Smith!
- 12 1096) 9/14/96(SAT)FPT.(7:07-12:09AM). Arrived to find a huge tractor trailer parked at foot of sq. and long line of people waiting to tour it(was an America On-Line exhibit). I setup W of usual spot and acq. Jupiter. Terrible image due to truck. Then clouds arrived. Then Bolivian music started! Was trying to catch J thru holes in clouds, was having trouble focusing because of truck, and was being overwhelmed by music--a thoroughly miserable time. Exhibit closed at 7:45PM and, with help of looker, I moved to my reg. spot. Was bedeviled by clouds for rest of evening, which finally shut me down. JUPITER(2+1). SATURN(Good, once it cleared tower; 3 moons). VISIT: Terry K. w/a man friend from CT, with whom I adjourned to the Oyster; Denise(dancer). \$91.00 + \$9.88 = \$99.88 (\$19.86/)
- 12 1097) 9/19/96(THU)FPT.(6:50-12:27AM). Cloudless sky, somewhat turbulent. 6-d. MOON. JUPITER (2+2). SATURN(2 moons + background stars, but sl. blurry image). y AND(several times). Some mention of my City Paper Baltimore's Best listing. VISIT: Jeff Truman & friend. Started slow but heavy traffic mid-evening. \$80.00 + \$10.89 = \$90.89 (\$16.17/hr.)
- 1/4 1098) 9/20/96(FRI)BUFFALO GAP DANCE CAMP(11:30-3:30AM) Green=ate sky! Set up by dining hall to catch people going for a snack after the dance. Lots of lookers; many very impressed. Also lots of dew. Joined by Steve Bilanow who wanted to see deep sky stuff. Located some doubles. Took scope into d.hall to wipe off dew, then did M 42. This was my first look at it with this scope in a dark sky. Magnificent!! No hat. Sold 14 comet cards.

TOTAL THIS PAGE = \$ 708.88

TOTAL THIS YEAR = \$5,420.54

- 10 1099) 9/23/96(MON)FPT.(6:57-11:48PM) Incredible sky allowed use of RKE 12mm on everything! 10-d. MOON(Aristarchus!). JUPITER(2+2). SATURN(4-moons!). M13(for Larry). Y AND. decent traffic. Visit by Linda Turbyville & daughter. \$54.00+\$2.36=\$56.36(\$11.62/hr.) Visit: A cab parked on Thames and out got the driver and some children to look thru my scope. One of the kids, a teenaged girl named Charlie(1), had attended the reading clinic I participated in at St. Paul St. library.
- 12 1100) 9/25/96(WED)FPT.(6:52-11:30PM) Nice but sl. turbulent sky. Lots of inquiries about tmw. night's total lunar eclp. JUPITER(1+2; ok). 12-d. MOON(doable craters on edge; lookers impressed). SATURN(1+2; pretty good toward end of stint). Y AND(once). Lots of very enthusiastic lookers. \$66.00 + \$9.88 = \$75.88 (\$16.28/hr.)
- 10 1101) 9/26/96(THU)(8:15-10:45PM) NIGHT OF THE TOTAL ECLIPSE OF THE MOON. Except for a +/-3 min. window around 10:30PM, sky was totally overcast. I set-up tripod with "Total Eclipse of the Moon?"(sic) sign, but I never took scope out of case. Lots of visitors who had heard me on WJHU at 7:30AM and from 1:30 to 2PM on Mark Steiner's show. Many remarked, "I heard you on NPR." All liked how I came across. Also visitors who had seen City Paper and Sun announcements. In lieu of tonight's eclipse, I showed everybody my slide of the 4/12/68 total lunar w/Spice near the Moon. Too bad it was overcast and I couldn't use scope, because I am sure I would have had a big night, hatwise! Accompanied by Laura Malick, with whom I had supper at Jimmy's. NO HAT.
- 10 1102) 9/29/96(SUN)(7:30-11:18PM).Late start due to indecision over clouds. Intermittent clouds early, then ok sky. JUPITER(1+3). SATURN(3 moons). 16-d. MOON(M. Crisium on terminator. Occasional groups of enthusiastic lookers. \$48.00 + \$2.83 = \$50.83 (\$13.38/hr.)
- 10 1103) 9/30/96(MON)(6:43-11:56PM) Clear but sl. turbulent sky. Rpts. from numerous locations that Thur's. lunar eclp. was great! JUPITER(somewhat blurry; 3, then 4 moons). SATURN (acq. 7:30PM; blurry 1st hr., then good; 3 moons). URANUS(bright!). NEPTUNE(brighter than I expected). Y AND. 17-d. MOON(impressed lookers; Atlas/Hercules on term.). Quiet scene in Fpt., but I had continuous interest! \$73.00 + \$16.36 = \$89.36(\$17.14/hr.) VOICE PROBLEM! Tonight, none at all. However, for past few weeks have had alot of trouble projecting my voice. Last night, one of my reg. lookers, Larry, asked, "What's wrong with your voice?" I have wondered if prob. is due to 1) depression over not wanting to be there, 2) aging(does voice falter w/age?), 3) damage to my voice from having to talk over the Bolivian musicians. Tonight, I felt great, like I wanted to be there, and my voice was fine--very strong. I believe that #1 is the most likely explanation!
- 13 1104) 10/3/96(THU)(7:05-11:30PM) Good sky; cold(should have been wearing long-Johns!). JUPITER(1+3; nice!). SATURN(3 moons + 2 stars). URANUS(once). Busy early. VOICE: somewhat of a problem; was thinking that, at least subconsciously, I maybe didn't want to be there! \$57.00 + \$5.12 = \$62.12 (\$14.05/hr.). Some booths in place for Festival.
- 10 1105) 10/4/96(FRI)FPT.(6:23-01:45AM). Festival eve! Parked at covered meter(was lent traffic cone by Steve, a DPW electrician, who is very interested in astro, to secure slot). Great sky, except problems with smoke from pit beef cooker. JUPITER(2+2; nice!). SATURN(acq. 7:15PM; as usual, impressive!). Y AND(twice). Good traffic early-mid eve. Later, crowd very young and interest waned. ORI above Rec. Pier as I packed up. Sold 3 comet note cards. \$128.00 + 6.99 = \$134.99 (\$18.32/hr.) Cold; body ok but fingers became problem. VOICE: problem variable; sometimes present, sometimes not.
- 13 1106) 10/11/96(FRI)FPT.(6:35-12:05AM) Big ball game at Camden Yds. but no noticeable traffic from it. Great sky; cold. JUPITER (3, then 4). SATURN(very sharp at times; 3 moons). Crowd v. young by quitting time. \$59.00 + \$9.07 = \$68.07 (\$12.38/hr.). VOICE: intermittent problem. When its failing, I must make an strenuous effort to articulate!
- 9 1107) 10/12/96(SAT)FPT.(6:22-12:42AM). PEAK NIGHT! Even before I got parked, I could sense it was a good, touristie crowd. Interest & contribs. started w/a rush as soon as I had Jupiter, and continued to +/-11PM, after which crowd got younger. JUPITER. SATURN. Y AND. M 45. Clear by turbulent sky. Saturn image mediocre after dark, but 3 moons. Some good kids, to all of whom I gave maps. Nearly ran out of Sat. stickers. VOICE: NO PROBLEM! Yankees 8, Orioles 5! Lots of (excitedly) "I heard you on NPR!" \$169+\$12.75=\$181.75(\$28.71

TOTAL THIS PAGE = \$ 718.86

TOTAL THIS YEAR = \$6,139.40

- 9 1108) 10/14/96 (MON) HARBORPLACE! (1st time since spring...felt ok to be back!). (6:04-10:04PM). Great sky!; mild. Very busy early; slow toward end. JUPITER(2+2...fine). SATURN(initially thru ship ropes, then super...at its best...4 moons!). Lots of enthusiastic families. Gave out lots of maps. \$77.00 + \$6.64 = \$83.64 (\$20.91/hr.)
- 1109) 10/15/96 (TUE)HPL.(6:07-10:02PM). Kind of bleak scene; intermittent traffic. Ok sky. JUPITER. SATURN(2, maybe 3 moons). B CYG(once). Tempted to leave +/-8:30PM, but hung on. VISIT: Rachael and her mother, Jane, early lookers in Chas. Vil. 1st TIME USING NEW "VALET PARKING" SERVICE FOR CAR. THEY KEPT CAR IN DRIVEWAY. PAID \$5 + \$1 TIP. \$46.26 (\$11.82/hr.). VOICE: ok!
- 9 1110) 10/16/96(WED)HPL.(6:05-10:09PM) Sl. hazy sky. Bleak scene, but with periods of good traffic. 4-d. MOON(pretty nice). JUPITER(3, then 4). SATURN(2 moons). VISIT by Jerry (of dancers Jerry & Peggy). Gave out lots of maps. \$80.00 + \$16.96 = \$96.96 (\$23.82/hr.)
- 18 1111) 10/17/96(THU) KRUEGER SCHECHTER DAY SCHOOL, STEVENSON (7:20-8:35PM) Invid by science teacher, Brian Schexnayder, who came across me in Fpt. Clouds arriving at set up time, but luckily was able to do telescope program. +/-50 people. Somewhat chaotic. Teacher had not prepared ahead, even tho I sent lots of material. I gave brief opening remarks, then went to scope. 5-d. MOON; JUPITER; SATURN(Titon just off ring tip...nice!). Everyone seemed please with looks. Gave stickers to all. \$75.00. (In that, due to clouds, I probably wouldn't have gone to Hpl., this was kind of a paywindfall for me.) Polar aligned by magnetic compass (9.75°W), which worked pretty well.
- 13 1112) 10/24/96(THU)FPT.(7-10:50PM). Headed for Hpl but increasing clouds diverted me to Fpt. to wait and see, where I eventually set-up. Slow at start, but surprisingly heavy traffic toward mid-eve. Shut down by clouds. JUPITER(over Adm. Cup but not bad!). 16 CYG(art. in morning paper re planet there; wide 6-mag. double.). 12-d. MOON(ok crater on limb). SATURN(sometimes very sharp; 2 moons). VISIT: A NASA engineer working on Cassini but who had never see Saturn nor Titan thru a scope! VOICE: Sometimes ok; sometimes faltering; felt bored sometimes. Visit by SSIP Teacher who said I rec. best evaluations. \$45.00 + \$8.43 = \$53.43 (\$13.94/hr.). Visit Ann & Dave Green. Still getting "I heard you on the Steiner show" comments...almost a month later!
- 1113) 10/28/96(MON)HPL.(5:08-9:40 EST!). Great sky! JUPITER(3+1). SATURN(As good as it can get in downtown Balto.; 3 + 1 moons.). URANUS (once). 16-d. MOON(Briefly, then lost for +/-1 1/2 hrs. behind WTC; then at reappearance; term. approaching M. Crisium.). Sometimes depressingly bleak scene, with occasional bursts of activity. \$99.05 (\$21.83/hr.)
- 10 1114) 10/30/96(WED)HPL.(5:05-10:11PM). Mild temp. Bad seeing early, but it improved. JUPITER (pretty blurry; 3 moons). SATURN(Blurry early, then good; 3 moons). First eve. of Nat. Middle School Assoc. mtg. Some teacher lookers. \$118.00 + \$13.09 = \$131.09 (\$25.69/hr.) 18-d. MOON (briefly, before it went behind WTC).
- 9 1115) 10/31/96(THU)HPL.(4:59-9:50PM) HALLOWEEN(but next to no H. in Hpl!). Disappointing night. I was anticipating lots of interest from teachers at the middle school conv. Even printed up extra maps. However, I had only a handfull at my scope. Maybe they all went to Fpt.? Some spurts of activity during long spells of quiet. Joe (panhandler) kept putting coins in my hat till I insisted he stop. Told me all the panhandlers in Hpl. call me "the planet man" and that they keep a protective eye on me. He eventually bummed \$1 from me, saying he had been robbed on the way to eat. JUPITER(briefly). SATURN(3 moons). \$82.00 + \$11.79 = \$93.79 (\$19.34/hr.) Sold two comet cards. TONIGHT, I FELT ANGRY WHEN PEOPLE LOOKED AND DIDN'T CONTRIBUTE. I SEE THIS AS A GOOD SIGN. IT SAYS THAT I THINK ENOUGH OF MYSELF, THESE DAYS, THAT I DON'T HAVE TO FEEL GOOD ONLY BY GIVING MY ASSETS AWAY. TONIGHT, FOR THE FIRST TIME, I CAN FEEL A DESIRE TO CHARGE FOR LOOKS, EVEN IF IT REQUIRES GETTING A PERMIT. I FEEL STRONG ABOUT THE IDEA OF SELLING LOOKS, OF CHARGING FOR THEM, AND I SEE GIVING AWAY LOOKS AS A WEAK PERSONAL POSITION.
- 10 1116) 11/2/96(SAT)HPL.(5:02-8:43PM) Cold & breezy. Trouble w/hands! Good sky. Lots of interest. Accompanied by Laura Malick. who is writing me up for her free lance writing course (She helped me due to my cold hands!). JUPITER(briefly). SATURN(Impressive; 3 moons, maybe 4). Packed up early due to cold. \$115.00 + \$11.34 = \$126.34 (\$34.27/hr.)

TOTAL THIS PAGE = \$ 805.56

TOTAL THIS YEAR = \$6,944.96

- 9 1117) 11/3/96(SUN)HPL.(4:53-7:43PM). Cold but breezless, tolerable. Great sky! JUPITER (Great rush of lookers, even before moons vis.! Eventually 3 moons.). SATURN(Terrific! 3 moons in little triangle at ring tip!). Like last night, I gave star maps to almost every family with kids, telling the kids to take them to school and to tell their teachers that they saw Saturn! \$72.00 + \$10.21 = \$82.21 (\$28.98/hr.)
- 11/29/96 I replaced original tangent arm assembly with a new one (P/N 51-1004 SSC Tangent Arm Assm.) I ordered from Meade. In my living room, it appears to be working well. Hopefully, it will keep the scope from moving with slight touches from lookers!
- 9 1118) 12/8/96(SUN)HPL.(4:32-6:00PM). Mild temp., but clouds moving in. Decided to set-up on theory that if I stayed home sky would be nice. SATURN behind cloud at start, then only intermittent views. Ring very narrow! Had to turn away lots of lookers. Telescope troubles, too. New tangent arm working erratically; sometimes it jammed. I think it will work out eventually, however. Also bad dec reading on Saturn-- $1\frac{1}{2}^\circ$ low. Why? Scope needs a good check in quiet conditions! \$10.32 (\$7.02/hr.)
- 9 1119) 12/21/96(SAT)HPL.(4:37-5:35PM). Clear sky, but very cold. Kind of bleak scene. SATURN(acq. quickly before ss; nice view, with distinct ring shadow across globe and Titan close on the right). Packed up for lack of traffic + cold. \$14.69 (\$15.30/hr.) Visit by Peter Eccles!
- 9 1120) 12/27/96(FRI)HPL.(4:52-6:55PM). Closed down by clouds. Too bad, because relatively good number of strollers in Hpl. Mild temp. SATURN(acq. 1st try; 2 moons. Lookers liked!). CAPELLA(briefly, after loosing Sat.). Lots of families. Gave out +/-8 maps. \$52.00 + \$9.58 = \$61.58 (\$30.08/hr.)
- 9 1121) 12/30/96(MON)HPL.(5:08-8:17PM). Bad weather rpt., but sky clear. Stage in place for NYE event blocked passersby view of me. Should have set-up on upper level. A fair number of people around. SATURN(2, maybe 3 moons; problem w/collimation as it got more westerly. Maybe I should think more about the 7" Maksutov!). Would have probably stayed longer, if it were not for stage, as mild temp. Gave out maps liberally. \$49.33 (\$15.65/hr.)

TOTAL THIS PAGE = \$ 218.73

TOTAL FOR YEAR = \$7,163.69

1996 IAAY Space and Astronomy Day

Maryland Space Grant Consortium

The Johns Hopkins University

Saturday, October 26, 1996

STUDENT SCHEDULE: GROUP 11

9:00 a.m. Welcome, Opening Remarks, and Keynote Presentation (See main program)

9:45 a.m. Break and dismissal to workshops

10:15 a.m. Workshop I: "Hubble Space Telescope -- NASA's Time Machine"

Brian Rehm
NASA/Goddard Space Flight Center

LOCATION: Bloomberg Center
Room 168

11:45 a.m. Break (Students escorted to lunch by group guides)

12:00 p.m. LUNCH: Levering Hall Cafeteria
(Students remain with group guides during lunch)

1:00 p.m. Workshop II: "PC's in Space"

Tom Devlin, Software Engineer
Jackson & Tull

Dr. John Wood, Astronomer
Hubble Space Telescope, NASA/Goddard Space Flight Center

LOCATION: Bloomberg Center
Room 462, Board Room

2:45 p.m. Break (Students return to Shriver Auditorium with group guides)

3:00 p.m. Final Presentation (See main program)

Students should remain with their escorts and/or IAAY Staff at all times when traveling around the campus. At the conclusion of the day, students attending the day without parents should meet parents at your pre-arranged locations. Students having any difficulties should notify IAAY Staff immediately.

Hopkins security can be reached by dialing 410-516-4600 or 7777 on a campus phone.

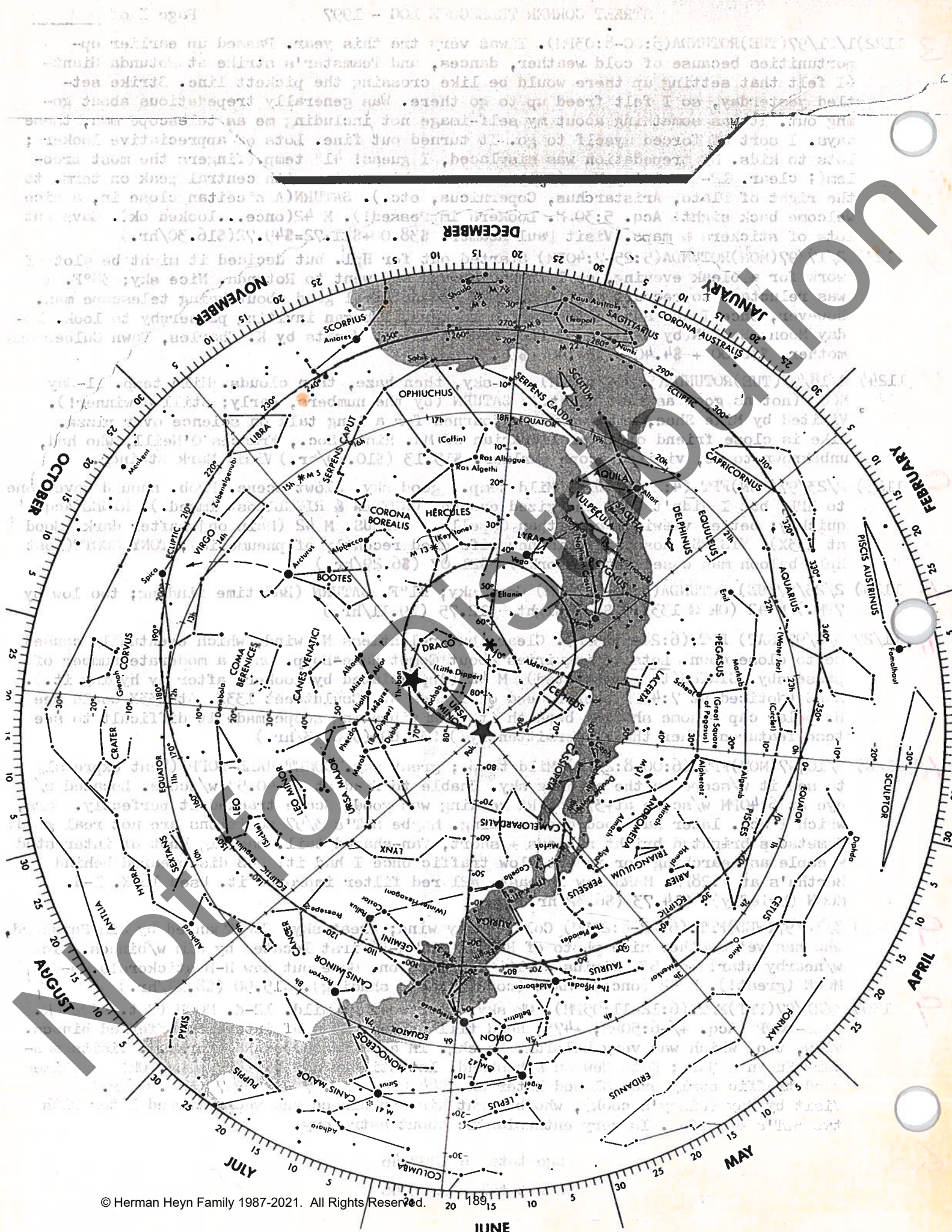
1997

Not for Distribution

- 3 1122) 1/21/97(TUE) ROTUNDA(5:00-8:03PM). First time out this year. Passed up earlier opportunities because of cold weather, dances, and Teamster's strike at Rotunda Giant-I felt that setting up there would be like crossing the picket line. Strike settled yesterday, so I felt freed up to go there. Was generally trepedatious about going out. It was something about my self-image not including me as telescope man, these days. I sort of forced myself to go. It turned out fine. Lots of appreciative lookers; lots to kids. My trepedation was misplaced, I guess! 41° temp.(fingers the most problem); clear. 12-d. rising Moon(Pythagoras...a big crater with central peak on term. to the right of Plato, Aristarchus, Copernicus, etc.). SATURN(With Titan close in, a nice welcome back sight! Acq. 5:30PM. Lookers impressed!). M 42(once...looked ok). Gave out lots of stickers & maps. Visit Paul Reamer. \$38.00+\$11.72=\$49.72(\$16.30/hr.)
- 4 1123) 2/17/97(MON) ROTUNDA(5:25-7:40PM) Started out for Hpl. but decided it might be alot of work for a bleak evening, so I turned around and went to Rotunda. Nice sky; 38°F. I was reluctant to recruit at first, as I did not feel good about being telescope man. However, once I had some enthusiastic lookers, I began inviting passersby to look. 10-day Moon. SATURN(by 6PM). M 42 (not bad at 133X). Visits by K. Charles, Dawn Culbersons mother. \$30.00 + \$4.40 = \$34.40 (\$15.31/hr.).
- 4 1124) 2/18/97(TUE) ROTUNDA(5:30-7:00PM). Ok sky, then haze, then clouds. Mild temp. 11-Day MOON (not as good as last night!). SATURN (by the numbers, early; still a winner!). Visited by Mike Shea, with whom I adjourned for a long talk on science over pizza. Mike is close friend of chief librarian of Md. Hist. Soc., Francis O'Neill, who had, unbeknown to me, visited scope earlier. \$15.13 (\$10.09/hr.) Visit Mark Steiner.
- 9 1125) 2/23/97(SUN) FPT.(4:27-7:48PM) Mild temp., good sky. Quiet scene. Prob. should have gone to HPL, but I didn't feel energized enough. CAPELLA (Acq. almost immed.). RIGEL(Acq. quickly; better viewing angle than Capella.) SIRIUS. M 42 (Main obj. after dark. Good at 133X). VISITS: Ross(said his new wife died recently of pneumonia); TONY SCOTT(Lost Hpl. baloon man case; out of work.). \$21.07 (\$6.29/hr.)
- 4 1126) 2/25/97(TUE) ROTUNDA(6:09-7:33PM) Good sky; 41°F. SATURN (Bad time finding; too low by 7PM.) M 42 (Ok @ 133X.) Slow night. \$12.75 (\$9.11/hr.)
- 11 1127) 3/8/97(SAT) FPT.(6:28-9:23PM). Clear, but relentless N. wind, which eventually caused me to close down. Lots of inquiries about Comet Hale-Bopp. Only a moderate number of passersby. SIRIUS(to get started). M 42 (Appreciated by lookers after my hyping it.). MARS (Noticed at 7:43PM over E. end of Thames St. Bright. 14" dia. At 133X could see N. polar cap + some shading beneath it. Wind vibrating scope made it difficult to see these features other than intermittently.) \$30.69 (\$10.53/hr.)
- 10 1128) 3/10/97(MON) FPT.(6:00-8:20PM) Mild temp.; great sky. COMET HALE-BOPP!(Went expressly to see it w/scope in the evening sky. Unable to find at +/-40.5° w/scope. Located w/eye at 6:40PM w/scope at +37.5°. RA reading was good. Scope tracked it perfectly. Mars, which I acq. later had good dec. reading. Maybe S&T's 3/97 positions are not real good? Thru scope H-B had bright nucleus + short, fan-shaped tail. Had big knot of interested when I was searching for it but slow traffic once I had it! H-B disappeared behind Bertha's at 7:28PM. MARS(Low in east. #21 red filter improved it. Used 160X. 1-d. MOON (briefly). \$14.73 (\$6.32/hr.)
- 9 1129) 3/12/97(WED) FPT.(6:22-8:20PM) Cold, gusty wind; great sky. Accompanied by Jim Sarsgard, who has yet another nice photo of H-B. COMET H-B(First located by Jim w/binocs. Nice w/nearby star! +42.5°. Sirius = -16.9...right on. Gave out new H-B stickers!). 3-d. MOON (great!). M 42 (once). MARS (considerable shading). \$15.90 (\$8.11/hr.)
- 9 1130) 3/21/97(FRI) FPT.(6:12-11:05PM). Ok sky, poor seeing; mild. 12-d. MOON (Bot. edge ok.) HALE-BOPP (Acq. +/-6:50PM; +47°; held till 8:50PM. Lots of interest. Offered binocs. view, too, which was very helpful. No chg. in appearance.) MARS (Murky.). Visits dancers Susan & Mark; Kate Newman & husband. 1st stint w/new battery plug. Ok! Sometimes good traffic early eve. Slowed later on. \$84.00 + \$13.07 = \$98.07 (\$20.08/hr.) Visit by Kay (Jimmy's cook), who brought his own binocs and who returned later with two BLT's + coffee. Is very enthusiastic about astronomy.

Page total = \$292.46

Year total = \$292.46



- 9 1131) 3/23/97 (SUN) FPT.(6:40-8:30PM). Great sky, then sudden haze, then drizzle! Accompanied by Sun reporter Janice D'Arcy and photographer Ken ? Story to run in coming week, supposedly. HALE-BOPP! (Acq. 6:45PM. I offer both telescope & binocs. looks. Several distinct ripples around nucleus. They made focusing easier. Great interest from passersby and from people coming to FPT. esp. to look thru my scope, including a couple who came from Reistertown. Comet lost to encroaching clouds suddenly.) FULL MOON (This was to be a 92% lunar eclipse night, starting at 9:58PM, but the clouds didn't allow.) Visits by neighbor's Michelle & Wiley; Pat Hallie & family. \$85.00 + \$3.68 = \$88.68 (\$48.46/hr.)
- 10 1132) 3/24/97(MON)FPT.(6:30-9:02PM). Great sky, then obscuring haze. Bleak scene, but I had fairly steady traffic, including lookers who came especially to see H-B. COMET HALE-BOPP (47.5°; brighter than previously; no binocs, as I left them home!; lost in haze +/-8:40PM). MARS(thru tree limbs, but dark areas obvious). 15-d. MOON (briefly). \$73.00 + \$8.96 = \$81.96 (\$32.36/hr.)
- 10 1133) 3/26/97(WED)FPT.(6:42-10:37PM). Cold wind at start, then mild. Ok sky. COMET HALE-BOPP (+45.7°; bright, ringlets; I offered binco looks to all, which they liked.). MARS (Thru branches. Sirtis Major?). Tried to pack up at 9:37PM but lookers kept arriving. I wish the view of both the comet & Mars were better thru scope. \$47.00 + \$10.87 = \$57.87 (\$14.77/hr.) Sold 2 comet photos.
- 11 1134) 3/27/97(THUR)FPT.(6:35-10:58PM). Great sky, mild. Lots of people out. COMET HALE-BOPP (Used 40mm K, yielding 50X. Worked ok. Held till 9:31PM.). MARS (220X w/#21 filter; ok, except for tree branches!). Very busy night. Visits: Merle Ann; Larry ? (with whom I adjourned to Oyster, where we met Cy Horine, birdwatcher and 1949 Gilman lacross player); Gus (friend of Terry, who bought 2 photos). \$111.00 + \$15.57 = \$126.57 (\$28.83/hr.) Sold 4 comet photos.
- 11 1135) 3/28/97(FRI)FPT.(6:52-11:04PM). Clouds all day, adverse weather rpt., then sudden clearing. Prob. would have not gone out, except for call fro Beattie Levi saying it was sunny in Pikesville. This was the evening of the day of the "Star Gazer"art. by Janice Darcy in the Sun. Lots of + comments on it. One woman brought a copy for me to autograph. Also the evening of the day of the mass suicide in Calif. of cultists who saw some omen in Hale-Bopp. Lots of in jest "can you see the UFO" comments. COMET HALE-BOPP (Usual difficult routine. Binocs helped alot. Lot of people reporting they've seen it on their own and that it was "great".) MARS (For a while.) Visit by Alice Lium(dance; with whom I adjourned to the Oyster for beer; Dawn Clubertson. \$119.05 + \$12.05 = \$131.05 (\$31.2)
- 9 1136) 3/29/97(SAT)FPT.(6:47-8:15PM). Set up in hopes clouds would dissipate. They did, briefly, but then returned, and I packed up. Sometimes, cold, unpleasant wind. COMET HALE-BOPP (46.1°; acq. on 1st try; bright, with star in field.). MARS (once). VISITS: Larry (an inner city kid who was seriously interest in what I was doing. Various dancers and others. Lots of good comments on yesterday's Sun art, one being, "You've been coming down here for a long time, so it is about time they gave you a write-up." Mr. Sklar (who bought a comet photo). \$22.00 + \$1.16 = \$23.16 (\$15.76/hr.)
- 10 1137) 3/30/97(EASTER SUN)FPT.(6:32-8:00PM). Quiet scene. Very few strollers. Set-up in hopes clouds would allow, but they didn't. VISITS: Passersby, people who came having seen Sun art., Gary-Terry-Maliea. Gary had discovered my connection with Peace & Freedom News and said he was a distributor at Catonsville H.S., where he knew Woody Miles! No hat.
- 10 1138) 4/2/97(WED)FPT.(6:40-9:55PM). Good sky, mild. Sometimes heavy traffic. Collimated on y And before acq. COMET HALE BOPP(44.9°; same view as previously, with ripples; lookers appreciated binocs view better; had radio and played G. Keilor's "Hale-Bopp" song several times, but lookers couldn't concentrate on it; photos taken last night at Rick' farm very well received.). VISITS: John Strohsacker. \$113.00 + \$9.67 = \$122.67 (\$37.74/hr.)

Page total = \$631.96

Year total = \$924.42

- 10 1139) 4/3/97(THUR)FPT.(6:33-8:33PM). Mild, but increasing cloudiness, which caused me to pack-up early. Adjourned to Duda's for supper w/Gilbert Miller. COMET HALE-BOPP(difficulty locating due to haze; intermittent views till clouded out.). VISIT: Larry, the good kid from several night ago. \$still alot of interest in comet, including many who have seen it naked-eye but want a telescopic view. \$32.75 (\$16.38/). Sold 9 comet photos.
- 10 1140) 4/4/97(FRI)FPT.(6:35-9:25PM). Mild. Great sky, then increasing haze. Sometimes very heavy traffic, incl. people who came from distances to see comet thru scope. Frequent comments on Sun art. Trouble finding parking spot, which was wearing. Supper at Jimmy's. COMET HALE-BOPP (Good at first; like a pebble dropped in a pond; gradually diminished by haze.) VISITS: K. Olsen & Andre Pap.; Dilts family; Andy Kane. Sold 23 comet photos. \$110.00 + \$5.79 = \$115.79 (\$40.81/hr.)
- 10 1141) 4/7/97(MON)FPT.(7:45-10:25PM). Great sky, but irritating wind. COMET HALE-BOPP(Acq. 8PM; DST! 42°; still looks bright; gave it up a bit early because slow traffic + wind.) VISITS: Larry; Charlie Newton, who said he also went to Garrison JHS. \$72.75 (\$27.28/hr.)
- 9 1142) 4/8/97(TUE)FPT.(7:46-9:07). Clouds moved in after sunset. Packed up, but saw comet from my front porch (bright!) while unloading. COMET HALE-BOPP(Intermittently, till clouds did it in.) VISITS: Roberta and her friend, who I met yesterday in S. Gdns. \$12.21(\$9.06/hr.)
- 10 1143) 4/10/97(THU)FPT.(7:56-10:10PM). Great sky, then haze. 3-d. MOON (Incredible...the best!). COMET HALE-BOPP(Acq.8:06; 40°?; same as ever; binocs best; faded in haze). VISITS: Larry Blische (pur. 6 comet cards!); Christine(dancer). \$41.00 + \$5.89 = \$46.89 (\$20.96/hr.)
- 10 1144) 4/14/97(MON)FPT.(7:20-10:30PM). Good sky. 7-d. MOON(Acq. in daylight. Used polarizer to good advantage. Moon as good as it gets!). COMET HALE-BOPP (Still good! 38°. Acq. 8:10. Will move to Square next time!). \$40.11 (\$12.65/hr.)
- 13 1145) 4/15/97(TUE)FPT.(7:15-10:32PM). Good sky. 8-d. MOON(Plato on term.; terrific!). COMET HALE-BOPP(Acq.8:10PM; 36.5°; hardly fading at all! I set-up in square, tonight, which made comet easier to find w/binocs, as was easy to see w/eye.) VISIT: Osna; Phil; Larry Blische. \$40.00 + \$4.10 = \$44.10 (\$13.43/hr.)
- 2 1146) 4/16/97(WED) AM) Montessori School, Brooklynville, talk. (Misc. income)
- 12 1146) 4/16/97(WED)FPT.(7:20-9:57PM). Ok sky, then sudden clouds. 9-d. MOON (Copernicus sunrise 50%...terrific, esp. at 166.6X Edmund!). COMET HALE-BOPP (Same as ever; still attracts interest.). VISITS: Family that used to live 35th St., now Roger's F.; Larry Blische, w/whom I adjourned to his Henderson Warf Apt. to set type. \$35.00 + \$5.35 = \$40.35(\$15.4 Comet acq. 8:13; 35°; alt. +/-32°.
- 10 1147) 4/20/97(SUN)FPT.(4:45-10:26PM). Cloudless sky; sl. breezy, early. SIRIUS BY DAY(Trouble finding...then shifted tripod sl. and acq. immed. at correct dec. Lots of lookers noticed it was "dancing around" due to air turbulence.) 13-d. MOON (Acq. +/-6:30PM. Ok crate on S. rim.). COMET HALE BOPP(Acq. 8:15PM;+33.5°; still amazingly bright!. Lost 10PM. Lot of enthusiastic lookers.). VISITS: John & Sally; Geri Bell & Bill; dancers Susan & ?; neighbors Michelle & Wiley; Ross; Jay; philosopher Bill & Art. \$72.00+\$16.65=\$88.65(\$15.4/hr.)
- 10 1148) 4/26/97(SAT)FPT.(6:05-10:02PM) Mild; hazy clouds till sunset, then ok sky. SIRIUS(Trouble locating, then refocused and found immed. at -16.7°). Set-up in daytime as much to sell comet cards/photos as to do a star! Sold them at a steady rate. Total = 34 cards. COMET HALE BOPP(Acq.8:15PM; +28.8°. Still very doable! Lost in tree 9:58PM. Invited everybody to use binocs.) Visits: Larry B.; Walter & Cy Galvin(just after I shut down). Very busy night, what with selling cards & looks! \$56.86 (\$14.38/hr.)
- 2 1149) 4/27/97(SUN) SHERWOOD GARDENS(10-12:30PM) 3" refractor. Adverse weather rpt. Intermittent high clouds, then overcast. SUN (Nary a spot but intermitten clouds caught lookers' interest, as did my "sunrise" demonstrations.)One little girl fascinated by rainbow from prism. Another little girl came by wearing a purple cat T-shirt, which she said she love Bought at Farmer's Mkt. Visits: Alan Umoto & fam., Eliz.-Ted-Thea, Greg & Barb Pease w/ 2 1/4" camera set-up. Great scene. Next time take star maps, mnemonic. Comet maps, too! Sold 17 comet cards. No hat.

TOTAL THIS PAGE = \$ 550.46

TOTAL THIS YEAR = \$1,474.88

gle negative, the Daguerreotype's fidelity to detail made it an immediate success with the public.

From the moment of its birth, photography has been closely associated with astronomy. The French astronomer FRANCOIS ARAGO made the first public announcement of the discovery of photography and subsequently convinced the French government to purchase the rights to it from Daguerre and turn over the process to the public. It was the English astronomer JOHN HERSCHEL, a friend of Talbot, who coined the terms "negative", "positive" and "photography". Also, Herschel proposed that the unused silver chloride be removed from Talbot's positives with the chemical sodium thiosulphate, which we now know as "fixer". On 3/23/1840, the English-American chemist J.W. DRAPER used a 3-inch objective to take the first photograph, a daguerreotype, of the Moon. In 1842 the French physicist, Alexandre Becquerel succeeded in making the first photograph of the solar spectrum, with some of its dark lines clearly visible. The night of 7/16/1850, W.C. BOND and J. WHIPPLE at Harvard College Observatory obtained a daguerreotype of Vega, the first photograph of a star. (Ref. Newhall, B., The History of Photography from 1839 to the Present Day, Museum of Modern Art, 1949.)

II. ASTROPHOTOGRAPHY WITH A TELESCOPE (equatorial mount required)

A. Methods--"piggyback"(camera sitting atop scope), prime focus, eyepiece projection (req. for magnification), afocal (photographing through the eyepiece)

B. Hardware for attaching camera to scope (Orion catalog, pp. 81-83)

C. Medium

1. Film (B&W, color)--wide field of view, good resolution¹

2. CCD (charged couple device.. "chip") excellent sensitivity, computer terminal in lieu of dark room chemicals, but small field of view with somewhat less resolution than film³

III. STILL CAMERA BACKYARD PHOTOGRAPHY (ie., camera on tripod)²

A. Examples of photos taken with still camera--constellations, conjunctions, eclipses, star trails, comets, meteors from HMH's collection(slides)

B. Technique (presented in detail in article "Photographing Mars")

IV. COMET HYAKUTAKE

A. How to locate (prime time for observing/photographing is 3/22 thru 4/1/96)

B. How to photograph with still camera - maximum exposure (with 50mm lens before trailing: 3/22 = 15", 3/24 = 18", 3/25 = 23", 3/26 = 41", 3/27 = 225", 3/28 = 129", 3/29 = 44", 3/30 = 35", 3/31 = 28", 4/1 = 26". ISO 400 color slide or print film.

1) Frequently used films: B&W = gas-hypered Kodak Tech Pan 2415; color = Kodak Gold 400, K. Royal Gold 1000, Fugichrome 400, Fugicolor Super HG 400

2) Film can be developed by ordinary commercial processors. With print film contact "don't overexpose!!" Slide film has advantage of being projectable.

- 13 1150) 5/2/97(FRI)FPT.(7:21-10:00PM). This was the night Cy Galvin & friends were supposed to show up for looks, but they never did. Otherwise, miserable stint. Strong wind the whole time. Hazy sky, then clearing; shut down by total haze. SIRIUS(After failing to find a CMI, shifted tripod and found a CMA immed.). MARS(Jumping around due to wind. COMET HALE BOPP(25°; loc. w/binocs but had much trouble getting in scope...prob. because was too dull in finder; just a white blob.). Sold 8 cards + xerox.\$9.01(\$3.40/hr!
- 2 1151) 5/4/97(SUN)SHERWOOD GDNS.(11-4:30PM). "Family Day"(re: Bonnie Gannon, 410-889-2285). Food & drink stand; lots of families w/young kids. Chilly, sl. windy, but ok sky. 3" REFRACTOR (SUN, with no spots. Passing clouds provided some excitement. Lookers amazed at "sunrise" effect.) Visit by Lynn Dewitt; Jim & Christian Sarsgard. Sold 53 comet cards + 2 xerox blow-ups. NO HAT.
- 2 1152) 5/11/97(SUN)SHERWOOD GDNS. (11AM to 5PM). Blue sky w/few clouds. Not nearly so many people around as last wk. Somewhat uncomfortable in the heat of the Sun. SUN(One small spot which, in a way, made all the difference!) Visits from lots of friends/acquaintances. Sold 59 cards(!). NO HAT.
- 10 1153) 5/11/97(SUN)FPT.(7:50-10:19PM). Very good sky. HALE-BOPP(No longer visible from Fpt., which is ok by me, as I'm tired of it!). 5-DAY MOON(Nice...viewers impressed!). Accompanied all evening by Steve Rawls, Austin, TX., photographer for American Way, American Airlines' monthly magazine, who shot many mostly posed shots of me. In several months the mag. will have a story of Baltimore attractions which, Steve said, will open with a photo and write-up of me! Sold 8 cards. \$36.80 (\$14.80/hr.)
- 13 1154) 5/17/97(SAT)FPT.(7:10-12:48AM) Preakness Day...goodly number of passersby, but mostly youngish. Great sky. 11-DAY MOON(Good craters in the Tycho to Schickard region. Lookers wowed...many of them.). Visits by Steve & Marcie Bickel, Bill and Sally Heller. Sold 19 comet cards. \$140.00 + \$8.78 = \$148.78 (\$26.43/hr.)
- 10 1155) 5/20/97(TUE)FPT.(7:52-11:05PM). Supper at Jimmy's w/Tony Romano, who then visited scope for several hrs. Very nice sky, but constant wind. Sort of bleak scene, early, but had respectful traffic at scope. 14-D. MOON(Not quite full; focused on craters below Tycho; a looker extremely startled by plane flying across Moon!; lots of "wow"'s from lookers. Sold 25 comet cards. Visit by Woody & Lindsay(bought 15 cards). \$43.00 + \$5.35 = \$48.35 (\$15.05/hr.)
- 13 1156) 5/22/97(THU)FPT.(9:12-12:00MN). Late start due to "fencesitting", and also because post full Moon was main feature. Nice sky; cool(wore winter jacket!). 16-D MOON (Just past full. Lookers impressed w/crater on rim. Moon rose at 8:39 and I acquired at 9:45PM.). 541 Leo (prior to Moon; on 1st try!; bright primary w/5th mag. companion; nice). Xi Crv (close identical pair; ok). 24 Com (close dim pair). People seemed more attuned to my celebrityhood. Sold 6 comet cards. \$35.10 (\$12.54/hr.)
- 10 1157) 6/8/97(SUN)FPT.(6:30-9:45PM). Ok sky but cold wind after sunset. Failed to find either Venus or A Boo by daylight. Why?? 3+-day MOON(Acq. +/-7:45PM; hazy, but it sharpened up after dark. Too soon dipped below roof.). a BOO, a VIR, MARS (fallbacks). Gave streets handout to two who read Sun art. and were enthusiastic about my work. Visits by Ross and Larry. Sold 3 cards. Sloe, lackluster stint! \$18.48 (\$5.69/hr.)
- 10 1158) 6/9/97(MON)FPT.(7:25-10:03PM). Ok sky. Visited by Michael (of Barclay St.) for a good while. ARCTURUS (1% high; why?). 4+-DAY MOON (Nice. Used 133X, mostly. Moved scope with Michael from center to E. edge of sq. to hold it longer. Below roof 10:05PM; image degrading badly prior to that.). Sold 2 cards. Visit Eliasberg.\$23.90 (\$9.09/hr)
- 9 1159) 6/10/97(TUE)FPT.(7:26-10:37PM). Good sky. Accompanied by Tony R. most of evening. 5+-DAY MOON(Strong craters; Theophilus on term.).3-cards. \$36.40 (\$11.42/hr.)
- 10 1160) 6/12/97(THU)FPT.(7:50-9:33PM). BAD NIGHT! Was cloudy all day w/rain predicted, but late afternoon sky became good. Was not prepared energywise nor psychologically to go out, but I went anyway. Arrived to find Fire Engine #3 parked in front of my spot w/motor running. Terrible noise and fumes. After 1 hr., I asked them to back-up 30', which they did. But noise was still a great bother! 7+-DAY MOON(Lots of craters; hazed up after 1 1/4-hrs. Probably could have continued but packed-up in disgust! 1-card. \$8.10 (\$4.71/hr.)

PAGE TOTAL = \$ 364.92

YEAR TOTAL = \$1,839.80

- 117.4 1161) 6/14/97(SAT) ELK NECK ST. PK. (Andrea's cub scout overnight!). Cloudy all day w/clearing at sunset. Gave talk on astronomy as a science, using 3" as example telescope, concluding w/Q&A session (their's & mine). Put away 3"; set-up 8" using magnetic compass (11 1/2°W), which worked pretty well. (Eyepiece locking screw missing! Averted disaster with rubber bands. Found screw at end of stint in scope box!). 9+-DAY MOON (Late sunrise on Copernicus. Great luck! Used mainly 133X...or is it 160X?). ALBIREO(As an ex. of star colors--lookers impressed!). Xi Boo (Not too good because, by this time, scope was dewing up badly.). Quit due to heavy dew. (8:50-11:24PM). 7-cards + 1-8x12. FEE \$100.00
- 10 1162) 6/15/97(SUN)FPT.(7:05-10:49PM). Greak sky, mild temp., but strong wind late eve. forced me to close-up. 10+-DAY MOON(Started on Tycho at 80X during day; switched to Jura Mts. @ 133X(?) after dark. Lots of good looker reaching...many wows!). TELESCOPE (3 problems: 1)declination lock hassle; 2)focus now starting to feel like some rubbing or grinding occuring; 3 scope may be getting too heavy for me.). VISITS: Mark Evans + other familiar lookers. 7-cards sold. \$61.98 (\$16.59/hr.)
- 10 1163) 6/19/97(THU...Eve's B.D.!)FPT.(7:45-12:16AM). Great sky; mild. ARCTURUS(Searched and searched w/o finding. Why? Rotated scope numerous times. When found after dark, dec. reading was only few 1/10th off.). NEAR FULL MOON (Will be full 3:09PM tmw.; craters around edge at 133X; Tycho; lookers satisfied.). Visits: Larry and Kieran (his g.f.'s son; Chris; Jay). 14-cards. \$58.00 + \$10.49 = \$68.49 (\$15.14/hr.)
- 12 1164) 6/20/97(FRI)FPT.(8:09-2:10AM!) Excellent, sl. hazy sky. Had to set up toward E. side of square because of Andean musicians. JUST PAST FULL MOON (M. rose at 8:24PM, but I didn't acq. till 9:45PM because of my position. Tycho + edge craters. Difficult for me! I bounc back and forth with 25mm and 15mm oculars. Otherwise, lookers impressed!). ARCTURUS(before Moon; acq. w/effort. Dec. 0.5° high. Why?). JUPITER!(Spotted over Rec. Pier 12:55AM Exciting event. Lookers awed!). As for past 2 wks., many questions about report that icy comets are crashing into Earth. This finding has really grabbed the public's addention! Visits: Terry, Melia & Gary. Several lookers commented on my "streets" discovery. Sold 6 comet cards. \$94.00 + \$11.09 = \$105.09 (\$17.47/hr.) Visit: Frank Somerville, retired SUN religion writer and another reported who are working on a "Baltimore Fun" publication and will include me.
- 13 1165) 6/21/97(SAT)FPT.(8:02-12:54PM). Great sky(Interestingly, several passersby mistook long twilight light pollution for a cloudy sky!). To catch rising Moon as early as poss. set up on S. side of Thames St., bet. fire plug and Fpt. sign.Slow at first, then good traffic for Moon....also to avoid loud Andean music. ARCTURUS(First try, renewing my faith in my system!). B SCO & B CYG(briefly). 16+-day MOON(Rose quite red; started w/80X on Tycho region and finished w/133X on Crisium/Langrenus; lookers pleased.). Visits: Larry, Mike (dancer). 16 cards. \$79.00 + \$6.14 = \$85.14 (\$17.48/hr.)
- 18 1166) 6/23/97(MON)FPT.(8:15-11:35PM). Prior to setting up, I read an article in "The Independen (Mark Adams' tabloid) saying the City is planning to remove the "Tomb of the Unknown Wino" because vagrants and homeless congregate on it. I was incensed, because it is a nice place for neighborhood kids to hang out. I showed art. to the young woman guitar player/singer, who immed. started a petition to save the spot. She had no trouble obtaining many signatures from passersby and local kids. I told her to call R. Alvarez at the Sun. Meanwhile, I will make some calls, too. Nice sky. ARCTURUS(On first try, but then I could find nothing else"by the numbers" for the rest of the evening!) ALBIREO (Ok object, but I would have liked to have another, too. But, couldn't find anything else!). Sold 11 cards. \$19.75 (\$5.93/hr.)
- 12 1167) 6/24/97(TUE)FPT.(8:30-11:57PM). Discussions w/Julia Rose & Mark Evans on "tomb" prob. Nice sky; sl. haze. ARCTURUS(1st try!). ALBIREO(main feature). Tried to hold out for Jupiter. Prob. would have been another 20-mins. Visit by Larry; also by a guy who bought a 4" Meade Ref. having looked thru my scope! \$22.42 (\$6.50/hr.)

PAGE TOTAL = \$ 462.87

YEAR TOTAL = \$2,302.67

- 9 1168) 6/27/97 (FRI) FPT. (8:07-1:26AM). Accompanied by Tony R. Very nice sky; mild temp. ARCTURUS (In field on 1st look!). ALBIREO (Main feature till Jupiter.). JUPITER (Acq. 12:17AM as it rose above S. end of Rec. Pier roof, as viewed from W. side of Sq. A dozen or so people were excitedly waiting with me for it to appear. 3 moons.). Visit by Eliasberg, who said he mailed me copy of Astronomy mag. art. mentioning me. Sold 13 cards. \$39.00 + \$7.34 = \$46.34 (\$8.72/hr.). (What happened!)
- 13 1169) 6/28/97 (SAT) FPT. (8:05-1:30AM). Accom. by T.R., briefly. Another nice sky; pleasant temp. ARCTURUS (Easy!). ALBIREO (My patter was, "The main feature tonight is Jupiter, which we'll have at 12:15. Till then we're looking at this pretty double star." Am getting a bit tired of B Cyg because of all the explaining required!). JUPITER (Acq. 12:14AM; Great! 2 + 2; lookers wowed; lots of comments about moons being in such a straight line). Visits: people from just ending stained glass trade show. \$69.00 + \$12.09 = \$81.09 (\$14.96/hr.). 7-cards.
- 10 1170) 7/3/97 (THU) FPT. (8:47-01:00AM). Paid condolence call of Dick Eliasberg on the way on the occasion of the death of his daughter, Carol. Tony R. watched my car while I was in the apt. After parking in FPT., changed clothes in the Bears store. Transparent sky but poor seeing. ARCTURUS (easy). ALBIREO (For most of evening. I feel I did a very effective job with kids by showing them the Summer T. in the sky and then Albireo inside it on the ASP July map! Otherwise, expended much energy explaining star to lookers.). M13 and M57 (w/ effort for one looker. Very vague. Should not try them again from FPT.!). JUPITER (Acq. 11:53PM. 1+2 then 1+3. Sometimes v. poor image. Visits: Tony, Ross, Larry, Beth C. Sold 6 cards. \$42.00 + \$4.46 = \$46.46 (\$11.01/hr.).
- 13 1171) 7/5/97 (SAT) FPT. (7:17-10:05PM). Clouds moved in as I arrived and never left. Too bad, because of yesterday's landing on Mars of the Pathfinder/Sojourner probe, I was prepared (even with a nice sign) to do Mars early evening. STAR OF SOUTH BALTIMORE (My only available object! I didn't recruit lookers, but I accepted contribs.). After packing up, I waited around to see if Jupiter would be doable, but while sometimes visible, it was not seeable enough to set up for again. Nice scene in FPT., tonight! \$9.95. 1-card. Visit by Raylene (DC dancer).
- 1172) 7/6/97 (SUN) FPT. (8:16-11:52PM). Iffy sky toward sunset, but it cleared a bit and was doable, tho hazy. ARCTURUS (briefly, for alignment). MARS! (Hung red Mars sign. Acq. at 8:39PM. Used 160X, but still a small dot. Much less cognizance of Mars lander news than I anticipated. Nobody seemed especially excited by prospect of seeing Mars, tonight. May should have done Albireo! Lost +/- 10:45PM.) ALBIREO (Till Jupiter.). JUPITER (Prob. should have left before it rose, but I wanted to glimpse it. Acq. 11:50PM. Great, w/4 moons in 2 groupings on left!). TONIGHT, FOR FIRST TIME IN MEMORY, WAS PUNCHED (IN CHEST) BY A DRUNK DERELICT TO WHOM I REFUSED A LOOK! Otherwise, slow night. 4-cards. \$36.35 (\$10.10/)
- 10 1173) 7/7/97 (MON) FPT. (7:58-11:26PM). Hazy, then ok sky. ARCTURUS (to align). MARS (I sense most lookers are disappointed w/view. Should go back to B Cyg and do Mars only by request!). ALBIREO (After loosing Mars.). Decided not to wait for Jupiter. Visit by Jay, who gave me copy of book "Unusual Mars Surface Features", plus a few St. John's Wort capsules for me to try for my depression. Sold 4 cards. \$36.13 (\$9.38/hr.) 95 OPH (Acq. for hop to M 8 but didn't find latter.)
- 10 1174) 7/10/97 (THU) FPT. (7:43-01:10AM). Great sky. Set-up on E. side of Sq. for Moon, then moved to W. side for Jupiter. 6-d. MOON (Wonderful, w/Theophilus, Cyrillus, & Catharina just beyond term.). MARS (Occasionally.). ALBIREO (Filler-in.). Failed to find M7-8-22. Why? URANUS (Easy, after re-leveling scope!). Long visit by Larry B. 2-cards. \$59.39 (\$10.90/)
- 12 1175) 7/11/97 (FRI) FPT (7:43-01:08AM). Great sky. Again, started on E. side of sq. and, w/help, at 11:05PM moved to W side. 7-d. MOON (Lookers awed, but I didn't think it was a spectacular as last night. Moon & Mars together in finder. I had everybody look!). JUPITER (Acq. 11:20PM. 3+3 on R, then 1+3.). URANUS (Found easily twice, then couldn't find!). Visits by Wayne & Marty Taylor & kids, Loraine Rovig, ? Dewitt. \$98.00 + \$10.81 = \$108.81 (\$20.10/

PAGE TOTAL = \$ 424.52
YEAR TOTAL = \$2,727.19

- 10 1176) 7/7/97(SAT)FPT.(7:21-1:50AM). Good, but sl. hazy sky. Long visit by John Strohsacker. Set-up in mid-square. Acq. Jupiter within moments of loosing Moon! 8-d. MOON(Lots of c's in south; Apennines in N.). JUPITER(2+2; lookers impressed!). URANUS(Acq. once, then failed numerous times. Why?). Visits Jerry & Peggy Woods and young cousins; Carole(dancer, who bought cards & T-shirt(!); Mario Livio of STScI. \$129.00+\$7.82=\$136.82 (\$21.10/)
- 1177) 7/13/97(SUN)FPT.(7:38-12:20AM). Sl. hazy but OK sky. 9-d. MOON(Sunrise on Copernicus just beginning at start and just getting good when Moon hit roof of A.F.Inn. Tycho, S. Wall, + many good features. AT 10:20PM EDT, a looker, Chuck Ruth, asked "What is that red spot in that crater?" His remark followed by +/-1 hr. a similar remark by another looker. At this point I decided to look for myself but didn't see anything unusual. I put Ruth back at the eyepiece (133X) and he reported still seeing it. He continued to see it, which he described as "a ballpoint pen mark" at 160X, but at 220X he didn't see it. When we went back to lower powers, he continued not seeing it. By working with my Moon map, Ruth determined the "red spot" was in Crater Timocharis.). MARS (once). JUPITER(Acq. 11:10PM. Luster diminished by haze. 3+1.). Visits by Alfred & Linda Himmelrich, Abe Adler; lots of interest from members of a wedding party who were staying at Inn. All looked at both Moon & Jupiter. I gave bride & groom a comet card. \$83.00 + \$6.57 = \$89.57 (\$19.06/hr.) Sold 6 cards + 1 blow-up. Unlike last night, I was pretty depressed tonight. Even with all the interest I was getting (expressions of satisfaction by lookers), I couldn't shake it. Kept telling myself that I'm not happy doing this, anymore. Have lost the show-and-tell need. Is not more like a job, which I'm tired of. Visit by Bob & Marilyn (old peade movement friends).
- 12 1178) 7/14/97(MON)FPT.(8:05-11:26PM). Sky hazy but good for Moon. Pretty quiet scene for a Mon. 10-d. MOON(No LTP! Tycho, Frau Mauro, Copernicus, Plato. Lots of sights!). JUPITER (Simply waited for it to appear, had two lookers, packed up.) 3 c's. \$39.15 (\$11.68/hr.)
- 9 1179) 7/15/97(TUE)FPT.(8:16-12:00MN). Hazy but nice sky. WBAL (ch.11)'s Lisa Robbins and cameraman Chuck spend +/-1 1/2 hrs. taping & interviewing me. Sequence will air Fri. night at 11PM. After being somewhat depressed at prospect of being interview, as it turned out I was in a very "up" head and feel it went fine! 11-d. MOON(Tycho, Shickard, Copernicus. Chuck show Tycho thru scope.). JUPITER(Brightness reduced considerably by haze; 1+3.). Closed out evening w/visit to Cat's Eye w/Elana. 3-cards. \$37.00 + \$0.81 = \$37.81(\$10.1) Visit by Peter Fricke (Eng. dancer).
- 10 1180) 7/17/97(THU)FPT.(7:58-12:32AM). Fine sky...only sl. hazy. Somewhat humid. 13-d. MOON (Tycho, Aristarchus, rim craters...good!). JUPITER(Acq. 10:53PM; murkey at first, then pretty good; 2+1.). Visits by Sandra Cannon (In Balto. from WA state and who I met last night at contra dance! Nick Glifis.). 2-cards + 1-blow-up. \$52.00 + \$7.98 = \$59.98(\$13.0)
- 13 1181) 7/19/97(SAT)FPT.(7:30-01:52AM). Loud Andean music till 9:45PM! Great sky; mild. ARCTURUS (1st try!). MARS (2nd try. Stayed with till Moon rose.). 15-d. FULL MOON(Acq. +/-9:15PM. Tough obj! Eventually centered on Tranquilitus region.). JUPITER(3+1. Fine sight, except seeing not terrific.). Visits: Joan & Al. +/-15 very positive comments on my last night's Channel 11 (WBAL) appearance! \$182.00 + \$13.89 = \$195.89 (\$30.77/hr.)
- 10 1182) 7/20/97(SUN)FPT.(7:47-12:32AM). Sky sometimes sl. hazy. Long visit by Chris Borroughs, STScI, discoverer of ring around 1987A, who seemed fascinated w/small scope astronomy. ARCTURUS(1st try.). MARS(Failed many times to find before ss, till I realigned.). B CYG, 61 CYG, B SCO, a SCO(While awaiting Moon, + for Chris.). 16-d. MOON(Acq. 10:05PM; 28th anniversary of 1st landing. Good show at Mare Crisium limb!). JUPITER(Acq. 10:40; Fantastic, w/4 moons in line on L in perfect sequence!). Visits by Jay, Larry B.(last night in Balto....too bad(!)...but will ret. for business every 3 wks.), Andrea, Avi and her mother, Ruth, Marge ?, Elana, + many enthusiastic lookers; Linda of Hometown G. Continuing comments on my Ch. 11 show. SCOPE(Continuing problem w/dec. latch.) Sometimes busy night! \$62.00 + \$3.00 = \$65.00 (\$13.67/hr.)

PAGE TOTAL = \$ 624.22
 YEAR TOTAL = \$3,351.41

- 10 1183) 7/26/97(SAT)FPT.(8:40-9:45PM). Hazy sky at first, then it got worse, and I packed-up and went to swing dance. VEGA(1st try. Touted it as the star in the movie Contact, but no lookers had seen it!). Visits: Dr. Diamond(physician), Marty Cohen (Company 7). Sold 1-card. \$8.50 (\$7.87/hr.)
- 1184) 7/27/97(SUN) PATAPSCO ST. PK., CATONSVILLE, FOR LINDA BLOCK'S CHESAPEAKE FDN. Bad sky all day, then clearing late afternoon. Failed miserably trying to polar align by mag. compass! Why? Eventually aligned by acq. Vega and a Boo and squinching scope till dec. reading close. +/-20 students, some of whom showed good interest. Opened with my astronomy as a science talk. VEGA, ALBIREO, M 13, a SCO, B SCO. Presentation lasted +/-1-hr. Gave Aug. sky maps to all. \$100.00 (ck rec. 9/2/97)
- 10 1185) 7/29/97(TUE)FPT.(7:56-11:55PM). V. nice sky, then closed down by haze. VEGA(Adjusted tripod 3 times before finding; then had v.g. alignment.). MARS, ALBIREO, ANTARES, NGC 6231(=41.89! nice!!), URANUS, NEPTUNE....all of these while accompanied by a guy named Holmes and his handicapped daughter, Olivia and awaiting Jupiter. JUPITER(Acq. 10:03; ok, but then clouds problems.). 0 cards! \$31.50 (\$7.89/hr.)
- 10 1186) 7/30/97(WED)FPT.(7:45-12:32AM). Perfect sky...no kidding! Cool temp.(no sunspots!). VEGA(After squinching tripod once.). ALBIREO (Crisp, beautiful.). URANUS. NGC 6231 (Nicest view, yet. Lookers enjoyed!). EARTH SATELLITE(At about 9:45PM a person in the crowd said, "What's that!" I looked up and saw a very bright (maybe mag. -4 or -5) light over the Admiral's Cup gliding toward N.E., where, as it passed behind the weather vane on the Kiosk, it faded out. I suggested to crowd that it was Mir.) JUPITER(1+3; moons very bright.). SATURN (1st acquisition...at 12:27AM...over tree on Lee's corner; writhing a bit.). VISITS: Gerry Klauber w/2nd wife; Elana. I was somewhat depressed all evening and having trouble choosing words. \$81.55 (\$17.05/hr.)
- 9 1187) 7/31/97(THU)FPT.(7:50-12:57AM). Sky good but not like last night. VEGA(After one tripod squinch.). ALBIREO. URANUS. JUPITER(Acq. 9:50PM; 2+2, except III & IV were in mutual eclp. at first & looked like one!). SATURN. Passerby rpt'd. seeing 75 meteors/hr. several night ago.(S-delta Aquarids?). Was on Gulf Coast. 2-cards. \$81.95 (\$16.01/hr)
- 1188) 8/1/97(FRI)FPT.(7:59-12:48AM). Intermittent clouds; finally shut down by them. VEGA(After several squinches. Hopefully, I'm getting better at this!). ALBIREO(Thanks to perfect alignment acq. way before dark.). JUPITER(Acq. 9:49PM; 4 on R, including another III/IV eclp.). I was in good head! 9-cards. Gave out many "Shooting Star Alert" blurbs. \$103.00 + \$10.65 = \$113.65 (\$22.87/hr.) VISIT: Bec & her friend, George. Still receiving lots of, "I saw you on TV!" comments (from Ch. 11, 7/18).
- 11 1189) 8/2/97(SAT)FPT.(8:49-01:14AM). Late start due to weather miscue.(Had supper at the Fields, with Vanessa, and planned to go dancing. By end of meal clouds had left so excused myself, went home for scope, and went to Fpt. Had good parking luck!). ALBIREO. JUPITER(3, then 2, than 3; so-so seeing.). SATURN(Acq. delayed due to haze.). VISITS: Eliasberg & friends; a looker reported seeing me on TV today(!), otherwise still numerous "I saw you...." comments. 2-cards. \$116.00 + \$11.53 = \$127.53(\$28.92/)
- 12 1190) 8/6/97(WED)FPT.(7:45-8:45PM). Expected clear but got clouds. Packed-up. VEGA(After several tries. Finally got perfect alignment.). ALBIREO(Briefly.). Had a beer at W. Oyster w/Tony Scott, then drove him home. 5-cards. \$2.00
- 10 1191) 8/8/97(FRI)FPT.(7:10-1:00AM). V. good sky. 5-d. MOON(Theophilis). VEGA(Couldn't find! Why?). JUPITER(1+3; impressive!). SATURN(Great!). VISITS: Merle Ann + son John & daughter, Betty; Brian Schaffer & dancers; John S. 4-cards. \$145.00 + \$11.27 = \$156.27(\$26. VISIT: Guy who took Jim P's. UMBC Spanish class and said Jim passed around my comet card and spoke of me, alot!
- 10 1192) 8/9/97(SAT)FPT.(7:50-12:55AM). Delayed start watching sky. Sit. improved so set-up. Intermittent haze, but gen. doable. 6-d. MOON. JUPITER. Unable to see Saturn. VISITS: Dr. Rbt. Williams, STScI director, who enthusiastically supported my work! Hettlemans. Accidentally left comet cards home! A young opl. excitedly reported seeing a bright meteor over Fpt.! A lookers rpt'd. many meteors last night. \$109 + \$10.14 = \$119.14(23! Rpt. from Donna Keck at Frm's Mkt. this I had write-up in Raleigh, NC paper. Rpt. from looker that I had write-up in Ocean City, Md. paper!

PAGE TOTAL = \$ 822.09

YEAR TOTAL = \$4,173.50

- 9 1193) 8/10/97(SUN)FPT.(7:14-12:25AM). Sl. hazy but excellent sky. BALLOON ARTISTS!: Leon announced that he complained to police about CHARLES, and police arrested him, supposedly for peddling w/o license. 7-d. MOON(Super!). VEGA(w/effort.). JUPITER(Fine!). URANUS(Briefly.). y AND(ibid). 57 AQL(wide ≠). SATURN(Acq.11:52PM; nice; lots of doubters. VISITS: various interesting people! \$68.00 + \$3.61 = \$71.61 (\$13.80/hr.) Informed by woman that her 21-yr. old son's astro. interest began when he looked thru my scope at age 16. Tonight gave out both Jupiter and Saturn stickers. Ugh!
- 10 1194) 8/11/97(MON)FPT.(7:27-11:40PM). Intermittent haze; shut down by clouds. 8-d. MOON(1st qt.; top part best!). VEGA(For alignment purposes.). JUPITER(Pretty good, except prob. w/heat from parked police cars.). VISIT: Elana. Lots of no pays. 1-card.\$39.25(\$9.31/hr.)
- 10 1195) 8/14/97(THU)FPT.(7:53-9:58PM). Nice sky, then clouds. 11-d. MOON(Tycho; Copernicus; Aristarchus on term.). JUPITER(briefly). 6-cards + 1-8x12. \$11.12 (\$5.35/hr.) VISIT: Laurel Durenberger.
- 10 1196) 8/15/97(FRI)FPT.(7:55-1:06AM). Ominous haze in W. at start, then intermittent haze, then clear. 12-d. MOON; JUPITER (acq. 8:50PM); SATURN. 3-cards. Too many no-contribs! VISIT: Harry Blum. I was in very good head--maybe due to St. John's Wort? \$126.81 (\$24.48/hr.) VISITS: Kate Walsh & Dave; Amy Kenniston.
- 10 1197) 8/18/97(MON)FPT.(7:47-12:50AM). V.G. sky; mild. VEGA(w/effort. Seems tripod alignment is different every time!). B Cyg, MARS, JUPITER, SATURN(acq. 11:10PM). MIR SPACE STATION (+/-9:22PM; had 12-15 people waiting to see it; per Westminster Astro. Soc. notice, it appeared in NW heading SE; started dim, brightened to +/- -2, then blanked out. Very exciting!). VISIT: Kate, Dave & friends. Sometimes busy night! ~~10-cards~~. \$95.07(\$18.81/hr.)
- 12 1198) 8/21/97(THU)FPT.(8:47-12:15AM). Start delayed by clouds. Intermittent clouds, thereafter. Lost significant contribs. because of clouds. JUPITER, 18-d. MOON, SATURN. Sold 3-cards. \$61.27 (\$17.66/hr....remarkable, given all the down time included!).
- 13 1199) 8/22/97(FRI)FPT.(8:06-12:45AM). Nice sky but uncomfortably cold wind all evening. B CYG (for alignment). JUPITER(v. murky, then ok.). SATURN. 19-d. MOON. VISITS: various friends + John Stroh. Acq. J @ 8:21pm & Sat. @ 10:57PM. Discouraged by well-healed non-contribs.! Otherwise, lots of enthusiastic lookers. 6-cards. \$116.00 + \$4.30 = \$120.30 (\$25.87/hr.)
- 10 1200) 8/23/97(SAT)FPT.(7:58-12:55AM). Clouds arrived shortly after J. appeared and stayed for +/-30 min., then great sky! First time in days that I was in a pretty good head--maybe due to talk this afternoon w/Kay. My voice projected, and I could choose appropriate words Lots of enthusiastic lookers, incl. some who returned for Saturn. JUPITER, SATURN(as good as it gets!), 20-d. MOON. Got a "I saw you on TV...you were great!" comment. Drove Elana home. A group of Israeli(?) software engrs. spend time w/me and said they'd put me on the Internet. 2-cards. \$140.00 + \$7.78 = \$147.78 (\$29.87/hr.)
- 10 1201) 8/24/97(SUN)FPT.(7:52-9:55PM). Ok sky, then intermittent clouds, then clouded out. Too bad, as Jupiter looked very sharp. VEGA, ALBIREO, JUPITER. 1-card. VISIT: Don, a retiree from Wheaton, w/sailboat tied-up in FPT; first Jupiter looker was woman whose b.d. is today and said looking thru scope was best part of her day. \$26.31 (\$12.85/hr.) When I complained a bit about telescoping, Don said he thought I had one of the best jobs going!
- 15 1202) 8/26/97(TUE)FPT.(8:12-12:03AM). For most of evening high, hazy clouds everywhere but where Jupiter was. JUPITER(Obsv'd. To make a full transit, shadow and all; Red Spot on c.l. at midnight--1st time obsv'd. in 2 yrs.?). SATURN(Never saw it w/eye and never saw Titan, however lookers wowed as usual!). 2-cards. \$70.91 (\$18.42/hr.!)
- 11 1203) 8/27/97(WED)FPT.(8:06-11:43PM). Hazy but doable sky till shut down by clouds. JUPITER. SATURN. Some enthusiastic lookers. Given icecream by one couple. VISITS: the O'Connors w/ Bill's son from Germany, Michael; Lenore Cowen & husband Bill(L.C. offered to open a WEB page for me, which I find an exciting idea!); Gil Miller. \$56.69 (\$15.67/hr.)
- 10 1204) 8/28/97(THU)FPT.(8:00-12:00AM). Sl. hazy sky. I in a dark mood, thoughts of never wanting to do it again, ~~6~~ ⁶having outgrown this. JUPITER & SATURN. 2-cards. \$63.08 (\$15.77/hr.)


TOTAL THIS PAGE = \$ 890.20


TOTAL THIS YEAR = \$5,063.70


- 12 1205)8/29/97(FRI)FPT.(7:42-01:05AM). V.G. sky. I was in better head than last night, but my voice was a bit weak, leading me to believe that, deep down, I was feeling unhappy about being there. JUPITER(4 on right; Red Spot early eve.). SATURN(As incredible as always!). 5-cards. \$137.00 + \$12.49 = \$149.49 (\$27.79/hr.)
- 1206)8/30/97(SAT)FPT.(7:40-01:05AM). Good sky. I in good head which got better as evening wore on. Slow start, then incredibly busy till about 10PM. JUPITER. SATURN(To deal w/ all the skeptics, I started heading them off at the pass by saying, "If it doesn't look real, it's in good focus for you!" I think it helped! Otherwise, S looked great, even, once, at 220X.) VISITS: J. Strohsacker; Sam Feldman. \$202.00+\$12.21=214.21(\$39.55, VISITS: Erin Robb(mason); a young woman who said as a "little girl" she looked through my telescope in Sherwood Gdns.; still rec. comments on Ch. 11 TV program!
- 6 1207)8/31/97(SUN)KURT MILAM'S DECK BUSTER PARTY(8:15-9:30PM). Ok sky, but some cloud blockage. I felt reluctant to set-up. Did so, however, when I started getting requests from people, "When are you going to set-up your telescope?" Dropped tripod on way to set-up spot. No serious damage(it fell off of handtruck). JUPITER(Lots of appreciative lookers--children & adults. Gave out stickers. In haste to set-up late, I was unorganized and didn't have cards, shirts at scope.). NO HAT.
- 13 1208)9/3/97(WED)FPT.(8-9:58PM). Decreasing clouds, so I set-up. Closed down by newly arriving clouds. JUPITER(1 moon on R + 1 shadow; still, the few lookers liked it.). VISITS: Tom Chalkly, delivering Fpt. posters I said I'd try to sell; Tony & Paula. \$14.60(\$7.42/hr)
- 9 1209)9/4/97(THU)FPT.(7:31-12:15AM). Great sky. JUPITER(Was clear of Rec. pier at start; 3 moons, then 4, w/shadow of IV.). URANUS & NEPTUNE(For visiting astronomer, Gerard Williger and his friend, Anya.). SATURN(Terrific; at least 3 moons.). Slow night, maybe due to ball games. 3-cards. \$40.00 + \$8.13 = \$48.13 (\$10.18/hr.)
- 10 1210)9/5/97(FRI)FPT.(7:17-12:15AM). Mild temp. 4-d. MOON & VENUS (briefly). JUPITER(Red Spot mid-eve.). SATURN(Some haze problem, but mostly doable.). VISTS: Chris Boroughs; Woody. 5-cards + 1-T-shirt(!). Left early as crowd got younger. \$97.00 + \$3.75 = \$100.75(\$20.27/
- 11 1211)9/6/97(SAT)FPT.(7:22-12:35AM). Mild temp. 5-d. MOON(briefly). JUPITER. SATURN(Intermittent cloud trouble, otherwise v.g. at 166X.). VISITS: Nancy Evans on date w/Tom Shields an enthusiastic family from Chas. Vil days. I, feeling very good. 3-cards.\$158.11(\$30.3 VISIT: Bob Smith, Irish musician, who played his banjo near me most of the evening.
- N/A 1212)9/12/97(FRI)BUFFALO GAP, W.VA.(Midnight-2AM). Nice sky but only fair seeing. Set up near dining hall for after-the-dance snackers. 12-d. MOON, JUPITER, SATURN. Most passers-bys stopped for look. Many very impressed I gave out Fpt. stickers. Did not set up again Sat. night because of intermittent clouds. Sold 23 cards+1 blow-up+1 tee. NO HAT.
- 9 1213)9/15/97(MON)HARBORPLACE!(7:00-11:33PM). Had my usual opening night trepidation, but it went well. Can now park at Pratt St. Pavilion w/parking pass! issued by Hpl.! Hazy but ok sky, lots of enthusiastic lookers (some ball game attendees). VENUS(briefly), 15-d. MOON, JUPITER, SATURN(acq. 10:30PM but maybe could have by 10AM). VISIT: Mark Evans. 6-comet cards sold. \$115.00 + \$16.60 = \$131.60 (\$28.92/hr.) (Part of my trepidation was due to the news of Tony's (Ramano) passing away over the week-end. I felt like I was courting bad luck, like both of us going together! Happily, everything was very fine! Tony's funeral is 10AM tomorrow at St. Leo's, in Little Italy.)
- 9 1214)9/16/97(TUE)HPL.(8:03-10:50PM). Had to delay start till Lisa (Unicyclelady) finished. JUPITER, HARVEST MOON(twice), SATURN. Day of Tony's funeral. 2-cards.\$90.56 (\$32.54/hr.)
- 7 1215)9/18/97(THU)HPL.(7:05-11:43). Great sky! Lots of lookers from Natural Foods convention! VENUS; JUPITER(4, then 3 + shadow); SATURN(3 moons); 18-d.MOON(Fantastic--Mare Crisium on terminator). VISIT: Lauren (E. dancer). 4-cards. \$154.00 + \$11.98 = \$165.98(\$35.79/)
- 7 1216)9/19/97(FRI)HPL.(8:06-12:15AM). Delayed start due to juggler. Some, but not as many enthusiastic natural fooders as last night. Numbers of no-pays. Bunches of v.appreciative lookers. Threatening haze throughout evening. JUPITER, SATURN, 19-d. MOON. Adjourned to Cheesecake Factory w/some n. fooders. Good time! 3-cards. \$127.00+\$13.05=\$140.05(\$33.75, VISITS: John Stroh., Sarah, & roommate; Ross.


TOTAL THIS PAGE = \$1,213.48

TOTAL THIS YEAR = \$6,277.18


	IO	EUROPA	GANYMEDE	CALLIS'
Dia.(mi.)	2,254	1,950	3,266	2,98
Dist.(mi.)	262,062	416,691	664,470	1,170,58
Period(d.)	1.77	3.55	7.16	16.7


	IO	EUROPA	GANYMEDE	CALLIS'
Dia.(mi.)	2,254	1,950	3,266	2,98
Dist.(mi.)	262,062	416,691	664,470	1,170,58
Period(d.)	1.77	3.55	7.16	16.7


	IO	EUROPA	GANYMEDE	CALLIS'
Dia.(mi.)	2,254	1,950	3,266	2,98
Dist.(mi.)	262,062	416,691	664,470	1,170,58
Period(d.)	1.77	3.55	7.16	16.7


	IO	EUROPA	GANYMEDE	CALLIS'
Dia.(mi.)	2,254	1,950	3,266	2,98
Dist.(mi.)	262,062	416,691	664,470	1,170,58
Period(d.)	1.77	3.55	7.16	16.7


	IO	EUROPA	GANYMEDE	CALLIS'
Dia.(mi.)	2,254	1,950	3,266	2,98
Dist.(mi.)	262,062	416,691	664,470	1,170,58
Period(d.)	1.77	3.55	7.16	16.7

	IO	EUROPA	GANYMEDE	CALLIS'
Dia.(mi.)	2,254	1,950	3,266	2,98
Dist.(mi.)	262,062	416,691	664,470	1,170,58
Period(d.)	1.77	3.55	7.16	16.7

	IO	EUROPA	GANYMEDE	CALLIS
Dia.(mi.)	2,254	1,950	3,266	2,98
Dist.(mi.)	262,062	416,691	664,470	1,170,58
Period(d.)	1.77	3.55	7.16	16.7

	IO	EUROPA	GANYMEDE	CALLIS
Dia.(mi.)	2,254	1,950	3,266	2,98
Dist.(mi.)	262,062	416,691	664,470	1,170,58
Period(d.)	1.77	3.55	7.16	16.7

	IO	EUROPA	GANYMEDE	CALLIS
Dia.(mi.)	2,254	1,950	3,266	2,98
Dist.(mi.)	262,062	416,691	664,470	1,170,58
Period(d.)	1.77	3.55	7.16	16.7

	IO	EUROPA	GANYMEDE	CA
Dia.(mi.)	2,254	1,950	3,266	2,98
Dist.(mi.)	262,062	416,691	664,470	1,170,58
Period(d.)	1.77	3.55	7.16	16.7

- 9 1217)9/21/97(SUN)FPT.(6:45-11:03PM). Great sky. Quiet scene, but fairly steady stream of lookers. JUPITER(double shadow transit!); VENUS(once on request). SATURN(3, maybe 4 moons; acq. 8:50PM). VISIT: Jay; natural feeders. 2-cards. \$84.00+\$6.45=\$90.45(\$21.03/hr.)
- 8 1218)9/22/97(MON)HPL.(6:47-10PM). Thick haze at set-up, then ok sky. Quiet scene; many no-pays. JUPITER(acq. delayed by haze; 4 nicely spaced on L). SATURN. 2-cards.\$66.20(\$20.37/hr.)
- 1219)9/26/97(FRI)FPT.(7:03-11:34PM). Juggler at HPL. so continued to FPT. Ok sky, then cloud JUPITER(C&G very wide on op. sides). SATURN(Nice, but cloud problems. VISIT: Larry Blise in town from Jupiter, FL. 2-cards. \$107.00 + \$9.15 = \$116.15 (\$25.71/hr.)
- 8 1220)9/29/97(MON)HPL.(6:40-9:57PM).Scattered small clouds; unsteady seeing. Somewhat quiet scene; many no-contribs. JUPITER & SATURN. VISITS: Tony Scott; Bonnie Wingate. Sold 2-cards. \$73.05 (\$22.27/hr.)
- 9 *1221)10/1/97(WED)HPL.(6:43-10:40PM). First somewhat cold night of fall. Good sky. Bleak scene, but lookers kept appearing. JUPITER. VENUS. MIR-SHUTTLE(Appeared on schedule and in location per Sunday Sun schedule. First spotted by Tony Scott. 6-8 lookers witnessed it.). SATURN(4 moons!). VISITS: Tony Scott; Gene Flannigan; Alan (of Moore Printing). 4-cards. \$82.00 + \$10.13 = \$92.13 (\$23.32/hr.)*Rosh Hashana eve.
- 8 1222)10/2/97(THU)HPL.(6:44-10:05PM). Scattered hazy clouds, but nothing fatal. First lookers was a group of 1/2-doz. very well dressed people who claimed they had no money because of the Jewish Holiday. Ugh! Otherwise, busy evening w/lookers who paid. JUPITER. MIR(on schedule and nearly as bright as J. A good crowd of watchers. Nice!). SATURN(2, maybe 3 moons). Lots of appreciative lookers. 5-cards. \$85.00+\$10.93 = \$95.93 (\$28.64/hr.)
- 9 1223)10/3/97(FRI)FPT.(6:40-9:58PM). Bolivians at Hpl. so went to FPT. Festival eve, so easy parking at hooded meter. Nice sky, then clouds by 8:30PM, so packed up after waiting for 1 hr.+. Thin crowd, plus lots of no-pays. JUPITER. MIR AND SHUTTLE(Mir leading by about 20°. Exciting sight to see!). SATURN(briefly, once).2-cards. \$27.25 (\$8.26/hr.) VISIT: Chalkly family. A couple told me my blue beret/You Are Here sweatshirt combo are perfect garb for what I'm doing.
- 8 1224)10/6/97(MON)HPL.(6:32-10PM)...after missing 2 days for the FPT. Festival. Clear but sl. hazy sky; +/-70°F! 5-d. MOON(before ss w/polarizer). JUPITER(Extremely sharp image at ss, followed by considerable degradation, telling me my worries about J's image are not due to scope!). MIR(Spotted by Frankie; alone, in NE; no passerby viewers; last pass-by on Sun sked.) SATURN(Acq. 8:15PM while in lower part of metal framing.) 0 cards. Spotty but sometimes busy night. \$75.00 + \$16.51 = \$91.51 (\$26.37/hr.)
- 9 1225)10/7/97(TUE)HPL.(6:37-8:43PM). No Unicycle Lady, so I was able to set up early. Warm. Haze & clouds shut me down. 6-d. MOON. JUPITER(Delayed by clouds). Bleak scene, anyway, w/many bizarre derelicts. VISIT: Lynn Wheeler Jensen. \$37.63 (\$17.94/hr.)
- 8 1226)10/8/97(WED)HPL.(7:27-10PM). Star delayed by Unicycle Lady(terrible act!). Haze, the increasing cloudiness, then ended by clouds. 7*d. MOON(impressive). JUPITER. SATURN (briefly). Am having trouble getting good night going in Hpl.! 1-card.\$55.32(\$21.69/hr.)
- 9 1227)10/9/97(THU)HPL.(6:20-10:55PM). No juggler, so started early! Warm & hazy. Not great seeing. I sometimes felt very angry when well dressed lookers didn't contribute! 8-d. MOON. JUPITER. SATURN(Due to haze, 0 moons! Lookers still liked!) 4-cards. \$100.95 (\$27.74/hr.)
- 13 1228)10/10/97(FRI...Yom Kippur eve)FPT.(6:33-12:35AM). Juggler at Hpl. so went on to FPT., which was a good move! Good sky; warm. 8-d.MOON(Copernicus just beyond terminator--terrific at 135 & 165X!). JUPITER. SATURN(sl. murky, then good). Sometimes very busy night with adult crowd early eve. VISITS: Joyce; Jay; 3-cards. \$142.00+\$27.50=\$169.50(\$28.11/hr.)
- 12 1229)10/11/97(SAT)FPT.(6:30-12:20AM). Good sky. Coolish. Incredibly busy night. Money pouring in so fast, sometime, that I felt slightly embarrassed--the opposite of the anger I often feel with non-contribs.! 9-d. MOON(Jura Mts.). JUPITER. SATURN. A good number of families. Lots of compliments & praise received.7-cards.\$193+\$11.91=\$204.91(\$35.15/hr.) The great enthusiasm evinced tonight by so many lookers gave me the thought that the general public is feeling intensely "astronomically deprived"; a feeling which may be attributable to the growing amount of astronomical news in the media.

TOTAL THIS PAGE = \$1,220.98

TOTAL THIS YEAR = \$7,498.16

SkyTalk

August 1997

THE SOLAR SYSTEM THIS MONTH

(Times are Pacific Standard Time (PST))

MERCURY is south of the ecliptic, making the planet difficult to observe this month for locations north of the equator.

VENUS is about 14° above the western horizon at sunset. Venus sets about 8:50 p.m. early in the month and about 8:15 p.m. by month's end.

MARS crosses into Libra during August and rapidly dims from magnitude .08 to 1. The planet is only 6 arcseconds in apparent diameter now, making it difficult to see surface details.

JUPITER reaches opposition in Capricornus on the 9th. The gas giant shines at magnitude -2.8. It rises about 7:30 p.m. early in August and about 5:30 p.m. by month's end.

SATURN rises in Pisces around 10:30 p.m. early in the month and about 8:30 p.m. by month's end. The southern side of the rings is now visible. A thin shadow from the rings is cast upon the yellow planet and Saturn casts its own shadow on the rings.

URANUS rises in Capricornus around 7 p.m. at the beginning of August and around 5 p.m. at the end of the month.

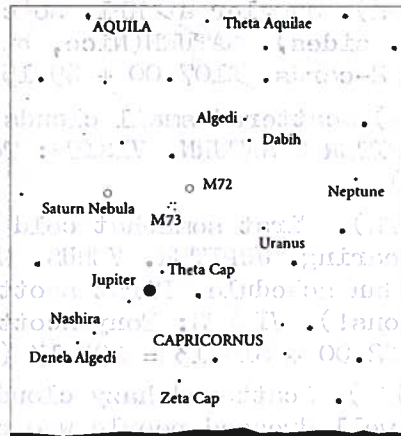
NEPTUNE rises in Capricornus around 6:30 in the evening on the 1st and 2 hours before sunset at month's end.

PLUTO shines at magnitude 13.7 this month as it crosses the meridian at around 7:40 in the evening.

METEORS: The annual Perseid meteor shower should be great this year as the maxima will occur over North America, but will be hampered early in the evening by a waxing gibbous Moon. August is meteor month with the Iota Aquarids South, the Delta Aquarids North, the Kappa Cygnids, the Iota Aquarids North, and the Alpha Aurigids also active or most of the month in addition to the Perseids.

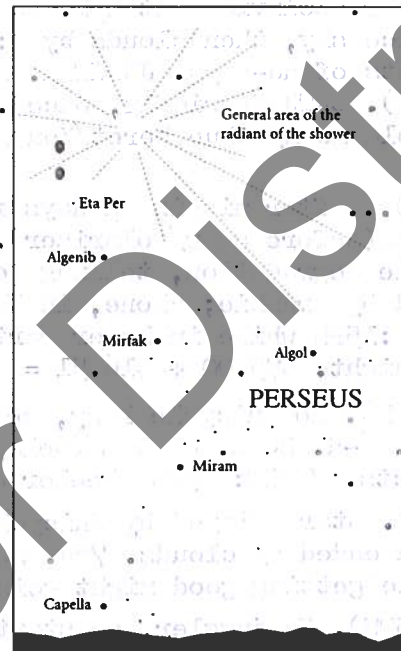
COMETS: No bright predicted comets.

8:00 p.m.; August 15, 1997



SE

Finder chart for the Perseid meteor shower About midnight; August 12th.



NE

THE PERSEID METEOR SHOWER

The best of the annual meteor showers is the Perseids. The shower is active from July 17th through August 24th. This shower usually reaches its peak flow of meteors early in the morning of August 12th. The shower can rain down with 200-400 meteors an hour. The strength of the shower is hard to predict, so do not be disappointed if the shower does not reach this high level of activity.

The meteors generally appear to fly out of the sky north and east of the Double Star Cluster in the constellation Perseus. The point in the sky where the meteors appear to come from is called the radiant. The streaks of fire can be seen shooting in any direction during the night, but the majority will seem to come out of the sky as shown in the box at lower left.

The meteor shower is the result of the Earth passing through the debris left by the passage of Comet Swift-Tuttle (1862 III) as the comet swept across the Earth's orbital path in 1862. Grains of cometary dust and sand-size pieces burn up as they enter our upper atmosphere. Large pieces can explode into fireballs. This shower is known for its fast, bright shooting stars. Many will leave behind long trails of glowing greenish-blue vaporized air.

The best way to observe this meteor shower is at a dark site. Recline on a lounge chair facing toward Perseus. Bundle up and keep warm fluids handy as August nights can become very chilly early in the morning. The shower usually reaches its peak after midnight as Perseus rises higher into the sky and the Earth passes into the debris stream.

Periodic Comet Swift-Tuttle was discovered by American astronomers Lewis Swift (1820-1913) on July 16, 1862 in New York and independently by Horace P. Tuttle three days later at Harvard Observatory. The comet has a period of about 125-130 years. It passed perihelion (nearest approach to the Sun) on August 23, 1862 and in December 1992 on its return orbit.

THIS MONTH'S SKY CHALLENGE

Each month this column will list 5 celestial challenges for you to try. Locate either naked-eye, or with binoculars or a small telescope.

1. M8; the Lagoon Nebula, a magnitude 5.0 emission nebula in Sagittarius.
2. M17; the Omega Nebula, an emission nebula in Sagittarius.
3. M18; an open star cluster in Sagittarius.
4. M20; an emission nebula in Sagittarius.
5. M21; an open star cluster in Sagittarius.

SELECTED CELESTIAL EVENTS THIS MONTH

Day	Event
2	Mars is 1.7° south of the star Spica in Virgo.
4	Mercury is at greatest elongation east (27°).
6	Venus is 1.6° north of the Moon.
9	Jupiter is at opposition in Capricornus.
12	The Perseid meteor shower peaks.
16	Uranus is 4° south of the Moon.
17	Double shadow of moons appear on Jupiter's cloud tops. This occurs again on the 24th and the 31st.
26	Mercury is at greatest heliocentric latitude south.
30	The asteroid Ceres is at opposition.
31	Mercury is at inferior conjunction.

SkyChart and SkyTalk are prepared for the Astronomical Society of the Pacific by Robert A. Garfinkle. Mr. Garfinkle is the author of *Star-Hopping: Your Visa to Viewing the Universe* (published by Cambridge University Press in 1994, ISBN 0-521-41590-X, and paperback in 1997, 0-521-59889-3).

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- 8 1230)10/12/97(SUN)HPL.(6:10-10:35PM). Scheduled gig. Crowded scene. Hazy to great sky. Sometimes 15 lookers in line! 10-d. MOON(Acq. before ss; great at 165X, later!). JUPITER. SATURN(Titan above.). 2-cards. \$150.00 + \$12.25 = \$169.25 (\$38.35/hr.). Had lots of large Spanish speaking and Arabic speaking families, the latter with veiled women!
- 8 1231)10/13/97(MON)HPL.(6:43-9:15PM). Late start due to clouds, then great sky, then shut down by clouds. Too bad, because lots of potential lookers on scene. 11-d. MOON. JUPITER(4 on L!). SATURN(intermittently). 22-cards. \$70.00 + \$7.41 = \$77.41 (\$30.60/)
- 8 1232)10/20/97(MON)HPL.(5:59-9:55PM). After a week of clouds plus, last night, Willie's 70th party. Mild. JUPITER(20-min prior ss w/polarizer!). SATURN(acq.7:10!). Quiet scene, but I had fairly steady traffic for a while. 1-card. \$81.00+\$7.32=\$88.32(\$22.43/hr.)
- 8 1233)10/23/97(THU)HPL.(5:56-9:53PM). FROM THE TIME I LEFT HOME TILL I WAS READY FOR BUSINESS WAS 45 MINUTES. Clear. 1st somewhat cold night of fall. JUPITER(Polarizer gave great view w/2 moons 15 min. before ss.). SATURN (Acq. +/-6:50PM). Sometimes amazingly heavy traffic! \$114.00 + \$9.33 = \$123.33 (\$31.20/hr.) 1-card.
- 8 1234)10/27/97(MON)HPL.(4:57-6:23PM STD. TIME!). Intermittent clouds; finally gave up, at which point sky cleared, but I wanted to go to Eng. dancing. VENUS(beautiful in finder w/clouds). MARS(near V.). JUPITER. SATURN. 4-cdh \$18.55 (\$12.94/hr.)
- 8 1235)10/28/97(TUE)HPL.(5:01-9:33PM). Cold but tolerable. Good sky. Slow start, heavy traffic 6-7PM, then intermittent lookers. JUPITER(polarizer at start). SATURN(nice, w. 2 moons close). 1-cdh. \$82.00 + \$7.77 = \$89.77 (\$19.82/hr.)
- 8 1236)10/29/97(WED)HPL.(4:58-9:00PM). Good sky; mild. JUPITER(3 + 1). SATURN(2 moon off L ring tip). Not much interest from passersby, + lots of low-pays. VISIT: Barbara Silber --here for a genetics conf.; Barry. \$55.00 + \$7.52 = \$62.52 (\$15.51/hr.)
- 8 1237)10/30/97(THU)HPL.(4:52-9:50PM). Good sky; mild(needed neither gloves nor long j's). Sometimes good traffic, w/paying lookers! I FOUND MYSELF THINKING THAT ONE OF THE BIG ATTRACTIONS OF ALL OF THIS FOR ME IS EXPERIENCING THE PLEASURE MANY LOOKERS GET FROM LOOKING THROUGH THE SCOPE. I MAY BE A BIT ADDICTED TO THAT EXPERIENCE! ANOTHER THOUGHT I HAD WAS THAT, TO MANY LOOKERS, THE SCOPE MUST SEEM LIKE A MIRACULOUS INSTRUMENT, AS IT MAKES CLEAR AND BRIGHT THINGS WHICH THEY CAN IN NO WAY SEE WITHOUT IT! JUPITER(fine!). SATURN(only 2 moons, but sometimes very sharp). VISIT: Barbara Silber and a friend on their last night in town. One looker videoed both J and S. 3-cdh. \$87.00 + \$4.29 = \$91.29 (\$18.39/hr.)
- 15* 1238)11/2/97(SUN)HPL.(4:48-8:27PM). Was on Rodericks Show this AM, but very few passersby mentioned it. V. busy early; dead by 8:15PM. JUPITER. SATURN. 1-cd. \$101.18 (\$27.72/)
3½-d. MOON(Very thin, but lookers appreciated it alot, while it lasted!
- 8 1239)11/4/97(TUE)HPL.(4:45-7:02PM). Clouds early, then OK. V. bleak scene so quit early to go to STScI talk. 5½-d. MOON. JUPITER. SATURN(3 moons). VISIT: Mitch Gyson and his dad, Leonard, up from Fl. \$31.73 (\$14.87/hr.)
- Ø 1240)11/10/97(MON)FPT.(5-9:45PM). 10TH ANNIVERSARY HAV-A-LOOK! FOR VIVA HOUSE night. Yukky sky but I went anyway because 1) My car is in shop and I lined up John and Jim P. for rides to and from and it would be hard to postpone plan and 2) I had announced over a radio station this morning that I'd be there, tonight. 11½-d. MOON & SATURN(intermittently thru breaks in clouds. Feel lucky we saw anything at all!) VISITS: J6Hh, Gil Miller, Zippy & Lou, Leah, Ellen Hochman, Karen Rohr (E. Balto. Guide reporter), Regina Nevis & friend Rebecca, Jim Pickett, Merle Ann, some passersby, Frank & Liz (who I see in Alice's card shop), Laura Malick. \$92.83 CONTRIBUTIONS TO VIVA HOUSE
- 4 1241)11/18/97(TUE)ROTUNDA!(4:43-8PM). Went because alot less work than Hpl., plus no problem people! 45°F, v. clear. VENUS(largess wanning crescent; nice!). JUPITER(4 on L!). SATURN(show stopper!). VISITS: Gail O'Conner, Francis O'Neill (Md. Hist. Soc. librarian) & family. \$53.00 + \$6.16 = \$59.16 (\$18.04/hr.)

TOTAL THIS PAGE = \$ 912.51

TOTAL THIS YEAR = \$8,410.67

- 4 1242) 11/19/97 (WED) ROTUNDA (4:45-8:38PM). Very clear; 40°F. Slow start, but then sometimes heavy traffic! One looker came after hearing news anchor, Vic Carter, who looked thru scope last night, give me a boost on the evening news. Carter reported that looking at Sat. thru my scope at the Rotunda, last night, "Made my day!" VENUS. JUPITER. SATURN (3 moons, eventually!). MARS (writhing red blob). URANUS. ALBIREO. VISIT: Jim, Giant Foods meat cutter who is very interested in scope. Gave me a beer, last night, and a roastbeef sand., tonight. Lots of kids. Bob Cotter. \$63.00+\$9.37=\$72.37 (\$18.64/hr.)
- 8 1243) 11/20/97 (THU) GILMAN SCHOOL (4:35-6:53PM). Sl. hazy sky; 55°F. Finally did it, after many weather and scheduling delays. Auspices Tom Shields. +/-10 students. Used mag. compass to initially orient scope, found Venus, and refined alignment via it. Eventually got v. good alignment! VENUS, JUPITER (3, than 4 moons), SATURN (2 m's), MARS, URANUS. ALBIREO. M 57! M 15! Y AND. M 45. Tom seemed pretty please with evening. (pay in tax folder). A NEW SATURN OBSERVING TECHNIQUE WHICH I TRIED ON ONE UNSUSPECTING STUDENT AND WHICH WOWED! HIM--I INTRODUCED HIM TO THE EYEPICCE W/SATURN WAY OUT OF FOCUS (AS A BIG DONUT). I HAD HIM BRING IT INTO FOCUS HIMSELF. WHEN IT REACHED FOCUS HE REACTED W/"WOW!"
- 4 1244) 11/25/97 (TUE) ROTUNDA (4:50-8:10PM). 40's F. Cloud threat early, but then clear. VENUS. JUPITER. SATURN (3 moons). Forgot my "I Saw..." stickers and felt a bit naked w/o them! VISITS: Paul Reamer, Alan Umoto, Lenore Callen, Van (Fpt. looker). \$60.18 (\$18.04/hr.)
- 4 1245) 12/1/97 (MON) ROTUNDA (4:50-6:55PM). Packed up because of cold wind. Despite wind had numero lookers for a while. ALIGNMENT OF THE PLANETS (Lots of passersby have heard "Star Hustler" talking about this. Currently, Mercury, Mars, Venus, Neptune, Uranus, Jupiter, and Saturn are simultaneously above the horizon at sunset. I had a tel. call about it this afternoon from Roylance, who says there'll be an art. on it in Sun.) MERCURY (Could not find w/scope early but spotted by eye +/-5:30PM.) VENUS. JUPITER. SATURN (2 moons). E-d. MOON. TELESCOPE (seems to req. Dec. latch tightening each outing; worrisome!). VISITS: M. Franch, Dell, Bob Brown, Andre Pap., some JHU astro. stds. \$28.56 (\$13.68/hr.)
- 4 1246) 12/2/97 (TUE) ROTUNDA (4:40-7:55PM). Windy at first, then calm but cold. "ALIGNMENT" OF THE PLANETS (+/- doz. people present at set-up time scanning sky! Joined by Ch. 11 cameraman for an hour. spotted Mercury + Moon, Mars, Venus, J & S.) JUPITER (4 on left!). VENUS. MOON (Mare Crisium). SATURN (2 moons). Some enthusiastic lookers. VISITS: John Strohsacker, Drew ? Perkins & fam. \$65.49 (\$20.17/hr.) Zippy & Lou.
- 4 1247) 12/3/97 (WED) ROTUNDA (5:00?-8:00PM). Arrived late after fence sitting about weather to find a large group of people pointing toward the sky and talking excitedly! This was thanks to Channel 11's visit last night and Roylance's article on the "alignment" in this mornin. 's Sun saying that I'm setting up at the R. on week nights. Good thing I finally got myself going because, had I not shown up, there would have been alot of disappointed and confused people! Sky was interspersed with clouds, but I managed to keep going, mainly on Saturn till 8PM, when it became totally overcast. Just as I was calling it quits, a woman with her daughter arrived from Perry Hall! In ans. to my inquiry, she said she saw the art. in the paper. VENUS (briefly). JUPITER (2+2, briefly). SATURN (mainly; 1 moon. Mercury remained unseen due to clouds. For a while, the line of lookers went up the ramp to the second level. Everybody seemed to contribute. VISITS: Ann Gordon; Lots of kids. Ran out of Saturn stickers. Lookers very appreciative of my being there. This was definitely a night to remember! \$109.00 + \$16.61 + \$125.61 (\$41.87/hr.)
- 9 1248) 12/6/97 (SAT) HPL (4:30-8:40PM). Sunny all day w/adverse weather rpt for eve. but decided to go for it, anyway. Good move! Huge crowd in Hpl. for send-off (to China) of Pride of Balto., after which was to be "Parade of Lighted Boats"! Sl. slow start but then a steady line till 8PM! 7-d. MOON (briefly). VENUS (briefly). JUPITER (briefly). SATURN (rest of night! 3 moons! depleted stickers!!). VISITS: Barry; Olaf. Even tho people still around, I quit due to cold and to go to Jerry Belton's B.D. party. \$154.99 (\$37.17/hr.)

TOTAL THIS PAGE = \$ 507.20
 TOTAL THIS YEAR = \$8,917.87

- 4 12/8/97(MON)ROTUNDA(4PM) Dry run due to clouds moving in.
- 8 1249)12/13/97(SAT)HPL.(5:10-7:53PM). Slightly late start due to tuba Xmas concert. (Intended to go to Fpt. but switched on way downtown. Good decision, I'd say. Very busy, with long line most of evening. Closed down by clouds, tho when I arrived home sky was clear again. PLANETS "ALIGNMENT"(At starting time could see Mars, Venus, Jupiter and Saturn.). SATURN(Went straight for it, not doing J. even once! Sometime only fair seeing. 2 moons.) FULL MOON (briefly, after loosing S. in clouds). VISIT: W. & M. Shook. 12-cds. Thanks to Santa Claus, I had lots of families w/young kids. \$107.00 + \$8.61 = \$115.61 (\$42.61/hr.)
- 8 1250)12/14/97(SUN)HPL.(4:20-7:30PM). Atrocious seeing for two hours, then bad seeing! VENUS & JUPITER(roiling blobs; J's moons barely visible!). SATURN(roiling blob early, doable at 80X later). Somewhat busy early, but a bleak scene after 7PM when Santa Claus Hse. closed. VISITS: Tony Scott; Barry. \$58.00+\$10.75=\$68.75(\$21.67/)
- 4 1251)12/15/97(MON)ROTUNDA(4:37-8:16PM). Magnificent sky. Slow start followed by good traffic. VENUS(briefly...getting bigger!). JUPITER(intermittently...4, then 3 moons). SATURN(3-moons). 15-d. MOON(briefly). VISITS: Dell S., Cindy Brown. Accompanied for a while by Brian, of Brian's Auto. DOWNTOWN(Flag on G&E bldg.)\$79+\$8.34=\$87.34(\$23.93/
- 4 1252)12/18/97(THUR)ROTUNDA(4:40-8:43PM). Milt temp. Increasingly hazy sky. Slow start, then moderate traffic, then light; heavy between 7:15 & 8PM! VENUS(Impressive crescent!). JUPITER(3+1; nice!). SATURN(2-moons; eventually went to 220X, which lookers seemed to like! Will try again!). Lots of enthusiastic lookers; families. VISITS: Andre P., Bob Brown, many others. Was told by Giant basket boy that people were looking for me when I wasn't there. Ugh! \$74.00 + \$14.27 = \$88.27 (\$21.80/hr.)
- 3 1253)12/19/97(FRI)JHU OBSERVATORY DECK, per 3 requests by Juliane Watco for help with planets alignment night. Big haul getting scope up 5 floors and onto deck. Then, lots of cloud troubles and very few visitors compared to a night at the Rotunda. Scope vibrated badly whenever anyone moved on deck. Accompanied by Jim Nickel with his Astroscan. SATURN, JUPITER, M 45, B GYG. wasted night! Dr. Henry present early evening. VISIT: Jim Sarsgard. NO HAT
- 8 1254)12/21/97(SUN)HPL.(5:17-7:43PM). Late start due to cloud doubts. Accompanied by Del Sweeny. Ok sky, with increasing haze. SATURN(1-moon). Lots of families with young children. Very slow start, then ok traffic. \$51.80 (\$21.26/hr.)
- 8 1255)12/26/97(FRI)HPL.(4:34-10:15PM). V. good sky. Good number of strollers. Not a rush, but a steady stream of lookers. Some enthusiastic children. VENUS(briefly; big crescent!). SATURN(at 220X for a good while!; 2 moons; lookers very impressed!). JUPITER (intermittently). M42(!)(nice; lookers liked!). 8-cds. \$143.00+\$18.35 = \$161.35(\$28.41/
- 8 1256)12/28/97(SUN)HPL.(4:20-8:30PM). Slow set-up due to prob. w/bubble level! Nice sky. VENUS(Pretty crescent.). SATURN(Sometimes at 220X; 2-moon; lookers impressed!). JUPITER(Intermittently.). M42(Nice!). VISIT: Arthur(from Gandy Dancer times..contrib. \$10 for looks for his family.). 1-cd. \$92.00 + \$12.34 = \$104.34 (\$25.02/hr.)

TOTAL THIS PAGE = \$ 6677.46

TOTAL THIS YEAR = \$9,595.33

MISC. THIS YEAR = \$ 500.00

GRAND TOTAL THIS YEAR = \$10,095.33

- *2/28/97 John Ruhruh Elem. Sch. (Peter French) talk \$100.00
 4/16/97 Montessori School (Leeanne Kahl) talk \$100.00
 6/15/97 Andrea's Elk Neck cub scout outing (on p.5 of Log)
 7/27/97 Chesapeake Bay Fdn. (Linda Block) (on p.8 of Log)
 11/20/97 Gilman School (telescope + 20-min. assembly + classroom) \$300.00
~~12/31/97 Elizabeth Milon (ck #460) photo sale \$24.64 (royalty)~~

CP 1/3/97	6-copies Hale-Bopp positional mats. (JHU)	\$.30
SP 1/6/97	6-copies "Night Watchman" (JHU)	\$.30
SP 1/6/97	4-copies Comet Hale-Bopp materials (JHU)	\$.20
POST 1/6/97	materials to "Star Hustler"	\$.55
SP 1/7/97	1-copy Sun art. (Loyola)	\$.15
STA 1/16/97	LP Correction Fluid (Staples)	\$ 2.89
SP 1/19/97	4-copies map article mats. (Pratt)	\$ 0.80
POST 1/21/97	mail children's newspaper to Tomney	\$ 0.78
SP 1/22/97	3-copies for map project (JHU)	\$ 0.15
SP 1/22/97	2-copies for Hale-Bopp project (JHU)	\$ 0.10
SP 1/27/97	12-copies for map project (JHU)	\$ 0.60
TEL 1/28/97	410-889-0460	\$ 0.70
SP 1/30/97	13-copies for map project (JHU)	\$ 0.65
SP 2/5/97	entree fee for Md. Historical Soc. Library	\$ 4.00
SP 2/5/97	parking meter at Balto. City Archives Dept.	\$ 1.25
SP 2/8/97	8-copies of map article (Amoco)	\$ 0.40
POST 2/10/97	copy of map art. to Z. Larson	\$ 0.55
SP 2/10/97	16-copies of mats. for map art. (JHU)	\$ 0.80
SP 2/13/97	24-copies map art. & enclosures (JHU)	\$ 1.20
SP 2/19/97	10-copies of Rafael Alvarez arts for Lisa Pollack (JHU)	\$ 0.50
POST 2/19/97	mail arts to L. Pollack	\$ 0.55
SP 2/19/97	5-copies mats. for streets art. (JHU)	\$ 0.25
Post 2/21/97	mail streets art + comet photo to Toyance	\$ 0.78
FEES 2/21/97	American Geophysical Union abstract fee (chk#2720)	\$ 50.00
POST 2/20/97	press releases to 3 TV weathermen	\$ 00.96
SP 2/20/97	6-copies of press releases on Comet H-B (Amoco)	\$ 00.30
SP 2/23/97	4-copies magnetism arts (Amoco)	\$ 00.20
POST 2/23/97	mail mats. to Cy	\$ 00.32
TEL 2/24/97	bill of 2/13/97	\$ 1.88
POST 2/25/97	mail scout expo form to BAS	\$ 1.01
SP 2/25/97	6-copies The Reversal of Earth's Magnetic Field art. (JHU)	\$ 00.30
SP 2/26/97	2-copies streets arts. (Pratt)	\$ 00.40
SP 3/2/97	5-copies streets arts. (JHU)	\$ 00.25
SP 3/4/97	11-copies streets arts. (Loyola)	\$ 1.65
SP 3/6/97	tip to Tony Scott	\$ 5.00
SP 3/7/97	4-copies astrophoto art. for Mike Hall (Amoco)	\$ 0.20
POST 3/7/97	mail art. to Mike Hall	\$ 0.32
SP 3/8/97	tip to musician Fpt.	\$ 0.50
SP 3/10/97	1000 post-its (Staples)	\$ 3.66
SP 3/11/97	Comet Hale-Bopp rubber stamp (Baumgarten)	\$ 18.01
STA 3/13/97	PL2AX CIG PLUG (Amateur Radio Ctr.)	\$ 4.84
POST 3/17/97	copy of magnetism art. to Chas. Duff	\$ 0.64
SP 3/17/97	2-copies Balto. Magazine "Nightwatchman" art. (Royal Farms)	\$ 0.10
SP 3/18/97	6-copies streets mats. (JHU)	\$ 0.30
BOOKS 3/19/97	Quadrangle Map 24-D for "streets" proj. (Md. Geological Soc.)	\$ 4.00
SP 3/21/97	8-copies "The Night Shift" (Royal Fms.)	\$ 0.42
SP 3/22/97	6-copies Universe in the Classroom art. for handing out (Amoco)	\$ 0.30
TEL 3/26/97	bill of 3/13/97	\$ 8.79
SP 3/28/97	2 ea. Sun papers w/"Star Gazer art. (7-Eleven)	\$ 1.05
STA 4/2/97	4-"D" batteries for radio to play "Hale-Bopp" music in Fpt.	\$ 5.02

PAGE TOTAL

= \$ 128.87

SP 4/4/97	2-copies art. for John S. on WEB imaging (Royal Fms.)	\$ 00.10
POST 4/4/97	mail above art.	\$ 00.32
POST 4/4/97	mail talk mats. to Montessori teacher	\$ 00.32
SP 4/4/97	6-copies mats. on Streets art. for A. Finkbeiner (Royal Fms.)	\$ 00.32
POST 4/4/97	to mail above copies	\$ 00.64
SP 4/9/97	1000 ea. Post-its (Staples)	\$ 3.66
SP 4/17/97	11-copies streets materials (Kinko)	\$ 0.66
TEL 4/21/97	Bill of 4/13/97 (410-889-0460)	\$ 1.88
SP 4/21/97	8-copies streets mats. (JHU)	\$ 0.40
SP 4/20/97	2-copies streets mats. for Larry B. (Royal Fms.)	\$ 0.10
POST 4/30/97	mail streets mats to Larry B.	\$ 0.32
SP 4/30/97	16-copies streets materials (JHU)	\$ 0.80
FEES 5/2/97	admission to Md. Hist. Soc. library; streets research	\$ 3.00
SP 5/2/97	8-copies maps for streets proj. (LOYola)	\$ 0.90
FEES 5/3/97	admission to MHS library	\$ 3.00
SP 5/3/97	1-copy streets mats. (Pratt)	\$ 0.20
SP 5/5/97	12-copies maps for streets proj. (JHU)	\$ 0.60
SP 5/5/97	6-copies (Kinko's)	\$ 1.04
STA 5/6/97	1-sector map for streets proj. (MGS)	\$ 5.00
SP 5/7/97	5-copies "Magnetic Rag" for streets proj. (JHU)	\$ 0.25
STA 5/7/97	10-copies map #1 draft for streets proj. (JHU)	\$ 0.50
FEES 5/7/97	registration AGU poster session streets proj. (ck#2732)	\$62.00
STA 5/9/97	2-copies of top. map for poster session (Kinko)	\$ 6.26
SP 5/11/97	tips to Pretzel Twist workers	\$ 0.50
STA 5/10/97	3-typewriter ribbons (Staples)	\$ 8.35
POST 5/12/97	2-letters (M. Prizzi & Geo. Musser)	\$.64
SP 5/12/97	8-copies U.S.A. Today art. on me (JHU)	\$.40
SP 5/12/97	7-copies Prizzi letter & "Stars Behind Bars" (JHU)	\$.35
SP 5/13/97	2-copies Prizzi letter (Royal Fms.)	\$.10
STA 5/13/97	8-copies streets mats. (R. Farms)	\$ 0.42
SP 5/14/97	1-FAX to National Graphics of streets format(Hopkins Store)	\$ 1.38
POST 5/15/97	stamps	\$ 6.40
SP 5/17/97	tip to Pretzel Twist workers	\$ 0.50
SP 5/18/97	payment in kind(icecream) to Larry Bliesche for computer "stdeets"	\$ 4.29
SP 5/18/97	5-copies USA TODAY article (R. Fms)	\$ 0.27
STA 5/19/97	12-copies maps titles (JHU)	\$ 0.60
SP 5/20/97	3-copies (inc. 1 color) (Copy Cat) maps	\$ 3.15
SP 5/20/97	2-copies maps (R. Fms.)	\$ 0.10
POST 5/21/97	16-copies "streets" press release materials (JHU)	\$ 0.80
SP 5/21/97	5-copies USA Today art. (R. Fms.)	\$ 0.25
STA 5/23/97	"streets" poster 42"x63" (Reproductions Spec.#122979)	\$ 189.52
SP 5/25/97	30-copies streets handbill composition (JHU)	\$ 1.50
POST 5/28/97	letter and materials to Michael Prizzi	\$ 1.93
TEL 6/1/97	bill of 5/13/97	\$ 0.42
SP 6/1/97	22-copies (composition+ 10copies of "A New Slant...") (JHU)	\$ 1.10
SP 5/30/97	parking at Hyatt for AGU poster session	\$ 10.00
STA 6/8/97	Sharpie pens (Staples)	\$ 4.19
SP 6/9/97	10-copies Mercury Magazine star maps (JHU)	\$ 0.50
SP 6/10/97	tip to Pretzel Twist workers	\$ 0.50
SP 6/11/97	6-copies sky maps (JHU)	\$ 0.30
SP 6/11/97	7-copies materials for Dan Pendick (Earth Mag.) (JHU)	\$ 0.35
POST 6/11/97	mail materials to Dan Pendick	\$ 0.78

PAGE TOTAL

= \$331.86

STA	6/14/97	STA bridge toll on way to Elk Neck scout outing	\$ 2.00
STA	6/16/97	10-copies Balto. map (JHU)	\$ 0.50
POST	6/16/97	computer graphic stuff to Marta	\$ 0.55
SP	6/20/97	tip to Pretzel Twist workers	\$ 0.75
TEL	6/23/97	bill of 6/13/97	\$ 8.36
SP	6/26/97	bicycle repair bill of 6/26/97(ie., 40% of it)	\$ 14.04
SP	6/27/97	tip to Pretzel Twist for water	\$ 0.25
SP	6/27/97	contrib. to Julia Rose to have "tomb" petition xeroxed	\$ 5.00
SP	6/30/97	5-copies July sky map (JHU)	\$ 0.25
POST	7/2/97	materials to Pendick	\$ 0.55
SP	7/5/97	contrib. to street musician, Greg, in Fpt.	\$ 1.00
SP	7/7/97	contrib. to P. Twist workers for water	\$ 0.50
POST	7/8/97	letter + materials to Prizzi	\$ 3.00
POST	7/9/97	materials to Gibson	\$ 1.70
POST	7/9/97	materials to Prizzi	\$ 0.55
POST	7/16/97	stamps	\$ 6.40
SP	7/17/97	5-copies of stickers collection (JHU)	\$ 0.25
SP	7/20/97	tip to Pretzel Twist workers for H2O	\$ 1.00
TEL	7/21/97	bill of 7/13/97 (889-0460)	\$ 1.53
SP	7/22/97	11-copies Aug. Sky Map (JHU)	\$ 0.55
SP	7/23/97	4-copies "Shooting Star Alert!" (Royal Fms.)	\$ 0.22
SP	7/25/97	1-copy letter to Dan Pendick (R. Fms)	\$ 0.05
FOOD	7/27/97	supper before Chesapeake Bay Fdn. presentation (Pinochio's)	\$ 7.30
POST	7/31/97	10-ea. 23¢ stamps	\$ 2.30
SP	7/31/97	Contrib. to Tony Scott for Balloons	\$ 6.00
SP	8/1/97	Contrib. to Fpt. bagpipe player	\$ 1.00
SP	8/1/97	Weeks tips to Pretzel Twist workers	\$ 1.00
STA	8/7/97	1000-post-its; #10 envel.; stamp pad ink; Lq. paper	\$ 7.54
SP	8/7/97	1-copy ASTRONOMY mag. for Ehsan Shams (Borders)	\$ 4.15
POST	8/8/97	Letter + literature to E. Shams in Iran	\$ 11.40
STA	8/8/97	knap Sack (Woolworth)	\$ 10.71
SP	8/8/97	5-copies Shams letter (JHU)	\$ 0.25
SP	8/9/97	10-copies BAS talk mats. (JHU)	\$ 0.50
BOOKS	8/12/97	The Heart of the Earth (JHU Book Ctr.)	\$ 7.33
POST	8/14/97	Note to Shams(Iran) pardoning my gender error	\$ 1.00
SP	8/15/97	week's tip to P.T. workers	\$ 2.00
SP	8/18/97	11-copies Scorpius mats. for K. Field (JHU)	\$ 0.55
POST	8/19/97	comet card + mats. to Dr. M.R. Gonzalez (Cuba)	\$ 3.40
POST	8/19/97	stamps	\$ 6.40
TEL	8/20/97	bill of 8/13/97 (889-0460)	\$ 2.47
SP	8/21/97	Fpt. tips (P.T. + Greg)	\$ 1.50
SP	8/22/97	Fpt. tips	\$ 0.75
SP	8/23/97	9-copies Sept. star maps originals (JHU)	\$ 0.45
STA	8/25/97	2-highlighters (Woolworth)	\$ 1.50
SP	8/26/97	tips to musician (\$1.00) and P.T. worker(\$0.50)	\$ 1.50
SP	8/29/97	tips to musicians (\$2.00) and P.T. worker(0.50)	\$ 2.50
POST	8/30/97	5-postcards to send out WWW announcements	\$ 1.00
SP	8/30/97	2,400 Post-its (Staples)	\$ 7.32
STA	8/30/97	1-typewriter ribbon (Staples)	\$ 2.82
SP	9/3/97	4-copies of WEB Page (JHU)	\$ 0.20
SP	9/4-6/97	Fpt. tips	\$ 1.50
SP	9/7/97	2-copies BSCA Home Page (JHU)	\$ 0.10

PAGE TOTAL

= \$145.44

SP	9/15/97	payment to worker to douse light at Hpl.	\$	1.00
SP	9/18/97	(ibid)	\$	1.00
POST	9/19/97	stamps	\$	6.40
SP	9/19/97	10-copies + composition of JHU "Beach" article	\$	0.75
SP	9/22/97	tip to lights man at HPL.	\$	1.00
TEL	9/27/97	bill of 9/13/97	\$	8.24
SP	9/29/97	HPL. lights	\$	1.00
SUBS	9/30/97	S&T '98 (Balto. Astronomical Soc.) ck#2760	\$	27.00
POST	10/1/97	letter to Case...Astronomia, Portugal)	\$	1.00
SP	10/1/97	Post-It notes (Staples)	\$	3.66
SP	10/1/97	HPL. lights	\$	1.00
SP	10/1/97	Tip to Tony Scott	\$	5.00
SP	10/2/97	tip to HPL. lights man	\$	1.00
STA	10/3/97	Beret for use at telescope (Kimberly Fields)	\$	20.00
SP	10/3/97	tip to Fpt. pavement artist	\$	1.00
POST	10/7/97	letter to E. Shams, Iran)	\$	0.60
SP	10/7/97	1-copy above letter (JHU) (+ machine misfire)	\$	0.10
SP	10/12/97	tip to lights man at Hpl.	\$	1.00
SP	10/13/97	tip to Frankie for loading help at HPL.	\$	1.00
SP	10/14/97	30-copies VIVA HOUSE TELESCOPE press release (JHU)	\$	1.50
POST	10/14/97	mail VIVA HSE. press releases	\$	7.00
SUBS	10/14/97	Planetary Soc. membership thru 11/99 (ck#2762)	\$	45.00
SP	10/14/97	2000 Post-it notes (Staples)	\$	7.32
SP	10/15/95	1-copy mats. for A. Benjamin (JHU)	\$	0.05
POST	10/15/97	cards to Cuba and to Phillipines	\$	2.00
SP	10/15/97	10-copies Viva Hse. press release (JHU)	\$	0.50
SUBS	10/16/97	AGU membership '98 (ck.#2763)	\$	30.00
POST	10/16/97	stamps (20 ea.)	\$	6.40
SP	10/16/97	2-copies Viva Hse. mats. (Royal Fms)	\$	0.10
SP	10/18/97	5-copies Viva Hse. press release (JHU)	\$	0.25
SP	10/18/97	19-copies Viva Hse. sign artwork (JHU)	\$	0.95
SP	10/20/97	HPL. lights man	\$	1.00
SP	10/23/97	HPL. lights man	\$	1.00
SP	10/24/97	7-copies November '97 star maps (JHU)	\$	0.35
SP	10/25/97	30-copies (150 handouts--Viva Hse. event. (JHU)	\$	1.50
SP	10/25/97	4-copies star maps for Gilman look-see (JHU)	\$	0.20
POST	10/27/97	curriculum vitae to T. Shields + book of stamps	\$	6.95
BOOKS	10/27/98	SG98R + H1998 + S0071 + S&H (Sky Publishing)	\$	29.10
SP	10/30/97	4-copies Fred Hoyle mats. for Viva Hse. TV show--Rodericks	\$	00.20
SP	10/30/97	HPL. lights man	\$	1.00
SP	11/3/97	8-copies V.H. press release (JHU)	\$	0.40
SP	11/4/97	HPL. lights man	\$	1.00
SP	11/5/97	11-copies mats. for Gilman presentation (JHU)	\$	00.55
SP	11/5/97	6-copies mats. for Gilman (JHU)	\$	0.30
POST	11/6/97	book of stamps	\$	6.40
SP	11/8/97	15-copies Viva Hse. announcement (JHU)	\$	0.75
POST	11/8/97	leter & mats. to Lucian Kemble	\$	0.72
TEL	11/10/97	bill of 10/13/97	\$	2.41
SP	11/21/97	1-FAX + 3-copies Leonids rpt. (Hopkins Store)	\$	2.10
POST	11/25/97	1 letter & mats. to Eric Gibson	\$	0.78
SP	11/26/97	14-copies (10 handbill + 4-Dec. map) (JHU)	\$	0.70
TEL	11/26/97	bill of 11/13/97	\$	2.13
SP	11/30/97	299-copies (Inv.104 = 151 ea. + 135 = 148 ea.) CK#2775	\$	17.94

PAGE TOTAL \$260.30

SP 12/6/97	Contrib. to deralict in Hpl.	\$ 1.00
SP 12/14/97	tip to Tony Scott at Hpl.	\$ 10.00
TEL 12/24/97	bill of 12/13/97 (889-0460)	\$ 00.47
FEES 12/28/97	1998 membership in Md. Academy of Science (ck.#2783)	\$ 27.00
SP 12/30/97	Cassiopea photo for BAS News Letter (Cooper's)	\$ 4.15
SP 1/15/98	JHU INV#169 for xeroxing done thru 12/16/97	\$ 10.86
Page total		\$ 53.48

YEAR SUMMARY

	(advertising) ✓ SP	POST ✓	TEL ✓	FEES ✓	(Office) ✓ STA	BOOKS ✓	FOOD ✓	SUBS ✓	YEAR
Page 1	\$ 44.29	\$ 6.46	\$ 11.37	\$ 50.00	\$ 12.75	\$ 4.00	---	---	\$128.87
Page 2	\$ 34.57	\$ 12.15	\$ 2.30	\$ 68.00	\$214.84	---	---	---	\$331.86
Page 3	\$ 55.13	\$ 38.25	\$ 12.36	---	\$ 25.07	\$ 7.33	\$7.30	---	\$145.44
Page 4	\$ 58.17	\$ 38.25	\$ 12.78	---	\$ 20.00	\$29.10	---	\$102.00	\$260.30
Page 5	\$ 26.01	---	\$ 0.47	\$ 27.00	---	---	---	---	\$ 53.48
YEAR	\$218.17	\$ 95.11	\$ 39.28	\$145.00	\$272.66	\$40.43	\$7.30	\$102.00	\$919.95

Auto = 1384 miles @ \$0.31/mi = \$429.04

T = \$1348.99

STA 12/29/98 Safe deposit box (Nations Bank) \$35.00*

∴ The STA total is actually \$307.66

1998

Not for Distribution

- 8 1257) 1/2/1998(FRI)HPL.(4:42-9:00PM). Delayed start due to trouble w/level! Mild temp. Nice sky but less than perfect seeing. Continuous line of lookers from start till shut down by clouds--a blessing in disguise, as was very hard work due to lots of families w/young children! 4-d. MOON(briefly). SATURN(started w/polarizer; 2 moons easy. VISIT: Jenny Bull. \$169.00 + \$11.25 = \$180.25 (\$41.92/hr.) 3-cds.
- 12 1258) 1/3/97(SAT)FELL'S PT.!(Aimed for Hpl. but was preempted by Andean musicians.)(5:04-11:00PM). Was nice to be back! Quiet at first but a slow build-up of lookers. VENUS (gigantic crescent!). 5-d. MOON(Theophilis-Cirillus-Catherina; impressive!). SATURN (2-moons). M 42 (looked good at 135X). SIRIUS (last obj. as clouds moved in; collimated on it thru clouds!). Shut down by clouds. VISITS: John, Suman & Max (dancers); Larry Blische; Kate Newman; Calvin of STSci. \$90.18 (\$15.21/hr.) Adjourned to Oyster, where I helped Duncan and his mom, Yvonne celebrate his 21st. A number of people commented on the pairing several nights ago of the Moon and Jupiter.
- 8 1259) 1/4/98(SUN)FPT.(3:20-6:23PM). Wanted to do Venus near IF but clouds interfered. 6-d. MOON(ok with polarizer, even thru some haze). SATURN(acq. after ss; benefited from last night's collimation work; very sharp!). VENUS(as clouds dissipated after ss). JUPITER. Pretty good interest for daytime stint. VISITS: Zippy/Lou. \$45.58 (\$14.94/hr.)
- 8 1260) 1/5/98(MON)HPL.(4:37-8:49PM). Went here rather than Rotunda expecting good traffic from large landscaper's convention. However, only a few conventioners came along. Generally quiet scene. Hazy w/poor seeing. 7-d. MOON (1st. qt.; rugged!). SATURN (Took a long time to find--due to haze?). \$66.76 (\$15.90/hr.)
- 13 1261) 1/9/98(FRI)FPT.(5:55-10:15PM). Preempted again by Andeans at Hpl. Very bad, as I missed out of potential lookers from the American Mathematics Conf.! SATURN(4 moons seen by a looker). JUPITER(briefly). M42(several times). 11-d. MOON (ok craters, but not breathtaking). h 3945 (terrific binary--red/blue!). VISITS: John S.; Rachael Wohl; Joyce (who I met later at the Grind). \$64.56 (\$14.91/hr.) VISIT: Beck.
- 8 1262) 1/10/98(SAT)HPL.(5:20-10:10PM). I waited out the Andeans. Was worth the wait, as I was very busy! SATURN(Great image at 165X; 2 moons). 12-d. MOON(Pathagoras?). \$201.00 + \$22.28 = \$223.28 (\$46.16/hr.)
- 12 1263) 1/11/98(SUN)HPL.(5:45-8:35PM). Ar. to find Andeans. Drove to FPT., but it looked so bleak that I returned to HPL. and waited them out. Again, good play! Quiet scene by set-up time but had steady stream of lookers. SATURN(magnificent; 3 moons!). M 45 (once). Sold comet 8x12 + 2 cards. \$78.00 + \$2.47 = \$80.47 (\$28.40/hr.)
- 11
2 1/19/98(MON)ANDREA SWERLING'S CUB SCOUT TROOP(7:00-8:00PM)
- 1264) 1/20/98(TUE)SHERWOOD GDNS.(5:30-7:30PM). JUPITER/MARS CONJUNCTION(Spectacular sight in twilight, with only 0.2° between them! Took photos thru finder: f/1.7 @ 1/30 and 1/15...handheld. Tried w/tripod but had trouble lining things up. Took more shots with camera on tripod of pair over trees; 1-sec. & 2-sec.). AS SKY DARKENED AND I SAW HOW SPECTACULAR CONJUNCTION WAS, I REALIZED I SHOULD HAVE GONE TO THE ROTUNDA. I DID NOT BECAUSE 1) I DIDN'T REALIZE HOW GREAT CONJ. WOULD LOOK NAKED-EYE AND 2) I SEEM TO HAVE LOST MY NEED TO SHARE ANYTHING AND EVERYTHING IN THE SKY. I ONLY SEEM TO WANT TO GO OUT ON OPTIMUM NIGHTS. I DIDN'T REALIZE THIS WAS ONE OF THOSE! As it happened, I attracted a crowd (unwanted!). Had a total of +/-15 lookers, including John Payne, who lives across street from where I was set-up. NO HAT. LESSONS LEARNED? 1) When widely separated, two lights in the sky don't attract much attention, but when they are close together they become memorable. 2) I was wrong in predicting that twilight would obscure the event. I must study the situation more closely next time!
- 9 1265) 1/25/98(SUN)HPL.(5:20-6:25PM). Stopped by clouds. SUPERBOWL NIGHT, but I had a respectable flow of lookers. I HAD TO FORCE MYSELF TO GO OUT, TONIGHT (COLD & SUPERBOWL WERE PRETEXTS FOR NOT GOING!), BUT ONCE I GOT INTO ACTION I FELT GREAT! WHAT DO I HAVE TO DO TO MAKE MYSELF REMEMBER THIS? SATURN. 1-cd. \$18.20 (\$16.74/hr.)

TOTAL THIS PAGE = \$769.28

TOTAL THIS YEAR = \$769.28

- 1266) 1/29/98 (THU) HPL. (5:08-7:20PM). V. nice sky; mild temp. Quiet scene; intermittent lookers. Packed up when threatened by a high tide. 1st time for something like this! SATURN (2 moons). \$38.51 (\$17.50/hr.)
- 1267) 2/1/98 (SUN) HPL. (4:37-8:20PM...ss=5:27PM). Started early, as Andeans were too cold to continue! Good sky, then hazy. SATURN (Just 0.6° N. of Moon at start, but I couldn't find it even if my life depended on it! Why? Otherwise, nice scene, with Titan in close.) IT SEEMS AS IF EVERYTIME I START FEELING COCKY ABOUT MY ABILITY TO FIND STARS/PLANETS IN THE DAYTIME, I GET SHOT DOWN!). 4-d. MOON (Impressive to lookers! Nice pairing in finder w/Sat.). MIR (Per sked supplied by Jim Tomney, it made a S to ENE passby starting around 6:09PM. Was a great sight for passersby...and for me. It went behind WTC and emerged from other side!) CAMCORDER (Had a family of very intelligent children with mother from Glen Burnie. Mother had camcorder and asked to record Saturn. We did it with some difficulty, then did Moon, which was easy and great at 80X. MAYBE I SHOULD ANNOUNCE A CAMCORDER NIGHT!) \$78.00 + \$15.41 = \$93.41 (\$25.18/hr.)
- 1268) 2/8/98 (SUN) HPL. (5:10-8:20PM...ss=5:36PM). Nice sky; temp. 45°. Lots of strollers at set-up time. Noticeably quieter by 7PM. V. quiet at quitting time. SATURN (Found before ss, which helped "hat"! Nice w/2 moons.). 11-d. MOON. M 42. h3945. VISIT: Harriet of ballet supplies store. \$89.00 + \$16.50 = \$105.50 (\$33.39/hr.)
- 1269) 2/9/98 (MON) HPL. (5:27-7:55PM). Another nice sky. Mild. Very quiet scene. Probably should have gone to Rotunda! SATURN (Very sharp just after ss; 2-moons.). 12-d. MOON (Edge ok at 166X). M42. \$33.00 + \$4.89 = \$37.89 (\$15.34/hr.)
- 1270) 2/10/98 (TUE) HPL. (10:00AM-01:25PM). VENUS IN THE DAYTIME! Mild temp. and good sky. With V 26-days past IF (MTT 10:00am dec -15.3), I couldn't resist giving it a try. Thought the lunchtime crowd at HPL. would be my best bet. Scene was very quiet till noon, when numbers began to increase. Unfortunately, sky haze began to appear, too. There was not a spontaneous interest like there is a night. Also, I did not recruit very actively. VISIT: Merle Ann (who I told I was going to be there). Lunchtime crowd was an encouraging sight for the lunchtime partial solar eclipse, 2/26. \$22.53 (\$6.59/hr.)
- 1271) 2/15/98 (SUN) HPL. (4:55-8:25PM). Cold (low 40's), finally! Needee better gloves. RIGEL (Located in daylight, after failing to find Sirius. Trouble finding Rigel, too. Why?) Collimated on Rigel before going to SATURN. (Incredibly good image at start. Took it almost to roof, or about 4½ hrs. past MIT. Lots of very impressed lookers.). M42 (Once. Too cold to do any real star hopping!). VISITS: Avon Bellamy. \$93.97 (\$26.87/hr.)
- 1272) 2/26/98 (THU) HPL. (12:15-2:10PM). PARTIAL ECLIPSE OF THE SUN! Near perfect day--60°F with slightly hazy but very doable sky! Employed the following: projection w/3" refractor; 2-ea. #14 (4x5") welders lenses, which I simply let circulate in the crowd (I believe lookers liked them the best); oatmeal container pinhole projector rubberbanded to a tripod; hand mirror covered by a file card w/7/16" round hole which reflected Sun onto portable screen +/-20-ft. away (Public found this fairly interesting, many saying they'd never heard of that setup before. Sun's image was +/-1-inch across, with eclipse quite evident.). Two prs. of small, hard-to-discern sunspots present. A gratifyingly sizable crowd was present for most of the eclipse. VISITS: John Strohsacker (who lent me a tripod for the oatmeal projector and who took 2-rolls of photos); Merle Ann (who did pinholes w/ file cards and who also took photos); Frank Roylance with his adult daughter (just visitin Barry (my "rainman" street person, who had an enjoyable time explaining the #14's to the public). Sold 3-comet cds. HAT (sm. black one w/"Hat Contributions Welcomed") \$56.89 (\$29.68)
- 1273) 3/6/98 (FRI) HPL. (5:55-6:40PM) & FPT. (8:05-11:38PM)! Growing cloud presence late afternoon, but I setup anyway hoping 1) clouds would dissolve at ss and 2) I'd see sunrise on Copernicus. When clouds shut me down at Hpl., I went to FPT. for a beer, whereupon the clouds thinned, so I setup again. 8-d. MOON (Plato and Erathosnese, but no Copernicus, yet!). Was sort of fun to be back in FPT. 3-cds. \$57.36 (\$13.34/hr.) METEOR (A passerby rpt'd. seeing a bright green meteor +/-7PM while driving S. on I-83. He said he heard radio rpt. that it might have hit near crownsville.

TOTAL THIS PAGE = \$ 506.06
TOTAL THIS YEAR = \$1,275.34

- 8 1274) 3/14/98 (SAT) HPL. (5:30-10:20PM) Cool & clear. SIRIUS (30-min. before ss; 4 tries, relevelled acq. on 5th try). M 42 (I worked real hard to make it meaningful to lookers; I think most liked it!). B Mon. h3945. 16-d. MOON (acq. +/- 8:15PM; Mare Crisium region good). Lots of enthusiastic lookers; families. I was in very good spirits. VISIT: Nathan Katz-- here for an Emergency Treatment Assoc. mtg. and who I took to Fpt. for beer. Gave out +/- 4 comet cards. Was warned by undercover copy that some kids hanging around me were contemplating robbing me. He ran them off. \$95.00 + \$12.58 = \$107.58 (\$22.27/hr.)
- 9 1275) 3/19/98 (THU) FPT. (6:55-7:58PM). Cloudy all day, adverse weather rpt., then clearing late afternoon! Went to FPT. in case someone who saw article on me in 3/98 issue of American Way (month pub. of American Airlines) showed up. No one did. Mild temp. Surprising number of strollers for a Thu night. Problem was that I did not recruit. SIRIUS, BELT OF ORI (finder), M 42 (my main feature), h3945. Closed down by clouds. \$16.00 (\$15.28/hr.!)
- 9 1276) 3/26/98 (THU) FPT. (6:30-10:22PM). Spring-like temp.; hazy. 1st night out since American Way publicity, but no lookers mentioned it. SIRIUS, M42, h3945, U Hydra (red), B Mon, 24 Com (nice!), etc. Frustrating night trying to find doubles. \$27.21 (\$7.03/hr.)
- 10 1277) 3/27/98 (FRI) FPT. (7:10-11:55PM). Warm. Hazy for two hrs., then clear. Objects as avail. (A CMA, M42, A Ori, h3945, etc.). ARCTURUS, 24 Com. Fairly steady traffic. LACK OF SELF EVIDENT OBJS. IS VERY STRESSFUL FOR ME! 3-comet cards. \$72.53 (\$15.28/hr.) Several passersby said they saw me in American Way magazine!
- 9 1278) 3/28/98 (SAT) FPT. (6:35-11:10PM). Good sky. Many no-contribs. Should have gone to Hpl.! No passersby mentioning A.A. mag. art. SIRIUS, a ORI, M42, h3945, a BOO, 24 COM, z CBR (wide, = pair, but too dim), 1669 Crv (too close), a CVn (bright, but uninteresting). VISIT: Joyce w/family; Randy (Eng. dancer; we went for beer). \$39.11 (\$8.55/hr.!) The only good thing to say about tonight is that I think I did real well w/some kids.
- 8 1279) 3/29/98 (SUN) HPL. (5:30-8:40PM). Warm; sl. hazy. SIRIUS (1st try. Whew!). 2-d. MOON (Only for +/- 20 mins. A BIG relief from double stars! People liked it.) M 42 (With alot of explaining for kids; Incredibly hard work, especially since it was low and sky was a bit hazy.). VISIT: People of Ok. who saw A.A. art. \$62.00 + \$7.84 = \$69.84 (\$29.97/hr.)
- 8 1280) 3/30/98 (MON) HPL. (5:27-8:22PM). Shared venue with Bolivians for +/- 1 1/2-hrs. Warm; good sky. SIRIUS (1st try, again!). 3-d. MOON (from just before 6:28 ss till it set behind bldg at 8:20). Lots of strollers, few lookers, and fewer contributors! MIR SPACE STA. (Great, 3-min. flyover; SW--NNE; appeared very close to a UMa.). \$19.17 (\$6.58/hr.)
- 10 1281) 3/31/98 (TUE) FPT. (6:50-8:10PM). Delayed by clouds, then shut down by them. Orioles opening day, but it was quiet in Fpt. 4-d. MOON (nice, while it lasted). \$9.00 (\$6.73/hr.) One American Way art. reference.
- 9 1282) 4/2/98 (THU) HPL. (5:12-10:48PM). Nice sky, but I was unprepared for cool wind. Oriole night game brought some families w/kids. 6-d. MOON (Acq. immed. but then lost in clouds for a while. Reacq. for rest of eve.). SIRIUS, FLAG ON FED. HILL, ORIOLE SIGN IN WTC, M 42. VISITS: Barry for most of eve. 5-cds. + blow-up. \$85.00 + \$15.20 = \$100.20 (\$17.89/hr.)
- 8 1283) 4/5/98 (SUN) HPL. (6:10-10:58PM DAYLIGHT S.T.!). Confusing start! Went w/scope to Fpt. for 4PM Rbt. Servidén poetry reading by Mike, intending to setup there, afterwards. But scene was quiet, so I drove home for handtruck and then went to Hpl. 9-d. MOON (started w/polarizer 1 1/4-hrs. before ss; Tycho, Plato area, SUNRISE ON COPERNICUS...sometimes at 220X!) a CMA; A ORI. Lots of enthusiastic lookers; families. Sold 4-cds. and gave away +/- 8. VISIT: brief by Cynthia Wear. \$144.00 + \$18.00 = \$162.00 (\$33.77/hr.)
- 8 1284) 4/6/98 (MON) HPL. (6:05-10:10PM). Another great sky! Pretty busy scene, w/many families. 10-d. MOON (Started w/polarizer; after ss used mainly 135X; Copernicus; sunrise on Jura Mts. VISITS: Tony Scott. \$102.00 + \$10.32 = \$112.32 (\$27.48/hr.)
- 8 1285) 4/10/98 (FRI) FPT. (7:58-11:17PM). Sl. hazy, then clear. 14-d. MOON (not quite full; concentrated on bottom edge & Tycho; 80X. Forgot filter!). VISITS: Accompanied by Barry, who I gave ride to subway train. \$50.00 + \$5.97 = \$55.97 (\$16.89/hr.)

TOTAL THIS PAGE = \$790.93

TOTAL THIS YEAR = \$2,066.27

- 2 1286) 4/11/98(SAT)FARMERS MARKET!(8:45-12-noon). Great sky. 3" REFRACTOR. SUN(a long line of 9 spots, none naked-eye, but one was nearly so. Moderate interest. Long stretches with no contribs. \$19.80 (\$6.09/hr.)
- // 1287) 4/11/98(SAT)FPT.(7:20:12:40AM). Hazy, then good sky. SIRIUS(till Moon avail.). FULL MOON(Great sight rising down Thames St. Then behind Rec. Pier for +/-1 hr.; then behind tower for +/-10 mins. Used 40mm K, yielding 50X, plus filter. Most lookers liked it, w/ Tycho drawing attention.). B Mon; h 3945; 1669 Crv. VISITS: Bob Cotter & Margaret with copy of Am. Way art.; Geri Bell. \$93.00 + \$14.43 = \$107.43 (\$20.12/hr.)
- 9 1288) 4/12/98(EASTER SUNDAY)FPT.(8:35-10:45PM). Late start, having spent day in D.C. with Eve visiting museums, including the Holocaust. Great sky; mild. Very quiet scene. A BOO, U Hya. 16-d. MOON(rose at 8:29 but didn't clear Rec. Pier till +/-9:40; still Tycho and "edge" craters.) UPON ARRIVAL WAS GREETED BY A POLICEMAN AND A MAN WHO WAS COMPLAINING TO HIM THAT I WAS A "PANHANDLER" AND SHOULD NOT BE ALLOWED TO OPERATE. WHEN I AGREED THAT I "SOLICITED MONEY", THE GUY SAID TO THE POLICEMAN, "SEE, I TOLD YOU SO!". I INVITED THE MAN TO HAVE ME ARRESTED AND PROCEEDED TO SETUP, WHEREUPON THEY LEFT. MY GUESS IS THAT THE MAN WAS TRYING TO MAKE SOME POINT ABOUT PANHANDLERS' RIGHTS. \$12.17 (\$5.61/hr.)
- 12 1289) 4/29/98(WED)FPT.(8:15-10:15PM). First stint following Amsterdam visit. Bolivians at HPL (crowded), so went to FPT.(quiet). 4-d. MOON(Nice; started clear & sharp, then haze ar.). Lots of no-contribs.! 6-cds. \$25.21 (\$12.61/hr.)
- // 1290) 5/15/98(FRI)FPT.(7:47-12:26AM). Preakness eve(nothing special about scene). Nice sky; T-shirt temp. TELESCOPE (Opened case to discover dec. latch broken off! Luckily, scope was able to hold dec. without its service. But I must fix it!). PROCYON(2nd try, 24 min. before ss!). ARCTURUS(I used 7th mag. ^{blue} star near it to explain color contrast.) Xi CRV (too close). z CBR(too close). 95 HER (close, but doable). ALBIREO(acq. 11:40PM; a relief to have to work with!). 2 comet + 2 FPT. cds. \$41.80 (\$8.98/hr.). I did no recruiting!
- 9 1291) 5/17/98(SUN)FPT.(7:35-9:50PM). Scattered clouds early, then clear. TELESCOPE(Packed up because dec. losing its grip. Must repair!). VISITS: A young woman who said her science teacher at North Co. High would give 3 pts. ex. credit to anyone who brought in one of my yellow stickers! ARCTURUS(Unable to find by daylight due to bad alignment!). U Hya (Red to me but not for lookers!). \$15.72 (\$6.98/hr.)
- 10 1292) 5/18/98(MON)FPT.(7:53-10-20PM). Clouds early, then clear. Prob. would have done ok had the Moon or a planet been up! TELESCOPE(New "old" dec. latch installed. Worked ok!). ARCTURUS(Again, trouble finding. Maybe scope was out-of-focus.). Xi Crv, 17 Crv, y Vir, y Leo, M3, M5, M13 (All unsatisfactory!). K Her(Do-able.). VISIT: Jackie, an incredibly articulate, up-front +/-8 yr. old girl. TELESCOPE(I painted spots at feet of my fairly well aligned tripod.) \$17.05 (\$6.95/hr.)
- 10 1293) 5/19/98(TUE)FPT.(7:46-11:22PM). Great sky! ARCTURUS(2nd try. Paint spots on bricks might have been helpful!). U Hya, k Her(ok, but....), 95 Her(sort of nice), 31 Cyg(wide tripple ...so,so), 3 Cen(close), B Sco(good one!). VISITS: A couple and a group of men who excitedly reported seeing the American Way art.*Good flow of traffic. Too bad no Moon! I felt good. VISIT: A guy named Jim from Annapolis who hung out for +/-2 hrs. \$31.89(\$8.87/hr.). *Made me feel like a celebrity!
- 9 1294) 5/22/98(FRI)FPT.(7:45-11:47PM). Ok sky; some high haze. ARCTURUS(1st try, thanks to alignment paint spots I put on bricks 5/19!). IZAR (too close). a HER(doable, but a bit indistinct because of being low; re/green). z UMA(briefly, before it got too hi). B SCO(briefly till overwhelmed by streetlight). ALBIREO(+/-10:55PM; a great relief!). \$32.73 (\$8.12/hr.) On the 6PM weather, Norm Lewis told of a supernova in M97, the Owl Nebula. I prepared for q's & requests from lookers, but received none, thankfully.
- // 1295) 5/23/98(SAT)FPT.(7:28-12:03AM). Good sky. Loud Andea music till +/-9:00. Adult crowd till 11:30PM, then kids. ARCTURUS(Lots of trouble finding. Alignment prob.). i CNC(Finally remembered it. Good choice. Held till 11PM.). ALBIREO(From 11PM). VISITS: Terry & Maliah; Matt (STSci), Julian Kurlik & friends(STSci). Girl from Springfield, Vt. Dancers cpl. Often busy night. \$65.00 + \$7.28 = \$72.28 (\$15.78/hr.)

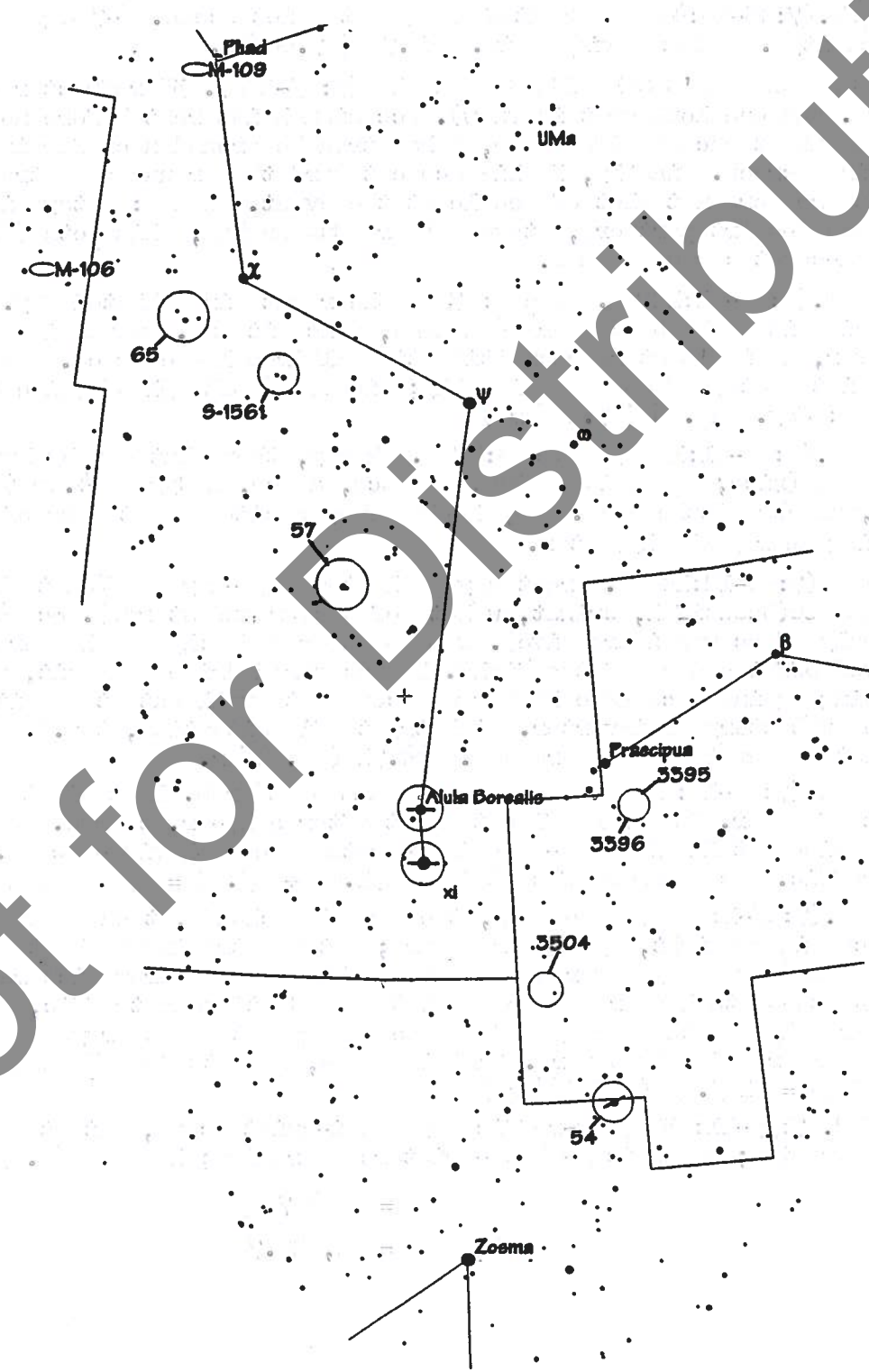
TOTAL THIS PAGE = \$ 376.08
 TOTAL THIS YEAR = \$2,442.35

- 10 1296) 5/28/98 (THU) FPT. (7:27-9:02PM). Bleak scene upon arrival, and it stayed that way! ARCTURUS (2nd try. 1st try failed due to out-of-focus. MUST REMEMBER TO PAY MORE ATTENTION TO FOCUS WHEN SEARCHING FOR DAYTIME STARS!). 3-day MOON (Good by sunset; Cleomedes, Crisium, Langrenus, Petavius.) No traffic, so I quit. \$0.75.
- 11 1297) 5/29/98 (FRI) FPT. (8:00-8:45PM). Another bad night! 4-day MOON. Clouds arriving as I was setting up. Packed up in a hurry with the approach of a large ominously dark cloud. Maybe ten lookers, and I only took in \$1.00!
- 12 1298) 5/30/98 (SAT) FPT. (7:53-11:01PM). Finally a good night in Fpt. Tourist scene, w/lots of adults & families. 4-5 day MOON (polarizer thru sl. haze, then clear, then sl. hazy, then intermittent clouds, then lost behind Inn. Atlas & Hercules.). VISITS: Lisa (lives in Cr. Keys and who I went to Renaissance Fest. with yrs. ago); Barry. \$69.82 (\$22.26/hr.) VISIT: Tim (worker at Images Cafe); Sue (old Wed. dancer from Annapolis).
- 10 1299) 6/1/98 (MON) FPT. (7:45-10:40PM). Beautiful sky but quiet scene. 6-7 day MOON (Aristotle, Eudoxus, Serenity). VISIT: David & Kim. \$21.79 (\$7.46/hr.)
- 10 1300) 6/21/98 (SUN) CYLBURN PARK'S SOLSTICE CELEBRATION (9:45-2PM). 3" refractor on the SUN (one small spot gp. and one lone spot in view). Occasional interest before noon, then next to none. With Sun at such a high angle, I had trouble around noon figuring out how to arrange viewing screen. Finally, I slid scope toward the ground an extra 1' or so. In general, there were not alot of people at the event. VISITS: Patsy Miller, Chuck (my old eclipse T-shirt partner), Steve & Laura Cunningham, Elizabeth (Viva Hse.) & family. Sold 2-comet cards. NO HAT.
- 10 1301) 6/25/98 (THU) FPT. (8:00-11:12PM). ss = 8:37PM. Clear but air polluted sky. I went to Fpt. tonight figuring it would be cooler than home, which it was. An amazing number of people around. However, I didn't start recruiting till Albireo looked good. ARCTURUS (2nd try; I aligned on paint spots). B SCO (Occasionally; nice!). B CYG. 31 CYG (wide tripple star; bright). VISIT: Jay. \$23.06 (\$7.21/hr.)
- 11 1302) 6/27/98 (SAT) FPT. (8:00-11:12PM). ss = 8:37PM. Ok sky, then shutdown by haze. ARCTURUS (4th try). 3/4-d. MOON (nice, while it lasted!). B Sco, a Sco, B Cyg. \$34.40 (\$10.75/hr.) VISIT: Joyce and her little ones. Many lookes very excited about news of discovery of planet orbiting nearby (15 ly) star.
- 10 1303) 7/1/98 (WED) FPT. (7:44-12:14AM). Great sky! Mild temp. 7/8-day MOON (Just short of 1/4; lots of craters). ALBIREO (beautiful, bright, w/lots of background stars!). oc 6405, M7, M8, M11 (of these, only M7 oc was impressive). TELESCOPE (Around 9:15PM a looker remarked that the Moon had moved off the edge of the field. I discovered drive had quit, and I was unable to get it going again! Once home I plugged scope into wall outlet and it worked fine, so prob. must be w/battery or inverter. Will try to fix situation, tmw.). VISIT: Patricia; Arlene (artist who exhibits in Europe!). \$44.71 (\$9.94/hr.)
- 10 1304) 7/2/98 (THUR) FPT. (7:58-12:29AM). V. good sky. TELESCOPE (Prob. last night was because battery ran out of power. It worked fine tonight after a 17-hr. charge.) 8/10-d. MOON (Mostly at 160X, sometimes at 220X! Plato-Appenines-Eratosnese + Clavius-Tycho). ALBIREO (twice). Very good traffic. Nice number of contribs. \$91.00 + \$5.48 = \$96.48 (\$21.38/hr.)
- 12 1305) 7/3/98 (FRI) FPT. (7:55-1:08AM). Good sky, then passing clouds, then somewhat hazy. 9/10-d. MOON (Copernicus in sunlight, Tycho, Frau Maro; not as striking as last night, but pretty good!). GIVEAWAYS (gave away several Moon maps, plus a Moon xerox picture. Should prob. begin offering these to lookers who request them.) Continuous traffic, with lots of contributors. I really had to push myself to keep up my "stage" energy! VISITS: Joyce, Jay, Brad Foster (Welder's Supply owner). Arriving home, I spotted JUPITER 20° up in the east! \$118.00 + \$15.25 = \$133.25 (\$25.56/hr.)
- 10 1306) 7/5/98 (SUN) FPT. (7:55-11:03PM). T-reffic sky! Semi-quiet scene, but steady traffic. 11/12-d. MOON (Tycho region; Copernicus-Plato-Aristarchus region; 160X). \$62.09 (\$19.84/hr.)

TOTAL THIS PAGE = \$ 487.35

TOTAL THIS YEAR = \$2,929.70

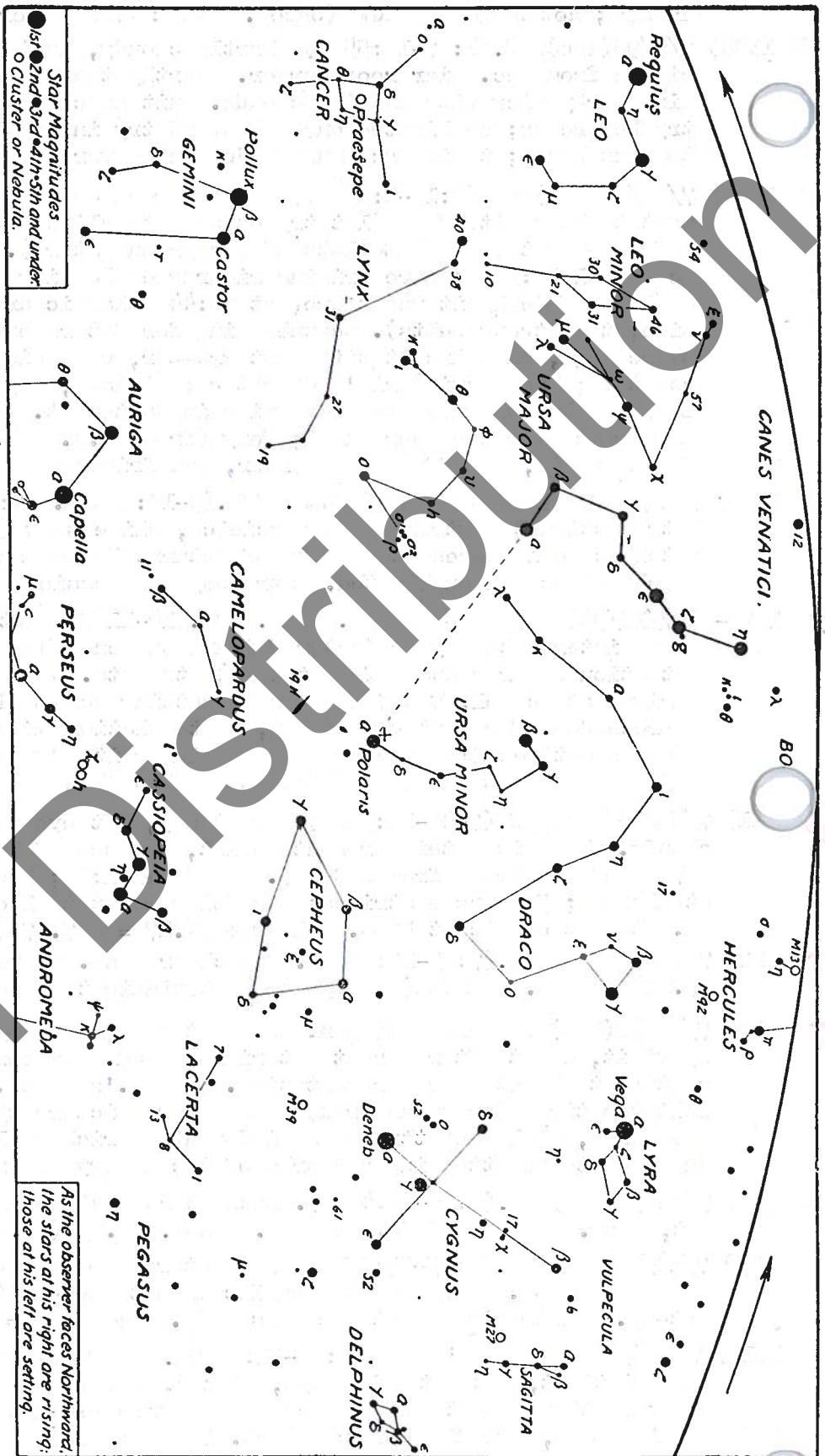
Not for Distribution



- 10 1307) 7/6/98(MON)FPT.(8:17-10:23PM). Partly cldy but nice sky. 12 $\frac{3}{4}$ -d. MOON(Tycho + terminator craters; not bad). ALBIREO (once). VISIT: Jim Balder. \$26.25 (\$12.48/hr.)
- 10 1308) 7/9/98(THU)FPT.(8:27-10:55PM). Partly cloudy, humid & hazy. FULL MOON(Acq. +/-10PM rising from Rec. Pier roof corner. Shortly thereafter lost behind streetlamp for 15-min. Murky view with passing clouds. Quit as clouds thickened.). ARCTURUS(Acq. 1st try before ss; collimated on). VEGA(2nd try in daylight). VISITS: Laura Danly(intown to rent house; taking sc. museum job in Denver). \$13.50 (\$5.47/hr.)
- 10 1309) 7/10/98(FRI)FPT.(8:16-2:23AM!). Sky as good as it gets. Stayed so late because I didn't want to leave it! VEGA (1st try--thanks to alignment per my marks on bricks-- +/-15 mins. before sunset!). ALBIREO(lots of background stars). M 7 (nice!). 14 $\frac{3}{4}$ -d. MOON(didn't acq. till 10:36PM; Mare Crisium rim rugged looking at 136X; lookers impressed!). JUPITER(suddenly it was there, at 00:44! Classic array of 2 moons evenly spaced on ea. side; two strong belts). Kept looking for Saturn but never spotted it. VISITS: ?? Churchhill, an Ellicott City photographer, who said he would contact me to buy a 20x30 comet(!); Mia Louvi(Mario's daughter); Michael, a young man who works for Silvan Learning but who used to be a guide in Baxter St. Pk., Me.(!); Barbara Smith, Gwen Hammer (celebrating her PhD!); Tony (from Pa.). \$93.00 + \$10.95 = \$103.95 (\$16.51/hr.) Visit by Jim, a Buffalo Gap dancer, and friends, who incl a gravity physicist.
- 7 1310) 7/13/98(MON) SINCLAIR LA. ELEM. SCH.(9-10:30AM). Re: Irene Fourqurean & Kate Faelten. Introduction to astronomy as a science, slide show (projector quit $\frac{1}{4}$ thru show), and a telescope look-see at a photo of Saturn. I also supplied star map and other originals, which the school duplicated. Astronomy Q&A session. \$110.00 *cb rec. 8/15/98*
- 7 1310-B) 7/15/98(WED) SINCLAIR LA. ELEM. SCH.(10-11AM). Returned to re-do slide show, which was interrupted by projector failure on Mon. Show went well, with pretty good attention and responses from the K-4 students. DEPRESSION (Felt reasonably ok on arrival at school, but found myself getting more and more depressed as presentation proceeded. For whatever reason, contemplation of giving a school talk depresses me and sometimes I'm depressed while giving it. TOO BAD, BECAUSE IF I WERE NOT DEPRESSED IT WOULD BE ALOT MORE FUN FOR ME AND I'D GIVE AN EVEN BETTER PRESENTATION!).
- 10 1311) 7/18/98(SAT)FPT.(7-40-12:38AM). Great sky, but eventually shut down by sudden arrival of clouds. VEGA(Rich Stein present on 1st, unsuccessful try; acq. on 3rd try.). ALBIREO. M 7 (Needed a break from B Cyg!). URANUS(+/-11:20; lookers liked!). JUPITER(Acq. in tree at 11:50PM; 3 moons + stripes; was doing great till clouds came). VISITS: Helga/Jim; ex. student of Picket UMBC. \$91.00 + \$6.17 = \$97.17 (\$19.58/hr.)
- 10 1312) 7/20/98(MON)FPT.(7:53-12:05AM). Sky clear & sl. unsteady. VEGA. ALBIREO. ANTARES, B SCO. M7. M8 URANUS. JUPITER(cleared tree at midnight. I depressed. \$36.18 (\$8.61/hr.)
- 8 1313) 7/22/98(WED)URBAN LEAGUE(attn: Ms. Boston & Rea). +/-75 4th-6th graders unprepared for my visit, event after I sent materials ahead. However, I'd say they were reasonably receptive to my standard presentation. Good q.'s asked. By the time I finished slides I felt too tired (or uninspired)to do Saturn picture w/scope. However, on insistence of some kids, we looked through a window at a brick wall, which impressed them. Kids were ps supposed to be attending a "world of technology program", of which I saw no signs. \$110.00
- 9 1314) 7/22/98(WED)FPT.(8:35-10:40PM). Late start having gone swimming at Suburban C. w/John. Hot, hazy. VEGA. ALBIREO. ANTARES. B SCO. \$9.75 (\$4.67/hr.)
- 10 1315) 7/24/98(FRI)FPT.(9:05-11:55PM). Late start due to clouds, then continuous passing clouds. ANTARES. B SCO. B CYG. Quit when I couldn't see Jupiter rising. VISIT: Barbara helped me set-up. Frustrating night w/clouds! \$20.00 + \$2.89 = \$22.89 (\$8.07/hr.)
- 1 1316) 7/25/98(SAT)FARMER'S MKT.(8:30-11:30AM). SUNSPOTS (Finally! 3" refractor w/ projection. Two distinct, but not naked eye, groups, + 2 tiny spots. Moderate interest, but I had conversations w/lots of passersby and gave mnemonics to kids.) VISITS: Jim & Debbie, David & Jan, Ann Finkbeiner (w/art. in Sept. S&T) & Cal. \$13.50

TOTAL THIS PAGE = \$ 543.19

TOTAL THIS YEAR = \$3,472.89



KEY-MAP TO THE SKY AS THE OBSERVER FACES NORTH.
 JULY 1, 8 P.M., JUNE 15, 9 P.M., MAY 15, 11 P.M., MAY 1, 12 P.M.
FOR NIGHT-CHART TO THIS MAP SEE OPPOSITE PAGE.
FOR THE SKY AS THE OBSERVER FACES SOUTH, SEE PP. 52, 53.
 For the sky at other Dates and Hours see Time Schedule, p. 35.

The Telescopic Objects. For the Constellations See the Page Opposite.
 The numbers in brackets [] refer to corresponding numbered notes in Observer's Catalogue, p. 116.

I. WITH OPERA-GLASS OR FIELD-GLASS follow, first, the course of the Milky Way as it stretches through AURIGA, PERSEUS, CASSIOPEIA, and on through CEPHEUS, CYGNUS, and SAGITTA. The innumerable stars which compose it are massed more thickly at some points than at others. Near Alpha (α) in PERSEUS, Gamma (γ) in CASSIOPEIA, and along the line of the Cross in CYGNUS—particularly from Gamma (γ) to Beta (β)—there are system; see p. 13. The real double is a very close pair in either a two-inch or three-inch instrument. But whatever the disappointments in connection with the preceding star there will be none with the Beta (β) [147] of CYGNUS, extremely easy and yet singularly fine. A little closer and yet also a delightfully satisfactory object is the Gamma (γ) [157] of DELPHINUS. Easy objects will also be found in the Xi (ξ) [104] and Beta

- 9 1317) 7/26/98(SUN).FPT(7:55-10:55PM). Sl. hazy but nice.sky. VEGA(w/alot of effort, for some reason!). ALBIREO(main feature). Failed to find Uranus, plus 3/2-d. Moon stayed behind hotel. VISITS: Alain, Jay, Joyce. \$26.83 (\$8.94/hr.)
- 10 1318) 7/28/98(TUE)FPT(8:30-10:00PM). Hazy & hot. 5/2-d. MOON(Slid behind AFI just before 10PM). After loosing Moon decided was too hazy for stars, plus Jupiter would be diminished by haze, so packed up. VISIT: Lynn Dewitt. \$18.85 (\$12.57/hr.)
- 10 1319) 7/29/98(WED)FPT(8:22-10:40PM). 6/2-d. MOON(Good craters--Theophilus, Cyrillus, Catharina + sunrise on Aristotle & Eudoxus; lost behind AFI at 10:40PM, having faded badly in haze). Good flow of enthusiastic lookers. VISITS: Martha (DC dancer) & Bob; Kent Karosen (of NYC); Mike Potter w/digital camera. \$32.19 (\$14.00/hr.)
- 9 1320) 7/31/98(FRI)HPL(8:13-11:53PM). MY FIRST EVER SUMMER NIGHT STINT IN HPL! An R&R band on stage when I arrived made for a daunting, discouraging scene. However, it quit at 8PM and I moved in. Great sky. 8/2-d. MOON(1st qt.; Archimedes & Appenines @ 167X; a bright Libra star near top edge for a time). JUPITER(Spotted @ 10:50PM but was too murky; great a bit later w/1+4). VISITS: Barry, who helped me set-up. \$110.00 + \$11.68 = \$121.68(\$33.22)
- 10 1320) 8/1/98(SAT)FPT.(7:02-1:45AM). Everything converged--the sky, the phase of the Moon, the week-end--to make this a great SC telescoping night! 9/2-d. MOON(Thanks to great sky, I started on it 77-mins. before sunset with polarizer; Tycho--was able to point it out to several wh0 saw my Tycho-Kepler letter in City Paper; Sunrise on Copernicus!). a SCO. URANUS(1st try). JUPITER(2+2). SATURN!(35° behind J; acq. 1:20AM; kind of murky). Sometimes had a line waiting to look. \$137.00 + \$13.28 = \$150.28 (\$22.36/hr.) VISITS: John Stroh & Sarah; the girls from Pocono, Pa.
- 10 1321) 8/2/98(SUN)FPT(7:20-10:50PM). Another great sky! 10/2-d. MOON(Acq. 58 mins. before ss. Using polarizer, DISCOVERED THAT MOON IS EASIER TO SEE DETAIL ON IN DAYLIGHT AT 134X and 167X!. Tycho, Copernicus, sunrise on Jura Mts., Plato--terrific array!). VISIT: Van Smith of City Paper; Lee Ann, Lori, & Brook. \$56.00 + \$4.15 = \$60.15 (\$17.17/hr.)
- 9 1322) 8/3/98(MON)FPT.(7:48-10:45PM). The great sky continues! Slow night, except that I rec'd. +/-4 \$5 contribs. Hated to leave before Jupiter, but I was bored. 11/2-d. MOON(Tycho, Gassendi, Copernicus, Jura Mts. area; another great Moon!). ALBIREO. THETA SER(equal brightness, wide double). VISITS: Michael Reitzig; "Bob"(long time NYC looker)\$42.00 + \$7.69 = \$49.69 (\$16.84/hr.)
- 9 1323) 8/4/98(TUE)HPL.(8:02-11:40PM).W/ok from Gideon. Had to force my way into a parking spot, the valet parkers saying there was no room! Andean's playing as I arrived. I agreed to let them continue, tho it made my work alot harder. 12/2-d. MOON (ok craters). JUPITER (+/-10:50PM; 2+2; lookers liked!). VISITS: Quick hello from A. Umoto as was setting up. Busy night. Alot of work! \$108.00 + \$10.09 = \$118.09 (\$32.47/hr.) Some ScFi Con lookers.
- 9 1324) 8/5/98(WED)HPL.(8:06-11:20PM). Pristine sky! Got ok from Gideon. Followed G. Rowan, who I let continue while I started. Unlike when Andean's play, I felt he took attn. away fm. me. I let Andeans play after G.R. left, which again made it alot tougher for me. 13/2-d. MOON(Some lg. craters on lower L. edge). JUPITER(Spotted 10:37; lookers liked alot!. VISITS: Barbara/Warren(dancers). No scfi lookers. \$100.00 + \$15.57 = \$115.57 (\$35.78/hr.)
- 10 1325) 8/6/98(THU)FPT.(8:08-11:56PM). Art. in today's Sun "Live" section saying I'm in FPT., so I went there instead of HPL.incase somebody who read art. would show up. Nobody did, tho one guy commented on art. Ok.sky; windy & somewhat humid. 14/2-d. MOON(not quite full). ALBIREO. VEGA(1st try in daylight). Unable to find URANUS. JUPITER. \$52.12 (\$13.70/hr.) Unlike at HPL., I felt somewhat bored and depressed. VISITS: A young woman who, when flying from Texas to Balto. to live, saw the American Way art. w/my photo and decided to reside in Fell's Point! A woman lookers asked if all the Moon's craters are named, to which I responded, "Yes, and mostly for dead, white European males", which started me thinking about an "alternative" Moon!
- 10 1326) 8/8/98(SAT)FPT(7:42-1:20AM). Thin, fast moving clouds, but generally good sky. VEGA. B CYG. THETA SER. 16/2-d. MOON(Acq. 10PM; M. Crisium area). JUPITER(Great!). SATURN(Acq. 12:45; great image!). Bolivians till 10:30PM. VISITS: Dick Ochs & friend Kay; Terry Reuter; Terry Kemp. W/no Moon early, slow start; then busy. VISIT: Barbara. \$94.53 (\$16.79/hr.)

TOTAL THIS PAGE = \$ 839.98

TOTAL THIS YEAR = \$4,312.87



July 10, 1998

Dear Viewfinder Forum Member,

As a valued Viewfinder Forum Member, we would like to share with you an exciting photographic opportunity and special offer.

Journey to the Walt Disney World Resort for the Disney Institute's Travel Photography Expedition, August 13-16, 1998. In cooperation with Kodak, this 4 day/ 3 night event will feature hands-on photography workshops, reviews and presentations by celebrated travel photographers, Steve McCurry and Kathleen Norris Cook. Photograph the world at Epcot's World Showcase, fireworks over the Chinese Theater at Disney-MGM Studios and more...all side-by-side with the pros!

We are also pleased to share with you an extended special offer as a benefit of belonging to the Viewfinder Forum. Book by July 30, 1998 and save \$100.00 off the regular price! See the enclosed flyer for event details or call 1-800-282-9282 ext. DC81.

Sincerely,

A handwritten signature in black ink that reads "Steve Hallowell".

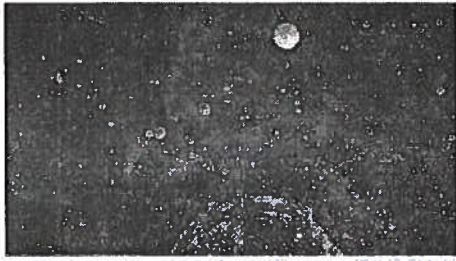
Steve Hallowell
Managing Editor



- 10 1327) 8/1/98(TUE)FPT.(9:05-10:35). Expected clear but got mostly clouds. ALBIREO(briefly). Unable to find Uranus. JUPITER(delayed start due to clouds). VISITS: David, my long-time, young, red-headed visitor finally received the planets in the correct order by using the mnemonic! I gave him a comet card as a reward. \$2.00 (\$1.33/hr.)
- 9 1328) 8/19/98(WED)HPL.(unscheduled)(8:30-11:37PM). Arrived to find Andeans. Got their ok to setup. Until they quit at 10:30PM, it was v. unpleasant for me. Nice but unsteady sky. ALBIREO. THETA SER. JUPITER(Acq. 9:34PM. Stayed blurry till 10:10PM.). Next time I will resist setting up till +/-9:30PM. \$55.00 + \$7.33 = \$62.33 (\$19.20/hr.)
- 9 1329) 8/20/98(THU)HPL.(9:35-11:57PM). Late start to await Jupiter. Setup when juggler finished. JUPITER(In and out of clouds first 20-mins, then great!). HEALTH(Was aware of irregular heartbeat. Why? Even considered leaving early, but didn't.). Spent early evening accompanying Barbara to Winterlings for supper. \$61.00 + \$8.50 = \$69.50 (\$29.32/hr.)
- 10 1330) 8/21/98(FRI)FPT.(8:43-01:03AM). Good sky, except for clouds mid-evening. ALBIREO. THETA SER. URANIUS(Finally!; reading 1/2° high!). JUPITER(9:45PM; 2+2 in staggered positions.). SATURN(+/-12:00; lots of skeptical lookers!). VISIT: Bob Cotter & family. Good adult scene early-on w/ lots of interest. Little interests from young crowd. \$97.00+\$9.08=\$106.08
- 9 1331) 8/22/98(SAT)FPT.(9:34-12:52PM). Arrived late for Jupiter and spent 1-hr. waiting for parking space! Hazy sky. JUPITER(ok; some moon shadows). Waited for but never found Saturn. VISIT: John Stroh.; Cinder & Mary. \$68.00 + \$3.34 = \$71.34 (\$21.64/hr.)
- 10 1332) 8/28/98(FRI)FPT.(7:35-12:58AM). Nice sky (expected clouds due to Hurricane Bonnie!). JUPITER(A looker found Red Spot, which looked white; acq. 9:20PM.). 6-d. MOON(Good!). SATURN(acq.11:50PM.; Titan v. evident over planet.). VISITS: Mario Livio; Quintin & woman friend..dancers. \$116.00 + \$6.32 = \$122.32 (\$22.78/hr.) PERSONAL(Sl. depressed w/some trouble enunciating. This afternoon I was turned down for Sc. Ctr. job. Found myself saying, "I just don't have the heart for this, anymore.").
- 11 1333) 8/29/98(SAT)FPT.(7:47-11:58PM). Thick clouds cleared at sunset. Bolivians playing as I setup, but they left early. PERSONAL(After feeling fuzzyheaded all day, I found myself being fairly articulate and upbeat!. 7-d. MOON(Good show!). JUPITER. SATURN(Acq. 11:25PM) Early-on, lots of families and many Spanish speakers. \$95.00 + \$7.94 = \$102.94(\$24.59/hr.) VISIT(Glen Reitz of Lemon St. collective in peace movement days.)
- 10 13334) 8/30/98(SUN)FPT.(7:15-10:35PM). Ok but sl. hazy sky. 8-d. MOON(1/4; sunrise on Tycho, Erathones, Plato.) JUPITER(Acq. 9:07PM; sl. hazy view.) PERSONAL(I felt ok and was able to muster required energy.). \$45.03 (\$13.50/hr.)
- 8 1335) 8/31/98(MON)HPL.(8:20-10:55PM). Bad night! Late start waiting for bagpiper to end. Slot shared with Andeans. Clouds arrived just after setup. Pack-up at 9:35PM, whereupon, clouds thinned. Setup again! 9-d. MOON(Great!). JUPITER(hazy but ok). Lots of no-pays. Invented "\$1.00 SUGGESTED, THE SKY'S THE LIMIT!" \$32.61 (\$12.59/hr.)
- 9 1336) 9/1/98(TUE)HPL.(7:19-12:00 midnight). Both bad & good night! Called ahead and learned from security office that both parking permits were unused! I had expected Jerry R. to have one and the Andeans to have grabbed the other. I rushed down at got #1 permit. I had slot to myself all evening! Lots of no-pays for a while got me angry & down, but then it began to improve. Had steady stream of lookers till 12MN. 10-d. MOON(Tycho region). JUPITER(v. murky at start, then good; acq. 8:55PM). ALBIREO. SATURN(acq. 11:50PM)! VISIT: family from L.I. who just bought 8" Celestron. Father (Rick Brand) and son (Johnathan) hung around long time. They had spotted me by binocs from Hyatt restaurant! Barry. Wayne(a guy who is one of my fans!). \$100.00 + \$13.17 = \$113.17 (\$24.18/hr.)
- 11 1337) 9/4/98(FRI)FPT.(7:50-12:40AM). Nice sky but bad seeing. PERSONAL: I left for FPT. eager to setup, but over evening I became more and more depressed and detached. I'm wondering if SC telescoping no longer jibes w/my self image or sense of maturity! 13-d. MOON(doable craters). JUPITER. SATURN(2 moons). VISIT: Sue Becker, Greg's sister! \$101.26 (\$20.92/hr.) Drive-by visit from Barbara.

PAGE TOTAL = \$ 828.58
 YEAR TOTAL = \$5,141.45

9/5/98 Am going to Amsterdam for 10-d. to visit Frank & family. Return to Balto. 9/15.



Mosaic26

NO FOR Distribution

- 10 1338) 9/18/98(FRI)FPT.(7:35-10:48PM). 1st stint since return from Amsterdam. Hazy but ok sky till clouds arrived and closed me down. JUPITER(Acq. 7:45 but lost it behind Rec. Pier quickly for +/-25-min.). THETA SER. B CYG. SATURN(Acq. +/-10:35PM.)\$61.27(\$19.03/)
- 10 1339) 9/19/98(SAT)FPT.(8:20-12:10AM). Adverse weather rpt., but sky cleared adequately late afternoon while I was at Irish Fest. w/Dorothy. This put me under alot of stress, but fortunately she didn't have a problem leaving. JUPITER(Moons v.wide.). SATURN(Acq. +/-10:30PM. Murky at first, then great at 165X). Suprisingly busy eve. \$123.05 (\$32.07/hr.) With Yankees in town, I had lots of in-your-face New Yorkers (great!). VISIT: Kate Newma (with her sister, Pixie), who said Images Cafe fliers were great and were distrib. Fri. JUPITER(Red spot went by mid-eve. I and lookers to whom I called its attn. easily saw it
- 9 1340) 9/20/98(SUN)HPL.(7:23-10:37PM). Hazy. Very tough stint. Busy, plus I have a cold. Andeans on scene at start. JUPITER(Delayed start due to hazy. I mistook IV for a star!). VISITS: Barry. Had to deal w/a large gp. of roudy lummoxes from Dundalk. Roshashona eve. \$68.00 + \$8.46 = \$76.46 (\$23.62/hr.)
- 9 1341) 9/23/98(WED)HPL.(7:15-11:05PM). 1st day of autumn; cool temp. w/incredibly good sky. Was pessimistic about Hpl. prospects, believing cool weather, mid-week, and end of vacation season would bode for slow evening. However, I was very busy, with lots of enthusiastic adults. Had a rash of \$5 contribs.(maybe because I was wearing my berret?). 3-d. Moon(briefly, before having to go to Jupiter). JUPITER(3 moons w/Io's shadow: lots of inquiries about Red Spot, but it did not appear). SATURN(Acq. 10:05; breathtaking, thanks to great sky). \$137.00 + \$6.39 = \$143.39 (\$37.41/hr.)
- 8 1342) 9/24/98(THU)HPL.(7:00-10:53PM). Was able to start sooner than expected because bagpiper Michael Scott decided not to perform. Continual hazy clouds, but I managed to work +/-90% of the evening. 4-d.MOON(Briefly, till lookers asked for Jupiter.). JUPITER(I, II, & IV in unusual dance on right side; moved from right angle to triangle!). SATURN (Acq. 10PM; used 135X). Hard work! \$116.00 + \$7.53 = \$123.53 (\$31.81/hr.)
- 12 1343) 9/26/98(SAT)FPT.(6:58-12:40AM). Sl. hazy but good sky. Exceedingly busy early & mid-eve. 6-d. MOON, JUPITER(Moons is very straight "textbook" array; Spot came & went.).SATURN (Murky, then good; at least 2 moons.). VISIT: Karen Cook, in a wedding dress, having just gotten married in the Adm. Fell Inn! ME: For the last 1 1/2 hrs. I felt really frazzled! VISIT: Ellen, blind dancer, to whom I introduced telescope. \$189.00+\$5.40=\$194.40(\$36.27/
- 9 1344) 9/27/98(SUN)FPT.(6:31-10:20PM). Warm, sl. hazy but ok sky; shut down by clouds(which was ok, because I'd had enough). Quiet scene with occassional groups of enthusiastic lookers. 7-d. MOON(Began w/polarizer.). JUPITER(Moon very wide, so I used 80X). SATURN(Sl. murky, then lost in clouds. VISIT: Paul (dancer); lookers from Nepal! \$74.70 (\$19.61/hr.)
- 8 1345) 9/28/98(MON)HPL.(6:38-10:35PM). Mild, good sky. 8-d.MOON(Just short of qt.--good craters! JUPITER(Acq. when low in E. and still murky because lookers saw sign and wanted it. Got good when higher.). SATURN(Acq.9:40PM; impressive!). \$99.00 + \$7.11 = \$106.11 (\$26.86/)
- 8 1346) 9/29/98(TUE)HPL.(6:37-11:05PM). Good sky, then some cloud action in last hr. Accompanied by Andeans till 8PM. Very busy at times! 9-d. MOON(Sunrise on Copernicus!). JUPITER(3 the 4 on R; spot went by mid-eve.). SATURN. Yom Kippur eve. Sold 13 comet cds., 10 to Susan from Kodak. Lookers from Exhibitors' Convention. \$114.00 + \$3.10 = \$117.10 (\$26.24/hr.)
- 8 1347) 10/2/98(FRI)HPL.(6:32-11:35PM). Mild; good sky. Very busy. Had a line, sometimes w/doz. people, most of evening! A drawback is that I have to work extremely hard. 12-d. MOON (Impressive!). JUPITER(Eventually sensational!). SATURN(Lots of doubters.). VISITS: Kay & Ray Knabe & grandson Emanuel. \$190.00 + \$15.27 = \$205.27 (\$40.62/hr.)
- 154 1348) 10/3/98(SAT)TUCKAHOE ST. PARK(4-5:15PM). Auspices Girl Scouts (ref. Kevin Bellamy, 410-265-4627). See "Presentations 1997-98" folder for details. Fee = \$75.00 + \$52.50=\$127.50
- 9 1349) 10/10/98(SAT)FPT.(8:30-11:25PM).Late start/clouds. Oyster Fest.Parked behind Kiosk; setup on Lee's corner. JUPITER(Impressive!).SATURN(Sharp, then blurry; 2 moons). URANUS(for science history prof. from Pittsburgh). V. busy at start, then slow.\$73.03 (\$25.04/hr.) I EAT GRAM CRACKERS!(New Jupiter's moons mnemonic from looker!!).

TOTAL THIS PAGE = \$1,425.81

TOTAL THIS YEAR = \$6,567.26

- 9 1350) 10/14/98(WED)6:22-10:45PM HPL. Took M. Scott's slot, as he is sick. Bolivians on scene but left early. As I setup I was discouraged by cold and sparse crowd, but I had a busy night after all. Many lookers from cable TV convention. JUPITER. ALBIREO (for girl who remembered it from previous look). SATURN(3 moons).\$121.05 (\$27.64/hr.)
- 1351) 10/15/98(THU)HPL.(6:20-10:00PM). Clear; cool. Barry & Charles visited Sc. Ctr. scope and reported its images of J & S were somewhat bigger and clearer than mine. MIR(óbserved for 2-mins. from 7:23PM. JUPITER(3, then 2 moons). SATURN(2 moons). Quieter scene than last night. \$101.00 + \$8.41 = \$109.41 (\$29.81/hr.)
- 9 1352) 10/16/98(FRI)FPT.(6:45-12:40AM). Clear; mild, then cool. Bleak scene 1st hr., then increasing numbers. V. busy mid-eve. and late eve., with lull between. JUPITER. SATURN(Some pretty insistent disbelievers.). \$143.00 + \$7.13 = \$150.13 (\$25.36/hr.)
- 12 1353) 10/17/98(SAT)FPT.(6:47-12:18AM). Haze at start, then clear, then haze, then clear. TELESCOPE(manhandled excessively, tonight!). ME(Felt incredibly energetic, sharp, and unafraid! Why?? Was it all the sugar & coffee I took in, today?). JUPITER. SATURN. ME(If I felt that way every day of my life, I would be a total winner. My behavior tonight at least shows me that I have the potential of such a state!). After stint went w/John to Waterfront to listen to Chuck(great!). \$152.00 + \$11.48 = \$163.48(\$29.62/hr.)
- 8 1354) 10/19/98(MON)HPL.(6:11-9:48PM). Good sky after ss, then intermittent hazy clouds, which finally forced me to pack-up. JUPITER. SATURN(Acq.8:10PM; lookers liked even when in deep haze!). VISIT: Jim Ethridge(BCC '49). \$94.00 + \$9.02 = \$103.02 (\$28.46/hr.) VISIT: Bio. teacher & +/-20 students from Montessori Sch. in Ohio.
- 8 1355) 10/20/98(TUE)HPL.(6:15-10:35PM). Thin clouds early, then v. clear. Lots & lots of no-contribs. early eve. JUPITER(III seemed to have a white halo around shadow as it transited?). SATURN(3-moons easy!). VISIT: Mary, women from Ellicott city who has read arts on me and was excited to meet me; has small scope. \$92.00,+ \$22.12 \$114.12 (\$26.34/hr.) VISIT: Linda, saleswoman at Something Else. ME: I've got to come up with a strategy for putting more pressure on lookers to pay, esp. the affluent looking ones(the non-affluent ones being likely to contribute). I do not like the powerless feeling of not being able to put on sufficient pressure. Anger is not the way! Maybe wearing a button with 50% LOVE BUT 50% \$\$ on it would be a start.
- 9 1356) 10/23/98(FRI)FPT.(6:40-11:50PM). A bit cold; good sky. JUPITER. 3-d MOON. SATURN(opposition; acq. 7:30PM). Unable to go to HPL., as Hilby on eve. sked. Too bad, because Fpt. very slow for first 2 hrs. I got into a bad mood. Also, had uninteresting lookers for the most part. Y And(for some Goucher students). \$98.00 + \$9.87 = \$107.87(\$20.89/hr.)
- 12 1357) 10/24/98(SAT)FPT.(6:06-12:28AM). Perfect weather & sky! Good scene upon arrival; busy night! 4-d MOON(briefly). JUPITER(Used 167X, to the exclusion of IV.). SATURN(4 moons--all seen by most lookers!). M 3l(w/effort, on request; hazy blob). Much more adult crowd than last night. VISITS: Jan Shipley & friends; the couple who named their sailboat Saturn! \$164.60 + \$8.81 = \$172.81 (\$27.14/hr.)
- 9 1358) 10/25/98(SUN)HPL.(5:20-9:20PM EST!). Accompanied by Bolivians for several hrs., which made things pretty tough. Intermittent haze for most of stint; very clear toward end. Extremely busy for several hrs. Rene (Bolivian) noticing my business, half-humorously commented that I was taking business from him! JUPITER(2+2+star). SATURN(Murky; 4 moons at end of stint). FOR LST TIME EVER I FORGOT TO TAKE MY STICKERS. I FELT A BIT LOST W/O THEM, BUT IT DIDN'T SEEMS TO EFFECT CONTRIBS MUCH! \$134.00 + \$10.76 = \$144.76 (\$36.19/hr.)
- 9 1359) 10/29/98(THU)HPL.(5:38-9:56PM). Cool; another as-good-as-it-gets sky. Delayed start due to performance by Morris Dancers. However, some of them came by later for looks and contributed. Many, "Can you see John Glenn?" questions, this being the day the Space Shuttle took Glenn back to orbit. MOON(Post sunrise on Copernicus; terrific!). JUPITER(4 on left; nice!). SATURN(With a +/-6th mag. star only .3° above. S moved westward, away from it during stint. 4-moons easy!). Very slow start; then somewhat busy.\$122.66 (\$28.51/hr.)

**TOTAL THIS PAGE = \$1,309.31

TOTAL THIS YEAR = \$7,876.57

**This is probably the first log page ever with all stints over \$100.00!

HALE-BOPP

HALE-BOPP

HALE-BOPP

March/April, 1997

- 8 1360) 10/30/98(FRI)HPL.(5:32-10:40PM). Went for HPL rather than Fpt. hoping money would be better. Clear but unsteady sky. With help of Barry, I moved from Amphitheater to Promenade when singing gp. Part Harmony arrived. Prob. didn't suffer from move. Lots of affluent no-contribs, which is discouraging. JUPITER. MOON. SATURN(Last night's close star now way east.) \$151.00 + \$8.03 = \$159.03 (\$30.96/hr.). Maybe would have done that in Fpt. in lots of people asking if we could see John Glenn and the Space Shuttle. more hours.
- 8 1361) 11/4/98(WED)HPL(5:22-9:15PM). Gloves weather; very good sky. JUPITER. SATURN(2 moons). MOON(Just past full. M. Crisium edge fine at 165X.). Bleak scene early, then increasing traffic. As usual, lots of no-contribs., which depresses me. \$90.55 (\$23.34/hr.) Had a looker return to show me he'd bought a copy of S&T at Barnes & Noble!
- 8 1362) 11/6/98(FRI)HPL.(5:40-7:20PM). Put out of action by clouds. Too bad, because lots of tourist-type out, so it would have been a good night! JUPITER(neat). SATURN(briefly). VISITS: Dick & Mary from Otterbein, who I ran into later at Barnes & Nobel and with whom I had a fun conversation. \$25.00 + \$6.12 = \$31.12 (+/- \$26.60/hr.)
- 8 1363) 11/7/98(SAT)HPL.(5:04-10:28PM). Coolish; good sky, but with numerous cloud threats. Man-to hang on till 10:28PM, at which point I was ready to leave, anyhow. Extremely busy ear- eve., w/lots of families and adults and with everyone contributing. Later, crowd got your ger and thinner. Must have had 15-20 in line early. JUPITER(2 moons close--like J w/ears! later, only IV!). SATURN(Quite nice, once it rose a bit; acq. 6:15PM; 3 moons). MOON (waining; briefly, as it was rising and before it went behind WTC). VISITS: Margaret & Ono, with whom I was photographed. I hope I get a copy! I was in a very good head but was feeling bushed toward end of stint. Was glad for clouds! \$218.00+\$12.09=\$230.09(\$42.6
- 8 1364) 11/11/98(WED)HPL.(5:11-9:48PM). Mild/coolish. Nice sky. JUPITER. SATURN(3 moons). B CYG (once). Quiet scene but steady stream of small groups. VISIT: Mark Adams, who said the Fpt. "Tomb" is being removed! \$99.00 + \$7.55 = \$106.55 (\$23.06/hr.)
- 8 1365) 11/12/98(THU)HPL.(5:00-8:22PM). Great sky, then clouds. Quitting early prob. good, as I felt tired. Had to struggle w/many kids who said they couldn't see anything. JUPITER (neat!). SATURN(4 moons). Lots of young lady lookers here for cheerleading convention. Adjourned to BOP Pizza w/Barry. \$66.00 + \$7.60 = \$73.60 (\$21.86/hr.)
- 8 1366) 11/13/98(FRI)HPL.(5:00-10:16PM). ELEVENTH ANNIVERSARY OF MY STREET CORNER TELESCOPE AD- VENTURE, WHICH STARTED IN FPT. 11/13/87! Very clear, then clouded out from 6:20 to 7:20 PM, then reasonably clear. Very busy till near end of stint. More cheerleaders and parents lookers. JUPITER(Very fine!). SATURN(Extremely sharp; 3 moons). VISIT: Sam Holden, a City Paper photographer, who took pictures for forthcoming art.\$152.00+\$17.52=\$169.52(\$32.19/)
- 8 1367) 11/15/98(SUN)HPL.(4:57-8:52PM). T-rrific sky! JUPITER(very briefly at start, then several side trips). SATURN(4-moons!). V. busy till +/-8PM. Many families. Had slowed considerably by 8:30PM. Numerous inquiries about Leonids. \$130.00 + \$9.77 = \$139.77 (\$35.66/hr.) VISIT: Edward Hamburger, who introduced himself but din't stop to talk.
- 8 1368) 11/18/98(WED)HPL.(4:59-9:26PM). Sl. hazy but great sky. Best Jupiter & Saturn images ever! Kind of a bleak scene, but I kept attracting lookers. First night out with my 141% enlarge "TONIGHT...THE RINGS OF SATURN!" sign. Maybe it helped, but not sure. VISIT: Janet Baletti a school photos photographer, here to take class photos at Morgan St., and with whom I ad- journed to Fpt. for a terrific evening of music, conversation, and dancing at Cat's Eye & Bertha's. She's a terrific person, with whom I hit it off real well. Incredible evening!!! !!!!!!! We will meet again. \$92.00 + \$12.19 = \$104.19 (\$23.40/hr.)
- 8 1369) 11/21/98(SAT)HPL.(5:08-7:40PM). Good start, then clouds. Battled w/them for 1-hr. before giving up. Too bad, because would have had a tiptop eve. 2-d. MOON(Spotted by eye low in W.). JUPITER(Moon close-in; tee-rrific!). SATURN(Only briefly.). Accompanys by Andeans for little while. Santa House in business, again. \$89.00+\$0.76 = \$89.76 (\$35.34/hr.)
- 8 1370) 11/22/98(SUN)HPL.(4:08-8:09PM).Ok sky; not great. Somewhat emptyish scene with occasional busy periods. JUPITER(Still tee-rrific!). 3-d. MOON(several times). SATURN(Rhea barely vis.). \$104.00 + \$7.23 = \$111.73 (\$27.79/hr.)

TOTAL THIS PAGE = \$1,305.91

TOTAL THIS YEAR = \$9,182.48

- 4 1371)11/23/98(MON)ROTUNDA!!(4:35-8:00PM). Great sky all day and early eve., then shut down by predicted clouds. 4-d. MOON(briefly, several times). JUPITER(Great, early; 4 then 2 moons). SATURN(Sharp, early; 2 moons). Lots of very appreciative lookers. VISITS: John & Sally(on way to movie), Paul R., Andre P., Andy Kane(bought me pizza), Alin Tolea (my new JHU grad. std. astro. friend) & wife. \$60.00 + \$5.00 = \$65.00 (\$19.01/hr.) Lots of "Did you see the shooting star shower?", including from a woman saying she saw it well from Greenmount & 28th, around 4:30AM, which I believe because she noted the moon was up!
- 4 1372)11/24/98(TUE)ROTUNDA(4:43-9:31PM). Good sky; cold wind, early. Traffic at first, then long lull (during which I was sorry I was there), then quite busy. 5-d. MOON(Several times). JUPITER(3, then 4; v. sharp image, then mediocre when high, good again when lower!). SATURN(3-moons; sometimes v. sharp image). M 42(once!). VISITS: Susan Rose; Lisa Permutt; lots of astro wannabees; Kurt Anderson, Apache Pt. Obsv. director; A. Umoto. \$113.35 (\$23.63/) A looker reported seeing a street corner telescopist recently on Harford Road!
- 8 1373)11/27/98(FRI)HPL.(4:53-11:32PM). Day after Tksgrv. Mild, great sky, lots of people out! Two comments (only) on my City Paper write-up. TELESCOPE: I bumped finder, throwing it way off, which bugged me half the night! 8-d. MOON (Sunrise on Copern.!). JUPITER(Parked +/-0.5° over Moon. Spectacular!). SATURN(3-moons). Extremely busy most of the stint. Too busy to pick up money from hat, so I just kept pushing it down! Lots of enthusiastic lookers. Family & adult crowd. Nice! \$301.00 + \$15.36 = \$316.36!!!! (\$47.55/hr.)
- 9 1374)11/28/98(SAT)FPT.(5:06-11:36PM). Just wasn't ready to face another night as intense as last night, so I went back to my "roots". Mild eve.; cloudless but sl. turbulent sky. 9-d. MOON(Sunrise on Jura Mts.!). SATURN(4-moons). JUPITER(Moons spread wide.). +/-10 people complimented me on City Paper art. VISITS: Carolyn & Kelly. M 42 (once). TELESCOPE (Still find prob., even tho I worked on it for 1-hrs. today.). \$169.00+\$14.70=\$183.70(28.26)
- 9 1375)11/29/98(SUN)FPT.(4:59-9:25PM). First stopped at HPL. but too much confusion (juggler, Andeans, Pride ship partially blocking sky) so moved on to FPT. Sl. hazy but v. good sky. Long slow times interrupted by knots of enthusiastic lookers. JUPITER. 10-d. MOON. SATURN. Lots of people saying they saw CP art. Autographed John's copy. \$81.00+\$7.86=\$88.86(\$20.03)
- 4 1376)11/30/98(MON)ROTUNDA(4:52-8:14PM). Adverse weather rpt. but great sky. JUPITER. SATURN. 11-d. MOON. All great! Somewhat slow traffic. VISITS: Buzzy H. Many "great article" comments on my City Paper write-up. \$47.00 + \$9.01 = \$56.01 (\$16.65/hr.) ~~10,005.76~~
- 4 1377)12/1/98(TUE)ROTUNDA(4:40-8:13PM). Mild temp., except for occasional cold wind. Greaaaaat sky! 12-d. MOON. JUPITER. SATURN(4-moons 45 min. after sunset! Sometimes at 220X.). VISITS: Susan(briefly). Leonard Kerpleman (very enthusiastic). \$66.77 (\$18.82/hr.) VISIT: "Unsung Hero" Skizz Cyzyk, filmmaker.
- 4 1378)12/2/98(WED)HPL.(4:38-10:07PM). Good sky, but not like last night! Bleak scene at setup, but +/-6:30PM it picked up nicely. HH In a great mood. I felt very strong & articulate. Had no trouble at all with voice, which makes me think that voice prob. is psycho. JUPITER. SATURN. 13-d. MOON (full). Pride of Balto. tied-up in front of me, blocking Sat. briefly. Some partygoers on ship visited scope. Enthusiastic lookers! \$142.67 (\$26.00)
- 9 1379)12/3/98(THU)HPL.(4:44-9:36PM). HH In a not so good mood. Felt angry, exploited. Good sky, then intermittent haze, which eventually shut me down. JUPITER(4 on L!). SATURN. 14-d. MOON(Very full.). VISITS: Angie(Irish dancer) + Granddaughter Kathleen; Jim & Debbie Pickett. Cpl. from KA who rpt'd Leonids "terrific"! \$100.00 + \$7.57 = \$107.57 (\$22.09/hr.)
- 7 1380)12/4/98(FRI)HPL.(5:45-11:03PM). Late start due to weather confusion. Good sky w/intermittent clouds. SCOPE(Failure of screw which hold eyepiece onto scope. Duct tape borrowed from Andeans saved the night!) POLICE(Confronted by officer who intensely questioned by presence and threatened to confiscate scope. Finally, when I told him I was scheduled he left me alone!) Peak night. I in great mood! JUPITER. SATURN. 15-d. MOON(Incredible!). VISITS: Woman from ID reporting a terrific Leonid shower, there. Harry Treece, a S. IL amateur who hung out and then went for beer with me. \$208.00 + \$11.65 = \$219.65 (\$41.44/hr.)

PAGE TOTAL = \$ 1,359.94

YEAR TOTAL = \$10,542.42

Figure 3
Scanning Electron Micrograph
of a Hollow Fiber

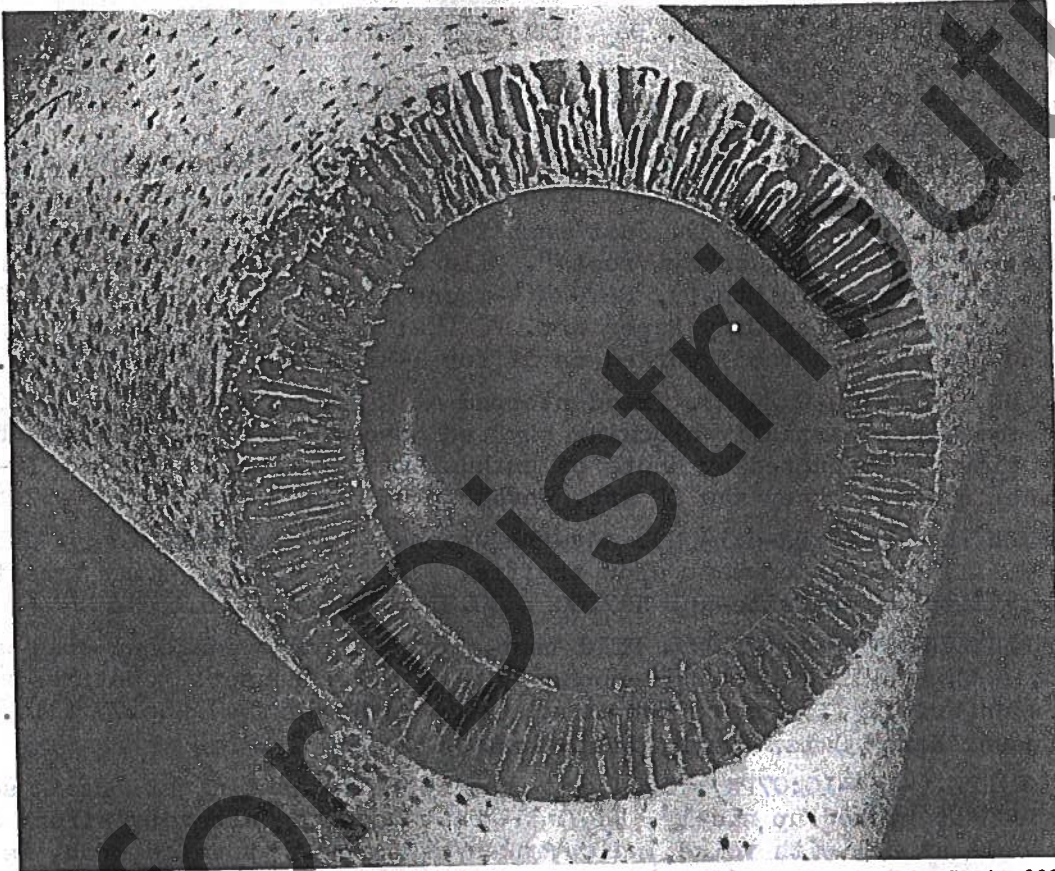


FIGURE 3 Scanning electronmicrograph of the cross-section of an asymmetric hollow fiber, magnification 300x.
(Photograph courtesy of Amicon Corporation, Lexington, Mass.)

(Source 2)

- 8 1381)12/9/98(WED)HPL.(4:46-9:39PM). Cool temp., mid-week, bleak scene when I arrived, but once I set up I had a steady stream of lookers, some very enthusiastic, till near the end! SCOPE(Eyepiece still held on by tape. Hopefully new part will arrived tmw!).JUPITER(3, then 2, then 4. Great show!). SATURN(3 moons + Cassini's Div.). LEONIDS(Rpt. of 30/min. 50 miles SW of DC from Josh, an amateur astro.). \$121.00 + \$9.19 = \$130.19 (\$2668/hr.).
- 8 1382)12/11/98(FRI)HPL.(5:03-9:55PM). Overcoat temp. V. clear early, then incredasing haze, which shut me down. TELESCOPE(1st time w/replacement Celestron eyepiece holder. Occular held by two small screws w/small heads, which are hard to use w/numb fingers. May need to have old holder drilled w/new threads.)JUPITER. SATURN(3-moons). Kind of a bleak scene with spurts of lookers. \$130.00 + \$8.13 = \$138.13 (\$28.38/hr.) Lots of no-contribs.! VISIT: CW Taylor and son, Ben.
- 8 1383)12/14/98(MON)HPL.(4:43-8:26PM). Cold. Pretty quiet scene, which stayed that way. JUPITER. SATURN(3-moons; lots of doubters). \$54.00 + \$6.91 = \$60.91 (\$16.40/hr.)
- 8 1384)12/15/98(TUE)HPL.(4:47-9:20PM). Milder than last night. Bleak scene, but increased traf- fic +/-8-9PM. JUPITER(4 on right. Great!). SATURN(4-moons!; ring shadow). Usual number of Saturn skeptics. Shut down just before clouds came in. \$87.00+\$8.13 = \$95.13 (\$20.89/)
- 8 1385)12/18/98(FRI)HPL.(4:56-8:50PM). V. good sky. Cold. Traffic a bit slow at first but pick- ing up steam nicely toward end. JUPITER. SATURN. VISIT: Val Smith, at Hpl. to shop. I packed up early, (and we adjourned to Fpt. for music & dancing. Very nice time. I felt a bit bad about running out on an eager public at Hpl. Did I do the right thing? I guess this was a test of the conflict between my desire for a better social life and the nu- merous gratifications I get from my SC telescope routine. Its a close call as to which I want to give priority to. Or, does it have to be an either-or sit.? \$126.90 (\$32.51/hr.)

PAGE TOTAL = \$ 551.26

YEAR TOTAL = \$11,093.68

STREET CORNER EXPENSES - 1998

SP	8/11/98	3-copies Sun "Live" astro. art. (JHU)	\$	0.15
SP	8/11/98	2-copies U.S. State Dept. addresses (JHU)	\$	0.10
SP	8/11/98	3-copies State Dept. letter + enclosures (Hopkins Store)	\$	0.15
SP	8/13/98	5-sheets handbill (JHU)	\$	0.25
SP	8/13/98	9-star maps (8 1/2x11--both) (JHU)	\$	0.90
SP	8/13/98	3-astrophoto art. (8 1/2x11--both)	\$	0.30
POST	8/15/98	FAX to Alan Hale re Iran (Hopkins Store)	\$	1.58
SP	8/17/98	5-sheets J's moons (8 1/2x11--both)	\$	0.50
SP	8/20/98	5-astrophoto art. (8 1/2x11--both) (JHU)	\$	0.50
SP	8/20/98	6-star map (8 1/2x11--both) (JHU)	\$	0.60
SP	8/20/98	tip to Frankie at Hpl. for helping setup	\$	1.00
TEL	8/23/98	bill of 8/13/98	\$	1.23
SP	8/31/98	SC handouts & maps (JHU)	\$	2.50
SP	8/31/98	1000-post-it notes (Staples)	\$	4.20
STA	9/3/98	1-incoming tape for TAM (Radioshack)	\$	2.51
SP	9/4/98	5-copies Kepler/Tycho mats. for Dr. Nygaard, Iowa St. (JHU)	\$	0.25
SP	9/20/98	tip to HPL. lights man	\$	1.00
TEL	9/21/98	bill of 9/13/98-P	\$	3.64
SP	9/23/98	tip to HPL. lights man	\$	1.00
SP	9/24/98	18-copies SC mats. (JHU)	\$	0.90
SP	9/24/98	tip to Hpl. lights man	\$	1.00
SP	9/25/98	15-maps/astrophoto art. (8 1/2x11--both) (JHU)	\$	1.50
SP	9/27/98	20-mnemonics & J's moons (both sides) (JHU)	\$	2.00
SP	9/28/98	1000-post-it notes (Staples)	\$	4.40
SP	9/28/98	tip to Tony Scott	\$	5.00
SP	9/29/98	tip to HPL. lights man	\$	1.00
STA	10/1/98	bike repair (Horizon Cycles 02-64702)-P	\$	12.95
SP	10/8/98	1-copy meteor observing form (Hop. Str.)	\$	0.05
SP	10/14/98	Hpl. lights man	\$	1.00
SP	10/15/98	Tony Scott at HPL.	\$	4.00
SP	10/19/98	1000 post-its + type. ribbon (Staples)	\$	7.22
SP	10/19/98	Hpl. lights man	\$	1.00
STA	9/4/98	1-Casio telephone answering machine (Catherine Budd)	\$	10.00
SP	10/21/98	3-copies mats for Rod Mollise, S&T 12/98(p.12) (JHU)	\$	0.15
SP	10/22/98	7-copys star map materials (JHU)	\$	0.35
SP	10/24/98	10-copies "SHOOTING STAR ALERT! (JHU) (5-up)	\$	0.50
SP	10/24/98	tip to Bill at Fpt. for wqching my stuff.	\$	1.00
TEL	10/25/98	bill of 10/13/98	\$	1.79
SP	10/25/98	tip to Charles at HPL. for helping out	\$	1.00
SP	10/26/98	15-copys Nov./Dec. star maps (JHU)	\$	1.50
SUBS	10/28/98	AGU membership + subscription, 1999 CK#344	\$	30.00
SP	11/6/98	tip to car parking boss at Hpl.	\$	2.00
SP	11/7/98	street corner handouts (JHU)	\$	1.85
SP	11/9/98	street corner handouts (JHU)	\$	1.25
SP	11/12/98	3-"Shooting Star Alert" (JHU)	\$	0.15
SP	11/13/98	Hpl. lights man	\$	1.00
SP	11/15/98	14-copies streetcorner handouts (JHU)	\$	0.70
SP	11/17/98	15-copies(compose and print flier for Port Discovery) (JHU)	\$	0.75
POST	11/17/98	mail 8 fliers to Port Discovery	\$	0.60
SP	11/17/98	2000 post-it notes (Staples)	\$	8.79
SP	11/18/98	Hpl. lights man	\$	1.00
BOOKS	11/13/98	Science Kit & Boreal Labs for Nuclear Sc. Poster/Teacher's Guide(c.cd.)	\$	33.00
PO	11/20/98	stamps	\$	6.40
SP	11/20/98	6-copies NYT art. + S&T art. (JHU)	\$	0.30

POST	= \$ 7.00
SP	= \$64.76
TEL	= \$ 6.66
STA	= \$25.46
SUBS	= \$30.00
BOOKS	= \$33.00

T = 127.18 ←

PAGE TOTAL \$166.88

TEL	11/22/98	bill of 11/13/98	\$	0.83
STA	11/24/98	Liquid Paper (Rite Aid)	\$	1.98
SP	11/24/98	2-copies e-mail acct. letter (JHU)	\$	0.10
SP	11/25/98	16-copies materials for student Becky Jordan (JHU)	\$	0.80
SP	11/27/98	Hpl. lights man	\$	1.00
SP	11/30/98	10-sides "Unsung Hero" art. (JHU)	\$	0.50
SP	11/30/98	20-sides star map (JHU)	\$	1.00
SP	11/30/98	16-sides astrophoto art. (JHU)	\$	0.80
SP	11/30/98	16-sides mnemonics (JHU)	\$	0.80
SP	11/30/98	4-copies "Hero" press release for astro. mags. (JHU)	\$	0.20
POST	11/30/98	mail releases	\$	0.64
SP	12/4/98	HPL. lights man	\$	1.00
SP	12/4/98	2000 Post-its (Staples)	\$	8.80
SUBS	12/7/98	2-copies info on The Planetarian (JHU)	\$	0.10
BOOKS	12/7/98	12/98 issue of the Planetarian (ISP) CK#351	\$	5.00
SP	12/8/98	3-copies McIntyre mats. for John (JHU)	\$	0.15
SP	12/9/98	10-sides "Hero" art. (JHU)	\$	0.50
STA	12/10/98	Scotch tape (Office Depot)	\$	1.57
BOOKS	12/10/98	4-back issues of The Planetarian CK#354	\$	20.00
EQUIP	12/8/98	1 1/4" Visual Back (Company Seven #120802) credit card	\$	37.00
SP	12/18/98	5-copies "Telescope Exhibitor" for T. McIntyre (JHU)	\$	00.25
SP	12/18/98	Hpl. light man	\$	1.00
BOOKS	12/14/98	Observer's Handbk. 1999 (Sky Pub.) Credit card	\$	23.90
TEL	12/22/98	bill of 12/13/98	\$	3.59
SUBS	12/23/98	SKY & TELESCOPE--3 YEAR SUB (credit card)	\$	95.95
MA	12/28/98	lens cleaning Kleenex (Giant)	\$	2.20
			PAGE	\$ 209.66

TEL	= \$ 4.42
STA	= \$ 5.75
SP	= \$16.90
POST	= \$00.64
SUBS	= \$96.05
BOOKS	= \$48.90
EQUIP	= \$37.00

SC IRAN EXPENSES

POST	8/15/98	FAX to Alan Hale re Iran (Hopkins Store)	\$	1.58
OST	8/17/98	FAX from State Dept. (H.S.)	\$	1.00
OST	8/18/98	FAX to Alan Hale (H.S.)	\$	1.05
SP	8/19/98	2-copies Iranian colleges (JHU)	\$	0.10
POST	8/19/98	FAX to Alan Hale (H.S.)	\$	1.05
POST	8/20/98	Fax to Alan Hale (H.S.)	\$	1.05
SP	8/20/98	3-copies prep. for fax(JHU)	\$	0.15
POST	8/29/98	Fax to A. Hale (Royal Fms.)	\$	1.00
SP	8/31/98	SC handouts & maps (JHU)	\$	2.50
SP	8/31/98	1000-post-it notes (Staples)	\$	4.20
SP	9/1/98	9-copies mats. for Search For Common Ground (eclipse mats.)(JHU)	\$	0.45
POST	9/1/98	mail letter & eclipse mats. for SFCG	\$	0.55
STA	9/3/98	1-incoming tape for TAM (Radioshaek)	\$	2.51
SP	9/4/98	5-copies Kepler/Tycho mats. for Dr. Nygaard, Iowa St.(JHU)	\$	0.25
POST	9/17/98	FAX to Alan Hale (Hopkins Store)	\$	1.05
SP	9/17/98	2-copy mats. for A. Hale (JHU)	\$	0.10
SP	9/20/98	tip to HPl. lights man	\$	1.00
TEL	9/21/98	bill of 9/13/98 p	\$	14.97
TEL	10/25/98	bill of 10/13/98	\$	00.18
SP	10/30/98	2-copies Sun Iran art. for Alan Hale (JHU)	\$	00.10
SP	11/30/98	FAX Sun art. of 11/28 to A. Hale (Hopkins Store)	\$	1.05
POST	12/1/98	letter to Ehsan Shams in Iran	\$	0.60
SP	12/3/98	Hpl. lights man	\$	1.00
POST	12/15/98	2-FAXs to A. Hale (Hopkins Store)	\$	2.10
TEL	12/22/98	bill of 12/13/98	\$	0.56
SP	12/28/98	lens cleaning Kleenex (Giant)	\$	2.20
SP	12/31/98	5-copies Iran visa for AH (Hopkins Store)	\$	0.25
			PAGE	\$ 29.94

IRAN = \$29.94

PAGE	SP	STA	POST	BOOKS	TEL	SUBS	PHOTO	EQUIP	IRAN	
1	\$ 32.42	\$ 66.71	\$ 45.92	\$ 27.40	\$ 22.88	\$ 8.00	\$ 12.45	\$ --	\$ --	\$ 195.38
2	24.83	27.46	23.09	21.00	3.48	--	--	--	--	99.86
3	64.76	25.46	7.00	33.00	6.66	30.00	--	37.00	--	166.88
4	16.90	5.75	0.64	48.90	4.42	96.05	--	--	--	209.66
5	--	--	--	--	--	--	--	--	29.94	29.94
YEAR	\$138.91	\$125.38	\$ 76.65	\$130.30	\$ 17.04	\$134.05	\$ 12.45	\$ 37.00	\$ 29.94	\$701.72
UTILITIES	(\$78.18 + \$18.95) = \$97.13									+ \$ 97.13
AUTO	1,323 miles @ \$0.325/mile = \$429.98									+ \$429.98

1999

Not for Distribution

- 8 1386) 1/3/99(SUN)HPL(4:40-6:30PM). Semi-mild. Good sky at start; fought w/clouds for last ½-hr., then had to quit. Too bad, because was busy! JUPITER(3 then 4). SATURN. VISIT: Dana Smith. Lots of families. \$45.00 + \$7.70 = \$52.70 (\$28.80/hr.)
- 8 1387) 1/10/99(SUN)HPL(4:57-6:52PM). Cold; +/-27°F. Very clear, then shut down by clouds. Accompanied by Alin Toles (PhD astro instructor from Romania) with his 3" refractor and wife, Medi. This was great fun for me and made the evening alot more tolerable. I showed Saturn, while Alin did Jupiter. It was a great relief for me not to have to switch back & forth in cold weather. SATURN(2 moons). VISITS: Marcos, former Louias Cafe bookkeeper, & friends. Lots of enthusiastic lookers. \$68.00 + \$5.20 = \$73.20 (\$38.18/hr.). We adjourned to Jimmies for chicken soup & baked potatoes.
- 8 1388) 1/16/99(SAT)HPL(4:55-7:30PM). Mild; overcoat not needed! Good sky, then at +/-7PM, as at the last two stints, clouds started appearing. By 7:30PM was out of business. Too bad, because I had lots of people waiting to look! JUPITER(briefly). SATURN(3 moons; many lookers very impressed). Lots of families & children. VISITS: John & Sally(Mark & Sharon Seefore (?)) (Mark had called earlier today inquiring about scopes; Sharon, it turned out, was in one of my SSIP classes.) Barry Reiner(who pumped me for eclipse photo info last Feb. I complained about his not sending me a photo, and he said he would. \$118.00 + \$12.13 = \$130.13 (\$50.44/hr.!). HH (Felt my voice was weak and constantly worked to overcome it.)
- 8 1389) 1/19/99(TUE)HPL(5:30-7:35PM). Mild. Thin clouds which arrive near end of day dissolved at sunset. OTHERWISE, AN ALTOGETHER TERRIBLE DAY AND EVENING. CAR TROUBLE (HAD TO REPLACE IGNITION SWITCH!); FURNACE TROUBLE(LIMIT SWITCH ON BLOWER BROKEN & NEEDS REPLACING!); TELESCOPE TRACKER STOPPED WORKING +/-1½ hrs. INTO STINT AND WOULDN'T START! WHY?? JUPITER. SATURN. CRESCENT MOON. VISITS: Mark S. Very slow scene. \$19.13 (\$9.20/hr.) 9:15PM AT HOME. (Plugged scope into wall outlet and it worked fine. Plugged it into battery and all it produced was a very weak buzz. Problem appears to be in battery side of system!).
- 21 1/20/99 Driving out Belair Road as far as Parts America to purchase a replacement rechargeable battery and connectors for my telescope.
- 1/20/99(WED)ROTUNDA(5:27-8:07PM). Mild. Clouds all day; clearing at sunset. Felt tired late afternoon but, on 15-mins. rest, went out. Felt good at scope! CRESCENT MOON. JUPITER. 1390) SATURN(3 moons!). Slow start, then more traffic. Some enthusiastic lookers. FIRST STINT W/NEW BATTERY. WORKED WELL! VISITS: Andrea P.; Alan U. \$45.31 (\$16.99/hr.)
- 4 1/21/99 RT to Amateur Radio Ctr., Hampden, for soldering of battery connector
- 4 1/26/99(TUE)ROTUNDA(5:04-8:17PM). Mild. Good sky, then thin olds., then good. GIBBOUS MOON(Copernicus). SATURN(3-moons). JUPITER. Slow start, then some traffic. Lots of no-contribs, but also some \$5-contribs. VISIT (Barton ?, woman who was given my Comet H-B framed and who loves it.) \$48.28 (\$15.07/hr.)
- 4 1/27/99(WED)ROTUNDA(5:28-8:27PM). Spent ½-hr. before setting up examining a 60mm Tasco w/ Shelby Boswell and mother, Chris. Was unable to get it to focus! Shelby returned later w/ father, Charles. Mild. Clouds at ss, clear, then shut down by clouds. GIB. MOON, JUPITER, SATURN. Ok traffic. Received many appreciative comments, if not contribs. VISIT: Ellen, JHU archaeologist who's written about the Pleiades. \$52.00 + \$5.44 = \$57.44 (\$19.28/hr.!).
- 8 1/29/99(FRI)HPL(5:32-10:02PM). Cool. Sl. hazy sky, then clear. JUPITER. SATURN(Followed it below flagpole tops.). MOON(nearing full). Could have worked longer but was getting bored. Also, a very rambunctious gp. of young men discouraged me a bit. \$125.48 (\$27.87/hr.)
- 394) 8 1/30/99(SAT)HPL(5:27-10:05PM). Cold. V. clear. JUPITER(briefly). SATURN(2 moons; followed it to beyond 2nd flag pole. Lookers still impressed but I wasn't, so I packed it in.) MOON(+/- 14 hrs. before full; rim craters impressive @ 166X.). Lots of families with kids. Lots of enthusiastic lookers! \$148.00 + \$13.35 = \$161.35 (\$34.82/hr.)

TOTAL THIS PAGE = \$713.02

TOTAL THIS YEAR = \$713.02

- 8 1395) 1/31/99(SUN)HPL(5:55-6:53PM). "BLUE MOON" NIGHT--with a serendipitous happening! By mid-afternoon, the blue sky started clouding up, and I began thinking about scratching my blue moon plans. That it was cold, encouraged the thought. However, I had made a nice blue moon HAV-A-LOOK! sign and some sheets of blue plastic for people to look through, which I was dying to use. After some handwringing, I loaded car and headed out, only to return home for more handwringing after two blocks. Among other problems, I was worried about being able to see the rising full moon from HPL and contemplated going to FPT. I again drove off, not sure where I was headed, but I ended up at HPL which, serendipitously turned out to be a wonderful decision. As I was unloading, a sweet young thing approached asking if I were the telescope man. I said I was, and she asked where I set up. After telling her, I asked why she wanted to know. She said she and her boyfriend were intown for the day from Phila. and that he was very interested in astronomy and was thinking about getting a scope. I asked how they heard about me, and she said from the HPL Internet site, which listed me as a scheduled street performer. I told her I'd be set-up in 15-mins. and that they better come by fairly soon because of the increasing cloud problem. They arrived just as I finished setting up. The scene was kind of bleak, THIS ALSO BEING SUPERBOWL SUNDAY(!), but along with them I started to have occasional lookers. I had my BLUE MOON sign out, and people asked about it, not a single one seeming to know anything about it, much to my disappointment as I believed the public to be very up on it! Not seeing any signs of the Moon, I decided it must be behind the WTC, and I mostly forgot about it. Suddenly, about 1/2-hour into the stint, someone shouted, "There's the Moon!" Low and behold, it was hanging low to the left of the WTC and looking terrific! Through the scope it was pretty blurry. Then I remembered my picture taking plan, having brought my camera. Jill and Rudy, my Phila. visitors had a point & shoot. I then took lots of shots of the two of them holding a blue plastic sheet in front of the Moon while facing the camera. We used both cameras. Jill and Rudy couldn't not have been better models, and made possible a photo op I had not dreamed of till the moment we tried it. My camera was handheld with my 35-70 zoom, and I used it mainly at 70mm. To steady it I sat on a concrete Amphitheater bench. I exposed from 1-1/60 sec. @ f/3.5 with ISO 400 color print film. Beside the Moon, there were lots of Promenade lights in the field, but with alot of luck I'll get a usable one I give Jill & Rudy my address and asked them to please send me copies of any which came out. They then went on their way, and I called it a night, adjourning to FPT., which was ~~even~~ quieter than HPL, for beer, pizza and desert. \$16.75 (\$17.50/hr.!) Even sold a comet card!
- 8 1396) 2/3/99(WED)HPL(5:26-8:53PM). Mild. Nice sky. JUPITER(briefly). SATURN. Promenade not a bleak scene for a change on a week night. Continuous knots of passersby. VISIT: Marty, woman I met recently thru my CP personal ad. We adjourned for soup & sandwich.\$56.62
- 4 1397) 2/10/99(WED)ROTUNDA(5:35-8:10PM). Mild (50's!). Clouds at ss, then clear, then shut down by clouds. JUPITER. SATURN. M42(nice!). Lots of no-pays. WORE A GIFT CERTIFICATE STICKER, WHICH CAUGHT ABSOLUTELY NO ATTENTION. WILL MAKE BIGGER! \$38.05 (\$14.71/hr.)
- 8 1398) 2/11/99(THU)HPL(5:31-8:58PM). Mild, again. Ok sky. TELESCOPE(1st use of eyepiece holder fixed by Alan Umoto. Worked fine!). JUPITER. SATURN(Nice, w/Titan nearby). M42 (Several times. Should have stayed w/it after S. got too blurry, but I decided to leave.).VISIT (Mark D. Feierstein, an army LTC, ex. owner of an 8" SCT.).\$78.20(\$22.69/) 1-GIFT CERT.!
- 8 1399) 2/14/99(SUN)HPL(4:40-9:55PM). Valentine's & President's Day week-end combined. Cold but sunny, but ~~surprisingly~~ warm in Ampitheatre when I arrived! Since I knew there'd be lots of people, I decided to try daytime telescoping. I'd say it worked. VENUS(Acq. 1st try.) JUPITER(A bit blah, but stripes vis.). SATURN(Acq. using polarizer 1/2-before ss.). V. busy; stint, w/most contributing. Stayed on Sat. till loosing it at 9:30PM, then did M 42. Cou. (\$46/00/)ld have stayed later with it. Adjourned to FPT. for beer/pizza. \$226.00+\$15.39=\$241.39
- 8 1400) 2/15/99(MON)HPL(4:59-8:38PM). Milder. Gd. sky, then thin olds. PERFECT ALIGNMENT!. VENUS (To get started.).JUPITER(On req.;nice!).SATURN(1/2-hr.before ss!w/polarizer!). M42(1X). V. busy early eve., then slowing trend. I in GREAT head!\$92.00+\$11.73=\$103.73 (\$28.40/)

TOTAL THIS PAGE =\$ 534.74

TOTAL THIS YEAR =\$1,247.76

Outlook Mail

herman heyn

Search Mail and People

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Re: [HAL E-mail Group] Baltimore Sun article on Herman Heyn

HH herman heyn Today, 4:21 PM
 Teresa Palomar (tapalot) Reply |

Great hearing from you, Teresa, and especially for refreshing my memory of that fateful night at the Rotunda! Many clear New Mexico skies to you!
 Herman

From: Teresa Palomar [redacted]
 Sent: Saturday, November 3, 2018 7:25 AM
 To: herman heyn
 Subject: Re: [HAL E-mail Group] Baltimore Sun article on Herman Heyn

I knew exactly what you were thinking and I remember explaining that I wanted no money. I also remember folks looking through my scope after dropping a buck in your hat. They'd then look for my hat and I'd point back at yours. Most of them doubled down on your donations! Happy to be of service, and congratulations on your retirement. It is well-earned.
 Teresa

herman heyn

Not for Distribution

See #1403.

Upgrade to ad-free

On 11/2/2018 2:42 PM, herman heyn wrote:

Thanks, Teresa.
 You know, when it's a nice spring evening and Jupiter and Saturn are up together (which I think they'll be next year), it will be awfully tough staying home. On the other hand, will try to keep reminding myself that at least 75% of my reason for quitting is to not push my physical exposure on the street luck any farther....especially in this day and age. I hope you're enjoying NM to the fullest....day and night!
 Herman
 P.S. At my talk I handed out my log entry for the night you appeared with your scope at the Rotunda and asked to set up with me. It said you'd looked at Saturn through my scope 3 years earlier and got hooked. I remarked that I hesitated for about 30-secs. and said Ok. (During those 30-secs. I was thinking "what about the money"!)

From: howardastro@yahoo.com
 <howardastro@yahoo.com> on behalf of Teresa Palomar [redacted]
 howardastro@yahoo.com

Upgrade to Premium

- 8 1401) 2/18/99 (THU) HPL (5:23-8:05 PM). Mild; sudden clearing in PM. INCREDIBLE ARRAY OF CRESCENT MOON, JUPITER, & VENUS! SATURN (1st try, 15 mins. before ss!). JUPITER (4 on rt.). MOON (Mare Crisium!). VISITS: Anna & Esmaralda from Orange Co., CA, Anna being very interested in scope. Susanne Harm (Former mktg mgr. for "Star Date"; enthusiastic about my effort! I was in very good head, as I've been for last few stints! \$43.00 + \$4.44 = \$47.44 (\$17.51/hr.))
- 8 1402) 2/20/99 (SAT) HPL (5:08-9:20 PM). Cold; occasional thin hi clds. 4-d. MOON (Started w/polarizer thru clds, then good; Atlas/Hercules). SATURN. Pretty busy night. Followed SAT. till it hit bldg. @ 9:10 PM. \$129.00 + \$9.67 = \$138.67 (\$33.02/hr.) Considerable no-contribs.
- 4 1403) 2/22/99 (MON) ROTUNDA (4:30-8 PM). +/-27°F, clear. Eve of VENUS-JUPITER CONJUNCTION (They'll be 0.1° apart at 3 PM tmw.). Pretty busy stint (had a sizable line at one point, maybe thanks to Frank Roylance's art. in yesterday's SUN, mentioning I'd be at Rotunda). Kris Braly arrived with hot soup (motza ball!) as I was setting up, then took photos w/my camera. Later, her daughter, Miriam, and her boyfriend, Jason, showed up to take film to SUN (Kris' idea!). Discovering that I couldn't get both planets at once, even in my 40mm Kelner, I put the pair in the finder and JUPITER in the main scope. Four moons were close-in, so it was impressive. Early-on, a woman showed up w/a 5" SCT and asked to set up, too. I hesitated for a moment, then gave OK. She was Theresa Palomar(!), who teaches math at BCCC and Western H.S., and who said she bought her telescope after having seen Saturn thru mine at the Rotunda three yrs. ago! 1ST QT. MOON (Breathtaking; looked at it often, too.). Gave out conjunction diagrams sent by Tom McIntyre, my NYC street telescopic friend. Lost the pair +/- 0:45. Weather rpt. for tmw. somewhat adverse. \$63.99 (\$18.85/hr.)
- 8 1404) 2/26/99 (FRI) HPL (5:27-10:05 PM). +/-40°F; clear. Eventually joined by Terresa Palomar. Great division of labor, she doing Moon and I Saturn. After losing Sat., I switched to M 42 (Some lookers appreciated it alot.). Before Sat., early eve., I did Jupiter. Later I gave TP looks at h 3945 and B Mon. For 1st time in weeks I was sl. depressed and having trouble keeping my voice energized. Why? \$91.00 + \$10.87 = \$101.87 (\$21.98/hr.) 1-T-shirt Adjourned for beer w/TP at Hpl. pub. VISIT: Flavio Mendez, who rpt'd. he's left STSci and now works for Md. Sc. Ctr.
- 8 1405) 3/6/99 (SAT) HPL (5:27-6:50 PM). Mostly cloudy day w/adverse evening weather rpt., but it cleared late after, so I went for it. Stopped when heavy clouds appeared; rained on drive home! VENUS (1st try). Wasted alot of time & \$ searching for Mercury & Saturn before ss. SATURN (Still above top of flagpole; lookers enthusiastic!). Lots of strollers and interest in me, but I had to leave before rain! \$33.00 + \$4.88 = \$37.88 (\$27.45/hr.)
- 8 1406) 3/7/99 (SUN) HPL (5:28-7:37 PM). Cold...my coldest stint in a while! V. clear. ^{Alot} Less cold than the ~~strollers presentation~~ than I envisioned, but nevertheless I had fairly steady traffic. Accompanied for 1st hr. by Richard, a spunky youngster visiting from Fla. VENUS (1st try.) SATURN (+/-20-mins. before ss! Vague, but there!). SIRIUS (before ss). \$30.95 (\$14.42/hr.)
- 8 1407) 3/8/99 (MON) HPL (6:00-8:02 PM). Clear; not quite as cold as last night. Surprising number of people out for a cold, Mon. night! SATURN (Problem w/building heat, so I switched to 80X, which seemed to be fine w/lookers. For next scope, maybe I should stop worrying about needing 166X!). Lots on non-contribs. \$34.00 + \$3.77 = \$37.77 (\$18.58/hr.)
- 8 1408) 3/12/99 (FRI) HPL (6:10-9:26 PM). Clear early eve., then clouds. Semi-mild. SATURN (80X; held till 8:05 PM). M 42 (Was doing ok with it till shut down by clouds.). \$90.18 (\$27.64/hr.)
- 2 1409) 3/13/99 (SAT) FARMER'S MKT. (8-12 noon). 3" refractor doing SUNSPOTS (4 gps., two being pretty obvious, tho not naked eye). Good interest, especially from Cinda's sub-teen son, Waverly. VISITS: Jim Sarsgard (who gave me 2 prs. eclipse "shades"), Alin & Medi, David K., Leah, Ellen, and many other friends. A fun experience! \$21.89 * Terresa Palomar. Cinda gave me a bag of beautiful, flower pedal lettuce!
- 8 1410) 3/15/99 (MON) HPL (6:07-8:50 PM). Clear; semi-mild. SATURN (Titan nearby; lost 7:55 PM). M 42 (Appreciated by most lookers.). A number of families/kids. \$43.00 + \$11.84 = \$54.84! (\$20.21/hr.)

* SUN photo in album.

TOTAL THIS PAGE = \$ 627.48

TOTAL THIS YEAR = \$1,875.24

70 miles

- 8 1411 3/16/99(TUE)HPL(5:21-8:48PM). Clear; no-gloves temp.! VENUS(After realigning tripod. Seems I'd forgotten the "angle"!)). SATURN(Nice; held till 7:48PM). M 42 (Ok at start, but was fading when I quit...or, vice versa!). \$81.00 + \$5.14 = \$86.14 (\$24.97/hr.) ((Total incl. contribs. of \$20 & \$10, otherwise take would have been \$58.14 = \$16.85/hr.))
- 8 12)3/17/99(WED)HPL(5:48-8:03PM). Spring-like temp.; sl. hazy. ST. PATRICKS DAY! Contemplated going to FPt. but am glad I didn't, as lots of people in HPL! SIRIUS & VENUS (briefly). SATURN. ST. PAT'S DAY (Very little "green" in evidence in Hpl. After loosing Sat., I put up a sign saying SEE A GREEN STAR and swung to A CMa using a green filter. However there was very little spontaneous interest and I felt I did not want to recruit lookers for it, so I packed up. Drove to FPt., where it was very busy--lots of teeny boppers. Did not feel inclined to setup, plus it had gotten cloudy, anyway.)\$65.37 (\$29.05/hr.)
- 8 1413)3/18/99(THUR)HPL(5:57-7:47PM). Cold, windy, but yet a steady stream of passersby. VENUS (Briefly, to fine tune alignment.). SATURN(Mostly @ 80X). I felt good and gave out a good bit of educational materials. Things got a little confused toward the end, as I was trying to listen to a talk show on string theory (interview of Kevin Green, author of Exquisite Universe) on a small radio will showing Saturn! \$44.00 (\$24.00!)
- 8 1414)3/19/99(FRI)HPL(5:45-9:20PM). Winter coat & glove weather; clear. 2-d. MOON + VENUS + SATURN in beautiful array. I focused mainly on Saturn but offered some looks at Moon. Slow start, but then pretty busy. Quit because of fatigue and not lack of lookers! M 42 after loosing Sat. at 7:38PM. \$79.00 + \$9.44 = \$88.44 (\$24.70/hr.)
- 8 1415)3/22/99(MON)HPL(6:12-8:22PM). Sl. late start because I was in a funk all day and really didn't feel like telescoping. A cold wind didn't help matters. However, the prospect of going English dancing instead made me decide to go. It was a good move because, even tho it was cold and windy, people were out, and I had reasonably good interest. Also, my mood improved considerably. 5-d. MOON (rugged!). SATURN(1st try in daylight!; lost at 7:30PM). Lots of out-of-towners. \$52.00 + \$2.77 = \$54.77 (\$25.27/hr.)
- 8 1416)3/25/99(THUR)HPL(5:43-9:30PM). 7-d. MOON(Acq. delayed +/-30 min. by clouds. Plato at 200X!). SIRIUS(Daytime.). SATURN(Maybe for 30-mins.). Steady interest.\$76.75 (\$20.30/hr.)
- 8 1417)3/26/99(FRI)HPL(5:47-10:16PM). Adverse weather rpt., but v. clear; coldish. Big rush of lookers at start; later, lots of no-contribs. 9-d. MOON (Copernicus, post sunrise; Plato, Tycho; v. sharp image). SATURN(v. briefly), Ran out of maps. \$138.00+\$15.05=\$153.05(\$34.1) Because the Moon was so high, I extended the tripod legs to nearly their max. I believe this helped business by making the scope look more formidable! HH (I was in a funk when I arrived and never really got out of it, whereaz often I do get energized.)
- 7 1418)3/28/99(SUN)HPL(5:48-7:20PM). Nice mid-afternoon, then approaching clouds. After a bit of hesitation, I went to Hpl, got in +/-1 hr. w/o clouds, then had to fight for holes in clouds, and gave up when a drizzle began. MOON(Tycho region good). Too bad about the clouds, because I had lots of people anxious to look! \$36.77 (\$24.03/hr.)
- 7 1419)3/29/99(MON)HPL(5:52-9:30PM). Mild, clear, but sl. shaky seeing. I arrived expecting a usual, slowish Mon. night but found Hpl. very busy, with lots of strollers--almost like a Sun. afternoon! I had been feeling oppressed and depressed all day over the news from the Balkans (Serbia/Kosovo), but I rose to the occasion. 12-d. MOON(Tycho region, mainly at 136X). Lots of families/kids. \$99.00 + \$6.70 = \$105.70 (\$29.12/hr.) MARS(Spotted by eye at 9:45PM rising in SE. Must move to W end of space for timely acquisition.)
- 8 1420)3/30/99(TUE)HPL(5:49-10:14PM). Mild, clear. Set-up at other end anticipating Mars. SIRIUS(briefly). 13-d.MOON(Acq. rising over Hd. Rk. Cafe; Tycho region. MARS(Acq. 9:30PM: small, reddish, writhing blob; N. polar cap vis. w/imagination.) Busy, but not quite the crowd of last night. VISIT:Ernie Davis, Harford Astro Soc.; Jim O'Leary, Joe Halley, Malissa Jahn, and others from Sc. Ctr. Friendly! Acq. i Cne for them.)\$99.17(\$22.47/)
- 8 1421)4/7/99(WED)(DST 7:30-11:20PM)HPL. Mild; clear. Invited lookers to see a MIR flyby, but we never saw it! Why? VENUS(Briefly). M 42(Thanks to sky clarity, it was pretty good, tho low.). U Hya(Several times, even tho I couldn't find any other "deep sky" objs!). MARS(Acq.9:50PM. Discouraging image; snowcap sometimes visible.)\$38.61 (\$10.08/hr.!) Note: Winter star map is still appropriate, as Orion remains prominent early evening.

TOTAL THIS PAGE = \$ 848.77

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- 38 1422)4/8/99(THUR)DEEP RUN ELEM. SCH., ELKBRIDGE, MD; auspices Anne Anikis--teacher contact Heide Karpe; "Star Gazer Party 1999".(7:03-9:30PM). Adverse weather rpt. Clouds early, then good sky. I joined telescopists from BAS and APL. Lots of lookers--parents & children. I polar aligned w/magnetic compass (10.8°W). Was good enough to acq. Venus 1st try; then I fine tuned. VENUS; M 42 (better than at HPL!); M 67 (Ok, but is too dim for HPL.). Hardwork, but I enjoyed my first "star party" in a long time. SIRIUS(After I tired of Venus and before M 42). No Hat.
- 8 1423)4/10/99(SAT)HPL.(7:30-11:30PM). Chilly; nice sky. VENUS(briefly; from now on will use chart of V's phases to make it more meaningful to lookers). SIRIUS(Fallback from V.). M 42(Held practically to roof, waiting for Mars.). MARS(Acq. +/-21:40PM; snowcap on L and dark region near it; worked w/Hubble photo to advantage.). Collimated on a Vir before leaving. May have improved Mars image slightly--except atmospheric were troublesome throughout evening. I felt pretty good, but I didn't recruit. \$57.00 + \$15.74=\$72.74(18.19)
- 7 1424)4/14/99(WED)HPL.(7:23-10:07PM). Ok sky; mild. A very off night. Nothing for me to recruit for. VENUS(Intermittently.). M 42 (briefly). SIRIUS (Intermittently). i CNC, 24 Com (nice) U Hya--just for me. MARS(Acq. delayed by sailcloth screen just installed. Acq. 9:43. Thru sailcloth it formed a nice diffraction pattern on rainbows. N. snow cap vis. sometimes. Atmospheric not good. Quit in disgust! \$19.25 (\$7.03/hr.).
- 8 1425)4/16/99(FRI)HPL(8:17-10:00). MARS(Acq. 9:15PM but gave it up at 10PM because of terrible seeing. Before Mars: VENUS, A Ori. HH(Plagued by stabbing pain in my L armpit, which added to my unhappiness, tonight. VISITS: M.A.'s ex. & friend...don't know whether he recognized me. I gave no sign of recognition to him.Jay Stadium Sch. teacher, who contributed \$28 and bought comet cd. \$40.94 (\$23.80/hr.)
- 8 1426)4/24/99(SAT)HPL.(7:56-11:02PM). Coal; sl. hazy but ok sky. Late start because Jerry Rowan scheduled 5-8. Big crowd in Hpl. I was kind of depressed on arrival, but I felt ok once I got setup. 8-d. MOON(Tycho, then sunrise on Copernicus!). MARS(Very disappointing. Maybe is covered by dust storm?). This was my first stint since my strange ailment, having missed two good opportunities early week. I felt ok. While the number of contributing lookers was diminishing, I might have stayed later, except for a bathroom emergency. Being out definitely got me away from obsessing on the Balkans war and the Colorado school shooting, which was a good thing. I guess come what may, everyday life continues! \$156.16 (\$50.33/hr.)
- 8 1427)4/25/99(SUN)HPL.(8:07-10:16PM). Late start waiting for Unicycle Lady to end. Too bad, be-sky was good enough to start on Moon before sunset. HEALTH(Felt like I had a low grade bug, cold & tired.). 9-d. MOON(Sunrise on Jura Mts.!). MARS(No detail). VISIT: Jay.\$67.97(\$31.64)
- 8 1428)4/26/99(MON)HPL.(7:58-10:27PM). Late start because of thick haze at ss. 10-d. MOON("S. Polar" region; Tycho. Mostly at 80X, but 130X toward end as sky cleared.). MARS(Maybe some vague shading; no polar cap.). HEALTH(Felt better than last night; voice and body felt stronger.) BAGPIPER(ShOwed up after I had setup, saying he called in for permission. We coexisted ok. Needed strong voice to be heard over his drone! VISIT: Karin B. Gordon, a Dane living in Chi. who said she'd just written a poem on Mercury and would send me a copy I gave her a comet card w/my address. \$64.07 (\$25.83). Maybe I'm back into the swing of it
- 8 1429)4/29/99(THU)HPL.(8:20-10:02PM). Late start due to band performance. Another hazy, problem sky. 13-d. MOON(Flat contrast due to haze; managed to bring in few craters on rim below Tycho.). MARS(A whitish patch on one edge; gave out first I SAW MARS...stickers!). HEALTH(I was in a good head once I got setup, but I felt "low-grade" physically.\$42.00(24.00)
- 8 1430)4/30/99(FRI)HPL.(7:56-10:05PM). Ok sky; uncomfortably cold wind developed after ss. VENUS(While waiting for Mars. Should have simply stayed w/it, as it shows more than M!). MARS(Same as before; disappointing.). 14-d. MOON(A few edge craters.).VISIT:(Kris Braly, who took me out for pizza after stint.). \$t one point I had a huge gang of young kids who really taxed my ability to stay cool. Barry helped constrain them \$54.98 (\$25.54/hr.)
- 9 1431)5/1/99(SAT)FELL'S PT.(8:05-12:20AM). Good sky. VENUS(briefly). MARS(late eve. polar cap def. vis.). 15-d. MOON(Acq.+/-10:20PM; M. Crisium + limb craters; good!). VISITS:(Kris and daughter, Miriam). \$70.00 + \$9.70 = \$79.70 (\$18.75/hr.)

110 TOTAL THIS PAGE = \$ 597.81

TOTAL THIS YEAR = \$3,321.82

- 132 1432) 5/4/99(TUE)BOONESBORO MIDDLE SCHOOL(auspices Anne Anikis; ref. teacher Jean Eoton, 301-766-8013). 100 4th graders in gym. I gave std. presentation: astronomy def., scientific method, the tools of sciences, slide show w/star maps. After presentation I setup 3" for sunspots(there was one moderately large one, but no others--none--so the one spot looked kind of isolated and lonely!). NEXT TIME(I think I should run quickly thru all the slides, then go back briefly to reading star maps. It would improve the pace of the presentation.) HH (I felt upbeat and awake while presenting. Gratuity = \$100.00
- 9 1433) 5/8/99(SAT)FPT.(7:48-10:52PM). Warm. Good sky, then shut down by clouds. VENUS(getting better). MARS(Problematic! Sometimes not bad, but mostly yukkie!) I was uncomfortable with it, so the arrival of clouds was a relief!). VISITS: Various dancer friends, some of whom I met up with later at Berthas. I gave out lots of Mars stickers. \$76.89 (\$25.07/)
- 3 1434) 5/9/99(SUN)SHERWOOD GDNS.(1:30-4:15PM). Mother's Day. Lots of flowers but only a moderate number of strollers. I felt very depressed in the morning and had to force myself to go. Once there, I rose to the occasion and enjoyed it. SUN(A good scattering of spots, incl. one medium large one. Occasionally some cloud action, which added some excitement. I especially enjoyed working with the young children. I was amazed at how many adult looker had no idea of the sunspot-aurora connection!) TELESCOPE(1. Probably should reduce aperture to lessen glare. 2. Because of a grey spot on image, I probably need a new 20mm H eyepiece). VISITORS: Lots of friends/acquaintances. NO HAT.
- 9 1435) 5/9/99(SUN)FPT.(8:08-10:36PM). V. good sky. Scheduled for Hpl. Arrived to find singers w/big, happy audience. Decided to leave them be and went to FPT. MARS(Best view in weeks ! Dark areas + tiny polar cap.) VISITS: Alice Brock w/grandson Alex and others. Slow but steady evening. I felt I had a "low grade" something. \$48.20 (\$19.51/hr.)
- 8 1436) 5/10/99(MON)HPL(7:58-10:27PM). Great sky. HH(Was v. articulate but felt slightly shaky & low grade. Coughed alot.) VENUS(Looking better. I used diagram to advantage.) MARS (V. disappointing at acquisition; slowly improved but was never as good as last night.). Gave out good number of Mars stickers). VISIT: Ab Logan(60's friend). \$68.58 (\$27.65/hr!)
- 8 1437) 5/11/99(TUE)HPL(7:43-9:26PM). Good sky, but I had a thoroughly miserable stint. Shortly after I started, Michael the bagpiper arrived. With VENUS and MARS each requiring lots of explaining, the awful din Michael makes sorely taxed my energies. Then, about 8:30PM a strong wind developed, which made Mar's image unsteady. Within an hour I ran out of steam and packed up. \$36.63 (\$21.38/hr.)
- 8 1438) 5/20/99(THU)HPL.(7:59-11:24PM). Grt. Sky! 5-d. MOON(V. sharp image. Theophilus, etc. v. impressive at 80X.). MARS(A few times. Some shading. Gave out stickers.). Lots of no-contribs., but also some \$5's. 8th mag. star near Mars. \$75.00 + \$12.95=\$87.95(\$25.72/)
- 10 1439) 5/21/99(FRI)FTP.(8:27-11:40PM). Delayed start due to haze. 6-d. MOON(Aristotle/Eudoxus; S. craters.). REGULUS(Moon to occult at 00:19. Pair looked nice in finder, but I was too bored to stay for event.). MARS(A few times.). Scattered interest; lots no-contribs. VISITS: Alan Katz; Mike(dancer/NASA). \$53.00 + \$5.95 = \$58.95 (\$18.31/hr.)
- L 1440) 5/22/99(SAT)FARMER'S MKT.(7:30-11:30AM). 3" "SUNSCOPE"(I removed paper from decal exposing name.). 4 lg. spots, + scattering of much smaller ones. Intermittent interest. Sold 2 comet cds; gave away lots of mnemonics. VISITS:(various). \$36.35 (\$9.09/hr.)
- 32 1441) 5/23/99(SUN)NATURAL HIST. SOC. OF MD's "NATURE STUDY DAY" AT OREGON RIDGE.(10:30AM-14:45). 3" refractor/sunspots(aligned reasonably well w/mag. compass). Disappointing (boring!) stint. Mostly cloudy till +/-13:30; very poor public turnout. VISITS: Jack MacConnell of STScI(knows of me and likes my work). Ellen S. (dancer). NO HAT
- 8 1442) 5/24/99(MON)HPL.(8:07-10:45PM). Had to work hard to get myself to go. Tho pretty busy, time seemed to move slowly while there. Unanticipated cool wind. 9-d. MOON(Copernicus past sunrise.) Visits by attendees to optical soc. mtg. \$73.00 + \$3.52 + \$76.52(\$29.10/)
- A looker did a good job on the Moon with his camcorder.
- TOTAL THIS PAGE = \$ 590.07
- 2x8 TOTAL THIS YEAR = \$3,911.89

- 7 1443)5/25/99(TUE)HPL(8:25-11:11PM). Late start thanks to Unicycle Lady. Clear but unsteady seeing. 10-d. MOON(Tycho region at 165X; Jura Mts.). MARS(By request). VENUS(once). Busy night, with good interest from laser conventioners + sailors from Spanish tall ship. VISITS: Frank DiMinno of Edmund Scientific; several backyard astros from convention. Again, my less than 2 hr. stint seemed much longer! \$63.00 + \$11.04 = \$75.04 (\$27.6/hr.)
- 8 1444)5/27/99(THU)HPL(8:07-11:01PM). Great sky. 12-d. MOON(Tycho region at 80X; showed picture first to lookers). MARS(not much to see). VENUS. Pretty busy. I was pretty depressed as I setup, but I rose to the occasion quite well as lookers appeared.\$66.02(\$22.79/)
- // 1445)5/28/99(FRI)FPT(8:07-12:05AM). Great sky. WAS INFORMED BY A WOMAN THAT 9 YEARS AGO, WHEN I WAS SETUP ON THE LEE'S CORNER(THO SHE SAID ~~IT WASN'T AN ICECREAM STORE~~, THEN), SHE AND HER BOYFRIEND LOOKED THRU MY SCOPE, AND IT LED TO THEIR GETTING MARRIED! When I pulled off the dew cap, there was a lemon sitting on the lens rim! VENUS & MARS (intermittently) 13-d. MOON(Tycho region, helped alot by photo; some lookers also noticed Copernicus. Sometimes very busy, with a line. VISITS: Frank Roylance and family.\$93.57 (\$23.61/hr.)
- 2 1446)5/29/99(SAT)FMR'S MKT(7:55-11:00)). SUNSPOTS W/3" "SUNSCOPE"(One decent gp., with a N.E. spot, plus several small, scattered gps.). As I was too tired from last night to work at recruiting lookers, I had long periods of no interest. VISITS: David, Alin, Otto, Dick Ochs, etc. \$18.50 (\$6.01/hr.)
- // 1447)5/30/99(SAT--MEM. DAY WEEKEND)FPT(7:55-12:35AM). Another grt. sky! Slow start, then busy. Trouble packing up because lookers kept arriving(I was staggeringly tired!). VENUS(briefly 14-d.MOON(hrs. short of full; Tycho, explaining its the best crater to see on a full Moon; inserted a 1-stop filter in eyepiece, which helped, but 2-stops might have been better). MARS(a few times; gave out final stickers...one left). VISITS: Buddy Kaufman(City Col.); MERLE ANN AND HER NEW HUSBAND, STAN, WHO SEEMS VERY LIKABLE; Terry and Gary(CODA). A more adult crowd than last night; goodly number of families. \$103.00 + \$9.41=\$112.41(24.11
- 8 1448)6/7/99(MON)HPL(7:42-10:37PM). Hot; sl. hazy sky. HH(Really dragging toward end!). VENUS (Main feature; held till +/-10:15PM). MARS(Twice; no detail.). I was scheduled for slot, but I let Bolivians join me. \$33.00 + \$4.95 = \$37.95 (\$13.01/hr.)
Milage for #'s 1422 and 1432 (JHU ok #B883613) \$ 52.70
- 9 1449)6/8/99(TUE)FPT(8:34-10:42PM). Late start because I waited at HPL to see if 8PM juggler would show, which he did. Then, in Fpt, I waited a bit for clouds to dissolve. Ok sky, except for intermittent thin clouds. VENUS(looks less than 1/2, tho dicotomy is 6/11). MARS (twice). B Sco. a Sco. I was on Lee's corner. \$26.52 (\$12.45/hr.)
- 9 1450)6/9/99(WED)FPT(8:23-10:43PM). Clear; warm. TOUGH NIGHT!(Tough parking, tough getting stuff to corner; 1st looker a drunk ~~derelict~~, 2nd a no-pay. Do a need this humiliation for only a few bucks? No!). VENUS(A tough sell!). MARS(Several times.). VISIT: Phil(Taxi driver). Tough time getting car to corner to pack up stuff! \$21.57 (\$9.23/hr.).
- L 1451)6/12/99(SAT)FMR'S MKT.(7:45-8:30AM). Shut down by clouds! SUN(lots of spot gps; no NE spots. NEW 17MM OCGULAR(made no dif.; will ~~exchg.~~ for 13MM). Sold 2 comet eds. \$3.00
- 9 1452)6/18/99(FRI)FPT.(7:37-10:53PM). Great parking luck, which greatly improved my mood! Clear but sl. unsteady sky. VENUS(Intermittently). 5-d. MOON(Sunrise on Posidonius, Theophilus; good!). VISITS: Carey Reis; Eliasberg. \$72.00 + \$3.25 = \$75.25 (\$23.06/hr.)
- 10 1453)6/19/99(SAT)CYLBURN'S SOLSTICE CELEBRATION(9:45-3:30PM). SUN(3" "Sunscope; pittifully few spots, 4 groups w/total of 5 spots! What's going on? It sure made my day alot harder and less exciting than it might have been. As last year, light attendance. However I had on-going intermittent interest. \$75.00 (FEE)
- 8 1454)6/22/99(TUE)HPL.(8:17-11:25PM). ~~It took slot of~~ magician Dave Rojahn, who I called this afternoon and discovered he wasn't coming. Good sky; busy night! 9-d. MOON(Sunrise on C., plus Tycho; confusion as to where to aim!). ALBIREO(Once!). VISIT: A guy who had been at Cylburn on Sat., Howard Posner & friends. \$63.00 + \$23.23 = \$86.23 (\$27.49/hr.)
VISIT: Lucas Henn(Son of Mary and winner of Mars Party'88 costume contest!

TOTAL THIS PAGE = \$ 743.76

TOTAL THIS YEAR = \$4,655.65

- // 1455)6/23/99(WED)FPT.(8:11-12:18AM). Good sky. Busy briefly at start, then long period of no traffic. +/-10PM got busy again and stayed busy till near end. 10-d. MOON(Tycho, Copernicus, sunrise on Jura Mts.). VENUS. MARS(several times on req.). ALBIREO. VISIT: Billy & Sally Heller & son; Gilman students from talk. Sold H-B tee! \$63.64(\$15.45)
- 1456)6/24/99(THU)FPT.(7:46-11:05PM). Ok sky w/intermittent clouds. VENUS. 11-d. MOON. Generally slower night than last n. VISIT: David K. \$45.00 + \$2.31 = \$47.31 (\$14.28/hr)
- // 1457)6/25/99(FRI)FPT.(7:51-11:55PM). Lucky at parking 3rd night in a row! Cloudy all day, but then good sky. VENUS(Briefly.). 12-d.MOON(Tycho & nearby craters @ 136X; invited many lookers to "cruise" Moon by turning dec. knob.). Sometimes slow, sometimes busy. \$75.00 + \$4.63 = \$79.63 (includes a \$18 contrib.!) (\$19.58/hr.) Lots of families with children, which makes for extra-hard work.
- 2 1458)6/26/99(SAT)FMR'S MKT.(9:30-11:35AM). Late start because I didn't intend to go to rest up for tonight. However, upon visiting for coffee, market mgr. Craig invited me, so I went home and brought back scope. SUN(No biggies, but lots of scattered small spots.) Laid out flier on ground; taken by some lookers. Used 1/2-stop baffle. \$18.50 (\$8.89/)
- 9 1459)6/26/99(SAT)FPT(7:45-12:18AM). More great parking luck! Warm, humid, sometimes sl. hazy sky. Great clientel(lots of families and seriously interested adults) till mid-night, when crowd became young and sl. roudy. VENUS(briefly). 13-d.MOON(Concentrated on Tycho, using picture to great advantage; still some terminator craters) I was very articulate, upbeat, worked very hard at making a good show! \$119.00 + \$8.94 = \$127.94 (\$28.12/hr.)
- L 1460)7/3/99(SAT)FMR'S MKT.(8:00-11:10AM). Very hot & sticky; shut down by clouds. Thanks to bad weather, this was my first possible stint in a week! SUNSPOTS(A respectable display; nothing exciting.). NEW 13MM EYEPIECE(Gave larger image than I had hoped. It overlapped the writing on the screen. Because of haze dimming image, I most ly worked with smaller, 20mm image. In clear sky k3MM might perform better.) \$18.90 (\$5.96/hr.) VISIT: Eric, STSiC astronomer studying AGN's, who I first met at Sherwood Gdns. Eric pedaled home and brought back for me a TRACE X-ray telescope sun poster. I gave a comet card in return.
- 1461)7/3/99(SAT)FPT(8:10-11:45PM). Hazy but ok sky; hot/humid. VENUS(Quite crecentie; w/dropping dec., held only till +/-9:20PM). ALBIREO(Acq. 9:30PM; some lookers liked alot. Decent crowd; good number of families. VISIT: Raylene(dancer). \$59.82 (\$16.71/hr.)
- 8 1462)7/5/99(MON)HPL(7:27-10:33PM). +/-95°F + humid(I'm sitting here sweating!), but good sky. Joined by Andeans, which made my work alot harder! VENUS(Acq. way before ss; it put on a good show. Lost at 9:30PM.). MARS(After Venus. Small dot. Incredibly, I had many lookers, almost all of whom paid! I felt bad about it and switched to B Cyg!). B Cyg(Good show, esp. considering I hype it pretty well.). \$97.00 + \$3.97 = \$100.97 (\$32.57/hr!)
- 8 → 7/6/99 Dry run to HPL.--clouds rolled in before I could set-up!
- 9 1463)7/7/99(WED)FPT(7:28-11:10PM). +/-90°F; sl. less humid. Great clouds in S and E at ss, then clear. VENUS(Nice; held till 9:07PM). ALBIREO(Immed. after V). k Her and θ Ser(not as good as Albireo!). M 13(Self-challenge; dim...forget it!). Fairly steady traffic. VISITS: Marty Bass, TV weatherman; Christian, civil engr. on chrome clean-up.\$53.31(14.42, VISIT: Jerry Grey, Judy Osborn, Loyola librarians.
- 10 1464)7/8/99(THU)FPT.(7:18-10:03PM). Slow. Should have joined Bolivians in HPL at 8PM, but I was too anxious to get started. TELESCOPE(Collimation erratic; must attend to.). VENUS (till 9:04PM). ALBIREO(Great trouble finding due to bad alignment!). \$22.67 (\$8.24/hr.)
- 9 1465)7/15/99(THU)FPT.(7:17-10:20PM). Warm. Ok sky; sl. hazy. VENUS(Trouble finding/misalignment nice crescent. Lost at 8:41PM). 2-d. MOON(Nice in twl.; lost 8:51PM). ALBIREO. THETA SER. Unable to find any SCO/SGR clusters. VISITS: Duncan; Mary Pat (Hometown Girl) & family; Larry Blische. Good number of strollers. \$32.00 + \$4.05 = \$36.05 (\$11.81/hr.)
- 9 1466)7/16/99(FRI)FPT.(7:00-11:02PM). Warm, sl. hazy. VENUS(Set up v. early to hold V as long as poss. and then couldn't find it! Maybe it was invisible in the haze, but then I start-adj. the tripod, which added insult to injury. V. frustrating experience. Found at 8PM!). 3-d. MOON(Ok, while it lasted.) ALBIREO(All the explaining is wearing me down!Packed up, even tho lots of people around, because of strain.)VISITS: C. Reis & friends. Mike Potter w/new girlfriend & her family. \$53.00 + \$4.66 = \$57.66 (\$14.31/hr.).

TOTAL THIS PAGE = \$ 686.40
 TOTAL THIS YEAR = \$5,342.05

- 10 1467) 7/17/99(SAT)FPT(7:10-10:04PM). Hot; hazy, partly cloudy. PARKING(Luck continues; prob. thanks to the fact that drivers misinterpret the new parking signs on B-way as "no parking" signs!). VENUS(Set up early to extend obsv. time but, incredibly, a cloud moved in and it didn't reappear to around sunset!). ARCTURUS(In lieu of Venus.). 4-d. MOON(Quite fine, but sometimes in haze.). VISITS: Larry Blische, who reported receiving my "1st" e-mail msg., which I sent over my new Hotmail acct., which I setup on a JHU machine. ASTRONOMERS! A group of Japanese in for a AGN conference at STSci; Ian Morrison, of Jodrell Bank Telescope, who said he is current president of the British Astronomical Soc; Marilyn Millstone, a freelance writer, who has an art. in the Int. Dark-Sky Assoc.' June '99 newsletter. All-in-all, an exciting night, even if the contribs. were no so great. Adjourned to Ellen Hochman's party, but found nobody on the premises(!). Why? The Japanese wer especially intrigued by the Boo daytime view. \$44.31 (\$15.28/hr.)
- 9 1468) 7/18/99(SUN)FPT(7:05-10:58PM). Hot, hazy, humid. SETUP(Spent whole 1st hr. in draining, frustrating daytime search for Venus and a Boo. Never saw V at all this eve., but when I finally scoped a Boo by eye, it was right on the money! 5-d. MOON(Theophiluz, Cyrillus, & Catharina--lookers impressed.). ALBIROE(a few times). VISITS: Larry B. with his 3 boys and Rita, a woman friend of theirs. Ian Morrison & son David. We tested Ian's just purchased barlow on scope, which convinced me I need one! STAR OF S. BALTO.(Larry worked the small angle formula provided by me to calculate it is +/- 1/2-ft. in dia. Lost \$\$ in first hour, but had good traffic afterwards. \$45.00 + \$3.75 = \$48.75 (\$12.54/
- 10 1469) 7/23/99(FRI)FPT(7:45-12:06AM). Hot but nice sky. ALIGNMENT(After adj. polar angle on wedge, able to find a Boo quickly! Collimated on it in daylight.) EMERGENCY VEHICLES (None, absolutely, due to my complaint call last Monday, I hope!) 10-d. MOON(Tycho! Used 80X w/filter 1/2 the eve., then went to 135X; lookers liked both.). Sometimes busy, sometimes long slow periods. \$73.00 + \$8.45 = \$81.45 (\$18.72/hr.) VISITS: Carol/Brough Schamp. Also, a woman who said her father is Lockheed's ch. eng. on the Lunar Prospector, scheduled to crash into the Moon 7/31, in an effort to stir up water vapor.
- 9 7/24/99(SAT)FPT. Dry run: clouds. While sitting on a bench was approached by a guy who asked for my card and seemed interested in what I'm doing. His name is Don Woods.
- 9 1470) 7/25/99(SUN)FPT(7:46-8:31PM). ^{13-d.} Great Moon, with Tycho and rim craters very prominent. I was enthusiastic and lookers were around, but clouds w/vague lightening forced me to pack-up. VISIT: Jerry, Surban lifeguard from way back. Adjourned to Daily Grind and then to Bertha's with Larry Blische, his last night in town. \$15.55 (\$20.81/hr.)
- 8 1471) 7/26/99(MON)HPL(8:00-10:58PM). Good sky. Busy scene. My slot but accompanied by Andeans, making my work alot harder. 14-d. MOON(Not quite full; Tycho & rim craters. Intermittent interference by Constellation masts. Acq. Moon @ 8:27PM.). ALBIROE(once, while Moon behind mast.). \$69.00 + \$5.66 = \$75.66 (\$25.50/hr.)
- 10 1472) 7/27/99(TUE)HPL(8:37-10:58PM). Intended to do Fpt., but it looked so slow I drove to HPL. Andeans' slot, so I knew I could set-up, even tho I had to pay \$7.00 parking. Was good decision, I'm sure. 15-d. MOON(11-hrs. before full; Tycho! Showed lookers picture of cratered Moon, then full Moon, explaining that all craters but Tycho had melted into backgd.) Sometimes had line. \$62.00 + \$3.06 = \$65.06 (\$27.72/hr.)
- 9 1472) 7/29/99(THU)FPT(8:25-10:56PM). Partly cloudy. Slow evening. Prob. should have stayed home. ALBIROE(Found easily in daylight.). Theta Ser(once). 17-d. MOON(Acq. 10PM. w/the help of Emily, a nursing std. who hung out for a while, moved scope westward for earlier acq.M. Crisis and vicinity impressive.). I in bad mood w/little enthusiasm. \$22.64 (\$9.01/hr.)
- 9 7/30/99(FRI)FPT. Dry run. Unable to setup because of approaching storm.
- 9 7/31/99(SAT)FPT. Dry run. (ibid.)
- 8 1473) 8/2/99(MON)HPL(8:13-10:55). Grt. sky. Andeans...noisy! Slow start, then mod. traffic. ALBIROE. IC 4665(too wide). M7 (oc...good). \$36.00 + \$9.01 = \$45.01 (\$16.69/hr.)
- 9 1474) 8/3/99(TUE)HPL(8:01-10:38PM). Grt. sky. VEGA(Briefly). ALBIROE(Looked great in twilight sky. All the explaining req.'d is wearing me down.) M7(1X; nice!). IC4665(Ok, but wide.). Last stint for a while, as I'm leaving Thurs. for A-dam and 8/11 solar eclipse! \$42.01 (\$16.08/

TOTAL THIS PAGE = \$ 440.44

TOTAL THIS YEAR # \$5,782.49**

- 9 1475)8/16/99(MON)HPL(8-10:08). 1st stint since ret. from eclipse trip to Amsterdam. 6-d. MOON(Good; Theophilus on term.) Lots of no-contribs. \$48.00 + \$7.89 = \$55.89 (\$26.24/hr.)
- 9 1476)8/17/99(TUE)FPT(7:40-10:52PM). Ok sky. ECLIPSE(A woman from Stuttgart reported it was clouded out. An American woman who was in Paris said she watched it in a puddle and that many people were in the streets watching.). 6-d. MOON(T-C-C; Aristotlis + Enduxos). VISIT: David Franks, who mentioned R. Alvarez's book w/art. on me.). Sometimes very slow; sometimes moderately busy. \$49.08 (\$15.35/hr.) VISIT(David Thomas, who was an AFSC anti-Viet. war activist. Is now a lawyer.).
- 11 1477)8/18/99(WED)FPT(7:39-11:16PM). Cloud scare early, but then very nice sky. 7-d. MOON(Terrific! V. sharp image. Hipparchus and Albategnius on term.). \$48.00 + \$3.02 = \$51.02 (\$14.1 JUPITER(I spotted it rising +/-11:55PM. Could have acq. it from W. side of square.)
- 8 1478)8/19/99(THUR)FPT(7:40-9:10PM). Adverse weather rpt., but considerable blue between the approaching clouds, so I wnet for it. V. nice sky for a while, then strong wind and more clouds. In the midst of packing up a family with a little girl arrived who were sincerely interested in seeing the Moon, so I reset-up for them(rec. a \$5 contrib.!). 7-d. MOON (Again, fantastic. Plato on term. Used 220X briefly early on.). VISIT: Charlie Doble and son Paul. \$22.00 (\$14.70/hr.)
- ((At the FMR's MKT drinking coffee & shopping this AM--8/21--a woman spotted me and said that seeing sunspots with my scope a few wks. ago inspired her and her husband to buy a telescope. She said after seeing my setup they just had to have one themselves!))
- 9 1479)8/22/99(SUN)FPT(7:11-11:29PM). Nice sky, allowing me to start 42-min. before ss. 10-d. MOON(Blocked by cloud 1st 15-mins. Back to Tycho!). Pretty busy evening for Fpt. (Died Moon mainly at 133X.). VISIT: Lindsay Stroh & friends. A couple (1 a local professional astronomer, who saw eclipse from Turkey. Didn't feel earthquake. \$79.00+\$7.24=\$86.24(\$20.0
- 11 1480)8/26/99(THU)TOWSON U.(8:00-10-30PM). PROGRAM FOR MAGI & I (Attn: Deloris Peck(410-557-7715). +/-9 children and their families. I followed my std. format. Kids were very bright, had good q's and answ's. Due to inolement weather, looked at Saturn photo taped on wall at end of long hall. Kids seemed to like it. Gave good range of literature and pictures to each participating family. \$210.00
- 11 1481)8/28/99(SAT)FPT(8:45-01:55AM). Nice sky. HH(During the day, driving to Fpt., and even at Jimmy's I felt very despondent and down on my life. However, once I got started I felt good, alert, and healthy. Maybe I should face the fact that SC telescoping seems to be what I best at and meant to do!). 16-d. MOON(Acq. 9:25PM; w/help of David Thomas moved scope to keep Moon from going behind Rec. Pier; M. Crisium region + Tyche region; lookers liked.). ALBIREO(while waiting for Moon). URANUS(while waiting for J&S). JUPITER(Acq. 11:30PM; first time this season! 4 then 3). SATURN(Acq. 12:25AM; Most lookers v. impressed; some skeptics). VISITS: Lynn DeWitt; \$85.00 + \$5.30 = \$90.30 (\$17.48/hr.) VISIT: George McDowell & woman friend--several times.
- 11 1482)9/10/99(FRI)FPT(8:07-12:28AM). Good sky; chilly late eve. Slow early, but v. busy later. URANUS(No trouble finding; even w/sign up not esp. interesting to passersby nor lookers). z Psc(bright; +/-30" wide). ALBIREO(to escape U!). JUPITER(Acq.10:18PM). SATURN(Acq. 11PM Gave out stickers. VISITS: J.Stroh.; J.Wasserman; L. Blische; D.Thomas. \$76.10(\$17.51/hr)
- 10 1483)9/11/99(SAT)FPT(8:07-12:40AM). Great sky. URANUS(Big trouble finding. Why? Was at right settings when I did find!). JUPITER(3-moons; Spot may have gone by soon after acq.). SATURN(Somewhat blurry at first, then great.) VISIT: Ross, who said he's getting married in Oct.; Mary Jo (once of 36th St.) and family. \$111.00 + \$4.95 = \$115.95 (\$25.48) VISIT: Jerry Bain's son and his girlfriend.
- 9 1484)9/12/99(SUN)FPT(A:7:10-8:25PM). Great sky. Moo's corner. 3-d. MOON(Crisium, Langrenus, Petavius; fine!). MARS(After a little boy, to whom I explained telling stars from planets, spotted Mars!). (B:9:07-11:21PM). Persuaded by people who saw J last night and wanted to see it again. Of course they never showed, however I had ok time. URANUS(Easy, thanks to perfect align.) JUPITER(2 moons on each side, close in; great!). SATURN. SCOPE(Jupiter looked alot nicer straight thru than w/diagonal!) \$41.00 + \$6.21 = \$47.21 (\$13.57/hr.)

PAGE TOTAL = \$ 803.79

YEAR TOTAL = \$6,586.28

- 10 1485) 9/13/99(MON)FPT(7:12-9:03PM). Scheduled for Hpl. and really wanted to go, but I prob. couldn't setup till 8:15, and I was itching to get started, so did Fpt. Boring! 4-d. MOON. Occasional lookers.\$15.55 (\$8.41/hr.)
- 11 1486) 9/17/99(FRI)FPT(7:12-12:33AM). Great sky after Hurricane Floyd. Very slow till Jupiter arrived, then incredibly busy. 8-d. MOON(1st qt.; great; sunrise on Archimedes). JUPITER (acq.9:49PM; one & three--spectacular!). SATURN(4-moons). VISITS: Laura Malick with the Begus's; Bill & Susan O'Connor with birthday daughter & her friends.\$139.56 (\$26.09/hr.)
- 9 1487) 9/18/99(SAT)FPT(7:06-12:08AM). Sl. hazy but ok sky. I became really tired and disinterested and closed up a little early. 9-d.MOON. JUPITER(4 then 3). SATURN(2-moons). VISIT: Jeanett Foster, in motorcycle garb with woman friend same. \$108.00 + \$11.84 = \$119.84 (\$23.81/hr.) VISIT: Linda Baer (w/friend, John) who said she now works as a cantor at the Reconstructionist synagog.
- 8 1488) 9/22/99(WED)HPL(7:09-10:05PM). Not scheduled but figured it would be open. Nice sky. Setup W of Ampith. to escape lights. 13-d. MOON(Tycho + term. craters; sunrise on Pythagoras) JUPITER(Acq.10:05; should move W to catch sooner. 4-on right. Great!). VISITS: Barry, who I drove home, meeting his parents. \$52.00 + \$2.41 = \$54.41 (\$18.55/hr.)
- 9 1489) 9/24/99(FRI)FPT(7:50-11:20PM). Hazy at 1st, then good. Quit early due to lack of attp.+ too roudy a scene. 57 AQL + URANUS(while awaiting Moon to rise above Rec. Pier). 15-d. MOON(10-hrs. before full; few distinct craters; Aristarchus limb @ 135X impressed lookers). JUPITER(Acq.9:17PM: 2+2; dark specks in N Eq. Band). SATURN(1). \$49.75 (\$14.21/)
- 8 1490) 9/25/99(SAT)FPT(7:40-01:10AM). Good sky, then mid-evening clouds. Started packing up but couldn't escape new lookers. Ping Ponged between Jupiter and Moon as clouds allowed. Then unexpectedly, sky cleared! ALBIREO(1X till Moon rose.) 16-d. MOON(+/-14 hrs past full; a few edge craters. Made difficult challenge to make it good for lookers. Ended up using 135X on Crisium edge). JUPITER, then SATURN. y AND(1X for Giovanni & Lauren, a few nice, interested couple who wanted to see a star). Kind of peak night! MOON(Rose above Thames St., missing Rec. Pier till it hit flagpole & tower). \$128.00 + \$7.85 = \$135.85 (\$24.70/)
- 9 1491) 10/1/99(FRI)FPT(7:30-12:30AM). Good sky, then haze which finally caused me to quit. Fpt. Festival eve--easy parking at hooded meter. Fairly busy scene. VEGA, B CYG, URANUS(really doesn't excite people), y DEL(bright, not bad). JUPITER(3+1; lookers wowed). SATURN(2 moons at first, but increasing haze diminished scene). VISIT: Yale and his wife from Phila who are regulars w/Fest. Eve.) Lots of + feedback. \$97.47 (\$19.49/hr.)
- 8 10/2/99(SAT)HPL(2-3PM) Drove down to check out alternate stage possibility for tonight.
- 8 1492) 10/2/99(SAT)HPL BICENTENNIAL STAGE!(8-11:50PM). Great move! Was locked out of Fpt. by the Festival and realized early in the day that this was a possibility. Easy parking, tho fairly long haul to spot. But spot was good, w/great horizon. Heavy traffic for most of evening. Was a bit trepedacious about new place but felt ok there after not too long. Y DEL(while awaiting Jupiter.). JUPITER(Rose mightly over Aquarium. 3+1. Haze prob. at first, but then great image.) Lookers loved it!). SATURN(Also haze prob. at first, then good.). VISIT: Bunny Dadds & friend. \$139.00 + \$10.09 = \$149.09 (\$38.90/hr.)
- 8 1493) 10/5/99(TUE)HPL(8:30-9PM). Inspected Bicen.Stage for mid-wk. use. Jupiter above Aqu. on arrival. Sort of a bleak, dark scene. Some flow of people, but sometime none in vacinity. Ampitheatre felt more comfortable. J in view by 8:40PM. Last yr. this time was having \$100+ nights consistently in HPL with J. starting at sunset. '98=\$6494.23; '99=\$7347.80
- 9 1494) 10/6/99(WED)HPL(8:27-11:04PM). Great sky. Setup sl. W. of Ampith. ALBIREO(to test align., which was good). URANUS(awaiting Jupiter). JUPITER(Acq.08:43PM; 1+3; terrific!; intermittent interference from ship for 45-mins.). SATURN(Acq.?.; Good. Did better than J w/ship.) Lots of paying out-of-towners. Display convention. Rick from Sc. Ctr., who I gave rise home. Jon W. \$76.00 + \$7.61 = \$83.61 (\$31.95/hr.)
- 2 1495) 10/7/99(THU)HPL/BICEN.(8-10:56PM). Had Barry w/me for comfort + promise to drive him home. This was good, because there was a creepy guy hanging around loading dock when ret. to car. Visit by Nicole saying she didn't have permit for Bicen week-nights. Ugh! Great sky; enthusiastic lookers! JUP.(Acq.8PM; moved scope for it).SAT.(8:40PM). \$74.06 (\$25.25/)
- Cool. Wore longjohns and sometimes gloves. Great sky!


PAGE TOTAL = \$ 919.19


YEAR TOTAL = \$7,505.47


- 8 1496)10/11/99(Columbus Day)HPL(7:47-11:06PM). Nice sky; mild. Setup W of Amphith. hoping to acq. Jupiter quickly, but it wasn't to be. JUPITER(+15 mins. later than hoped for; nice). SATURN(9:35PM). Pretty busy night. Enthusiastic lookers. Lots of \$5's! \$94.07 (\$28.33/)
A +/-7 mag. star was beyond Callisto, looking like a 5th moon.
- 2 1497)10/12/99(TUE)HPL(8:03-11:58PM). Setup at step between Prom. and lowered walkway. Acq. J&S at least 35 min. sooner. Great sky! JUPITER(4, then 3, then 4; Io shadow; spot). SATURN (4 moons!). Lots of lookers from telecommunications convention. Peak night! Took Barry P. home to Pikesville. \$116.00 + \$7.80 = \$123.80 (\$31.61/hr.)
- 9 1498)10/14/99(THU)HPL(6:53-10:16PM). V. good sky; cool. 5-d. MOON(Low, so sl. unsteady). JUPI-TER(Acq.7:39PM; Nice, 2+2 close). SATURN(Acq.8:49PM; 4-moons!). \$61.00+\$12.54=\$73.54(\$21.71)
By "handy-hand", Jupiter and Saturn are 11° apart.
- 9 1499)10/15/99(FRI)FPT(6:40-11:49PM). Here because Nicole called saying there's no 8-11 permit yet for the Bicen. stage. Ugh! Another great sky. 6-d. MOON. JUPITER(Acq.7:50PM; great!). SATURN(3, maybe 4 moons). URANIUS(For an astronomer from Mass.). Slow early, the somewhat busy, then slow. VISIT: A woman Howard Co. teacher who attended my SSIP classes and complimented me on them. Gave her lots of handouts. \$85.00 + \$7.18 = \$92.18 (\$17.91/hr.)
- 9 1500)10/16/99(SAT)FPT(6:15-12:03AM). Because of adverse weather rpt. and gathering clouds, and wanting to work while I could, started on Moon in daylight w/filter, which worked well. Eventually was doing Moon thru holes in clouds; Was ready to quit around 8:30PM but somehow kept going, bouncing between Moon, Jupiter & Saturn when they entered holes in clouds! Then, around 10:30PM, sky became perfectly clear! MOON(Great. Hipparchus & Albategnius). JUPITER(4 on left--marvelous, then 3). SATURN(A looker claimed seeing 5 moons!). VISIT: Stephen Lampredi, who I had't seen for sev. yrs. Steve, Jon & I went for beer at the Oyster. Wild night! A family bought 5 comet cards. Report, which I also got on phone from Eve, that J&S were shown on TV during baseball playoff game. \$131.00+\$10.16=\$141.16(\$24.34/
- 8 1501)10/18/99(MON)HPL(6:20-10:36). Great sky, cool. Really didn't want to go out, but I'm glad I did, because I brought pleasure to a number of people, plus I made some needed money. 9-d. MOON(Sunrise on Copernicus!). JUPITER(3+1). SATURN(3?). A looker did a pretty good job videoing J & Moon. Sl. bleak scene on promenade. \$80.00 + \$10.61 = \$90.61 (\$21.22/hr.)
- 8 1502)10/21/99(THU)HPL(6:16-11:57PM). Sl. hazy sky; cool. Lots of people on promenade on way to Ravens FB game. They showed more int. in me after game. Lots of lookers from annual Natural Products convention, who were enthusiastic & contributed. TELESCOPE(Dec. latch failure. Had to tell lookers not to put any pressure on scope. I've known for weeks it was coming but didn't want to think about it. I hope I can fix it tmw.). 12-d. MOON(Copern. + craters). JUPITER(3+1). SATURN(2 moons). \$150.00 + \$8.08 = \$158.08 (\$27.83/hr.)!
- 8 1503)10/23/99(SAT)HPL(7:27-11:32PM). Late start due to very mixed-up weather rpt. & clouds all day. Good sky; sl. unsteady. TELESCOPE(Installed original dec. lock. To my relief, it is working ok! Meade sending new one.). JUPITER(Best ever moons array! 4 on left, with 3 in a tight triangle and one alone further left. Unbelievable. If you could take it out of the sky and hang it in an art museum, peopled would be totally wowed!). SATURN(Great. 4 moons). MOON(A few times. Just shy of full. Edge craters @ 135X). Quite a few very enthusiastic lookers. \$152.00 + \$13.19 = \$165.19 (\$40.46/hr.) Actually, a R&R band was on sked for Hpl., tonight, but I figured it was too cold for them, I was right! They didn't show.
- 8 1504)10/25/99(MON)HPL(6:52-9:35PM). Great sky; mild to cool. JUPITER. SATURN(Acq.8:12PM). 16-d. MOON(edge craters). Sparse crowd. \$60.00 + \$6.21 = \$66.21 (\$24.40/hr.)
- 8 1505)10/26/99(TUE)HPL(7:02-7:58PM). Gathering clds. @ ss, but I chanced it. Gave up when more clds. than holes. JUPITER(1+3). \$13.10 (\$13.98/hr.)
- 9 1506)10/27/99(WED)HPL(6:45-10:05PM). Terrif. sky! JUPITER. SATURN(3 moons). VISIT: Jim Ethridge. \$80.00 + \$3.64 = \$83.64 (\$25.99/hr.)
- 8 1507)10/28/99(THU)HPL(6:53-9:58PM). V.G. sky. JUPITER(3, then 4; 2X shadows). SATURN(3). VISIT: A NYC couple who looked 8-yrs. ago in FPT. \$63.00 + \$2.63 = \$65.63 (\$21.26/hr.)


PAGE TOTAL = \$1,167.21


YEAR TOTAL = \$8,672.68


	IO	EUROPA	GANYMEDE	CALLISTO
 Dia.(mi.)	2,254	1,950	3,266	2,981
Dist.(mi.)	262,062	416,691	664,470	1,170,585
Period(d.)	1.77	3.55	7.16	16.7


	IO	EUROPA	GANYMEDE	CALLISTO
 Dia.(mi.)	2,254	1,950	3,266	2,981
Dist.(mi.)	262,062	416,691	664,470	1,170,585
Period(d.)	1.77	3.55	7.16	16.7


	IO	EUROPA	GANYMEDE	CALLISTO
 Dia.(mi.)	2,254	1,950	3,266	2,981
Dist.(mi.)	262,062	416,691	664,470	1,170,585
Period(d.)	1.77	3.55	7.16	16.7


	IO	EUROPA	GANYMEDE	CALLISTO
 Dia.(mi.)	2,254	1,950	3,266	2,981
Dist.(mi.)	262,062	416,691	664,470	1,170,585
Period(d.)	1.77	3.55	7.16	16.7


	IO	EUROPA	GANYMEDE	CALLISTO
 Dia.(mi.)	2,254	1,950	3,266	2,981
Dist.(mi.)	262,062	416,691	664,470	1,170,585
Period(d.)	1.77	3.55	7.16	16.7

	IO	EUROPA	GANYMEDE	CALLISTO
 Dia.(mi.)	2,254	1,950	3,266	2,981
Dist.(mi.)	262,062	416,691	664,470	1,170,585
Period(d.)	1.77	3.55	7.16	16.7

	IO	EUROPA	GANYMEDE	CALLISTO
 Dia.(mi.)	2,254	1,950	3,266	2,981
Dist.(mi.)	262,062	416,691	664,470	1,170,585
Period(d.)	1.77	3.55	7.16	16.7

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	IO	EUROPA	GANYMEDE	CALLISTO
 Dia.(mi.)	2,254	1,950	3,266	2,981
Dist.(mi.)	262,062	416,691	664,470	1,170,585
Period(d.)	1.77	3.55	7.16	16.7

- 9 1508)10/29/99(FRI)FPT(6:49-11:40PM). Tried for HPL, but it didn't work out. Great sky; mild. Joined by Teressa Palomar w/her 5" SCT. She took J and I took S. Good division of labor; might even have enhanced contribs. JUPITER(Great!). SATURN(4-moons). VISIT: Billy Heller's grandson, Alex, who B. instructed to come see me. \$136.00 + \$12.38 = \$148.38 (\$29.66/hr.) Looking at Jupiter and its moons, tonight, and reacting to how beautifully they have looked recently, I had the thought that beyond being "park rangers of the sky", street corner astronomers are "curators in an art museum", who help people appreciate beautiful paintings.
- 9 1509)10/30/99(SAT)FPT(6:45-12:38AM). HALLOWEEN EVE, WITH A HUGE TURNOUT OF COSTUMERS AND SPECTATORS. I WAS VERY BUSY! JUPITER(A bit murky for a while, then good). SATURN(2 moons). VISIT: Jay Berg & friend, Mary. \$202.00 + \$8.91 = \$210.91 (\$35.85/hr.)
- 9 1510)11/01/99(MON)HPL(5:33-10:03PM EST). Adverse weather rpt. but fine sky(sl. hazy). Unexpectedly busy stint! JUPITER(4, then 3; fine!). SATURN(Extremely sharp; 2-moons). \$132.45 (\$29.43/) J&S obliterated by clouds at the very moment I had decided to pack it up!
- 9 1511)11/04/99(THU)HPL(5:28-10:00PM). Clear, but not great seeing; chilly. MAYBE IT'S HAPPENED--- A RPT. OF SOMEONE'S BECOMING AN ASTRONOMER HAVING LOOKED THRU MY SCOPE! A MIDDLE-AGED COUPLE SAID TO ME, "YOU MIGHT NOT KNOW THIS, BUT OUR SON LOOKED THROUGH YOUR TELESCOPE YEARS AGO AND IS NOW AN ASTRONOMER." I REQUESTED HIS NAME. HE IS JIM BENSON, AND HE WORKS FOR THE NAVAL OBSV. AT THE LOWELL OBSV. IN FLAGSTAFF. PARENTS' TEL.# 410-837-9891. I WILL TRY TO CONTACT JIM BENSON TO SEE IF IT IS REALLY SO. JUPITER(4, then 2 moons). SATURN(a looker saw 5 moons?). Surprisingly busy night. It just wouldn't stop, and nearly everyone contributed. \$138.00 + \$8.74 = \$146.74 (\$32.39/hr.)
- 10 1512)11/05/99(FRI)HPL-BICEN.STAGE(5:39-9:40PM). Superb sky then, suddenly, clouds. I took them as a blessing in disguise, as I was very tired from a hard day selling holiday cards, and packed up. Pretty busy, w/lots of families. JUPITER(3, then 4; great!). SATURN(4 moons!). Tho it feels a bit strange, the Bicen.Stage seems to be an ok spot. \$118.00 + \$4.09 = \$122.09
- 12 1513)11/6/99(SAT)FPT(6:16-12:00MN). Good sky, mild, but a very strong N wind arrived +/- 10PM & stayed. Accompanied by Teressa, who did Jupiter while I did Saturn. JUPITER(4 on left). SATURN(3 moons). Slow start, then v. busy toward 10PM. VISIT: Ellen Hochman with mother, Silvia, and friends fullfilling "gift cert". \$223.00 + \$10.92 = \$233.92 (40.82/hr.!). Am pretty sure that T's presence enhanced contribs. Will offer her 20% in future.
- 9 1514)11/7/99(SUN)HPL-BICEN(5:01-8:46PM). Hazy start, then terrific sky; coolish. Kind of a bleak scene, but moderate traffic. Accompanied by Alborado at start. JUPITER(right away; 2+2; I seem to be especially enjoying J this season!). SATURN(2 easy moons). \$100.18 (\$26.74/hr.)
- 9 1515)11/8/99(MON)HPL(5:14-9:24PM). Another great sky! Slow start, then busy. JUPITER(2+2+bright star in Psc). SATURN(3-moons). VISIT: Greg, piano player on Mon. nites at Phillips. Quit a bit early(prob. a mistake!) to accept his invite of a beer, but then decided I had too much to do at home with holiday cards. \$124.00 + \$8.08 = \$132.08 (\$31.67/hr.)
- 8 1516)11/9/99(TUE)HPL(5:08-9:32PM). Good sky. I was tired & in a bad mood. Barry's incessant talking got badly on my nerves, and I asked him to move away. JUPITER(Great! IV right over J). SATURN(Must have been good, because it drove a woman looker to tears!). Pretty steady traffic. Lots of Spanish speakers. \$115.00 + \$12.30 = \$127.30 (\$28.91/hr.)
- 9 1517)11/13/99(SAT)HPL(5:02-10:49PM). 12TH ANNIVERSARY AS SC ASTRONOMER! I felt reenergized following 3-d. clouds break. 5-d. MOON. JUPITER(3, then 4; spot). SATURN(4-moons; 1 gp. of adamant doubters). Busy. Lots of enthusiastic lookers. I did good for them. Was at Bicentennial Stage. \$183.00 + \$24.29 = \$207.29 (\$35.82/hr.)
- 8 1518)11/14/99(SUN)HPL BICEN.(4:52-8:27PM). Semi-quiet scene. A GUSTY WIND FORCED ME TO USE 80X ON SATURN, AN EYEOPENER, AS LOOKERS WERE AS IMPRESSED AS W/135X! WILL TRY TO BUY AN 18MM OR 20MM ORTHO TO USE ON BOTH JUPITER AND SATURN! 5-d. MOON(good). JUPITER. SATURN(4 moons at 80X!). I chased away Barry for talking incessantly! \$83.18 (\$23.23/hr.)

PAGE TOTAL = \$ 1,638.52

YTD TOTAL = \$10,311.20

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From: RMOLLISE Save Address Block Sender

To: Save Addresses

Subject: Re: Mirror image Moon map

Date: Mon, 18 Oct 1999 11:12:58 EDT

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In a message dated 99-10-18 10:58:08 EDT, you write:

<< Hi Ron, With considerable effort I have created a mirror image Moon map for

use with SCT's and refractors carrying star diagonals. Would it be OK if I offered copies of it to the SCT users' group for two dollars (\$2.00 per map as a nominal postage? Let me know. The map is not fancy, but it is clear, accurate, and works well. Shown are eighty-six (86) prominent lunar features, each one numbered and named. Many also have width, depth, and height data. The six Apollo landing sites are shown.

While I've got you, I'm still befuddled as to how to post a message for the group. I can never seem to find the "post to this group" thing. Is it there sometimes and not there other times? Any help you can give me on this will be GREATLY appreciated!

Herman Heyn >>

Hi Herm:

To post, all you need to do is send a message to sct-user@groups.com. You can do this whether you read the list on the web site or via email. As far as your Moon map, yes, by all means offer it to the users... this sort of thing is a godsend for star diagonal equipped scopes! :-)

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- 8 1519)11/18/99(THU)HPL(4:57-10:08PM). Good sky;mild. Lots of querries as to whether I saw the Leonids last night. A Brit rpt'd. seeing big shower last night from Manchester. Slow start, then quite busy. 9-d.MOON. JUPITER. SATURN. \$133.00 + \$7.22 = \$140.22 (\$27.05/)
- 9 1520)11/19/99(FRI)HPL(5:08-11:18PM). Great sky, then good; mild.10-d.MOON. JUPITER(4 on L, then 3). SATURN(3-moons).M42(once). Slow start, then v.busy.\$210.00 + \$14.71 = \$224.71(\$36.42/)
- 8 1521)11/21/99(SUN)HPL-BICEN.(4:52-8:50PM). Great sky. V. busy, then slow. 12-d. MOON(Edge craters @ 136X). JUPITER(3, then 4). SATURN. Visited by a grp. of +/-12 affluent El Salvadorans. Also had some pretty enthusiastic children. \$116.00 + \$9.23 = \$125.23 (\$31.60/)
- 9 1522)11/27/99(SAT)HPL(4:53-11:15PM). Sched. Bicen. but discovered Ampli. avail. John & Sal strolled by as setting up, but couldn't stay. JUPITER(4, then 3, then 4!). SATURN(2 mns.) y Ari(1X for Olaf). Pretty busy. Lots of kids. Visit: Sharon Ceci. Good, but not great seeing; mild again! \$258.00 + \$12.39 = \$270.39 (\$42.45/hr.)
- 9 1523)11/28/99(SUN)HPL(4:43-8:14PM). Coolish; great sky. Not a big crowd. Sometimes bleak looking, but knots of lookers kept appearing. Adjourned a little early to visit piano player looker at Phillips. JUPITER(3, then 4). SATURN(2 moons).\$105.00+\$10.33=\$115.33(\$32.83/hr.)
- 4 1524)12/2/99(THU)ROTUNDA(!)(4:32-8:30PM). Mildish; good sky. JUPITER(4 on right). SATURN(I saw 4 and Teresa saw 5 moons!). Joined by Teresa, who I'dalled. Many enthusiastic lookers. VISITS: Mike Franch, Ann Gordon, Sally Heyn(leaving the Rotunda with her tutee and his mother), Eve Heyn & Aren(in town this wk. to escape lead paint removal work at home in Brooklyn). \$63.00 + \$5.97 = \$68.97 (\$17.37/hr.)
- 9 1525)12/3/99(FRI)HPL(5:40-7:10PM). Late start due to clouds, then shut down by them. JUPITER & SATURN intermittently thru clouds. Could have been a good night! \$25.42 (\$16.98/hr.)
- 9 1526)12/4/99(SAT)HPL(5:07-11:20PM). LIGHTED BOAT PARADE(Big crowd of spectators. Alborado stopped playing for it, but I kept going.). Mild, sl. hazy;(not great seeing. I was overdressed and removed by long Johns undershirt. JUPITER(4, then 3; IV beneath J). SATURN(2-Moon; background stars). Lots of families. Many Enthusiastic lookers. \$265.00 + \$25.12 = \$290.12 (\$46.72/hr.) VISIT: Malia Kemp & father, Billy.
- * 1527)12/7/99(TUE)ROTUNDA(5:19-7:13PM).Sl. late start due to indecision about setting up because of wind. Drove home, then came back(!). Joined by Teresa. FIRST NIGHT W/NEW 18mm ORTHO(WHICH YIELDS 111X. SATURN LOOKED RESPECTABLE. ONLY ONE LOOKER COMMENTED ON ITS SIZE. JUPITER(Spot; mostly left it for T). SATURN(4 moons). VISITS: Bob Brown & family; Barbara(Morris dancer). \$34.84 (\$18.37/hr.)
- * Incl. 1/3 of license renewal + 2 trips to Rotunda + trip to Staples
- 4 1528)12/9/99(THU)ROTUNDA(4:48-6PM). Great sky at ss, but adverse weather rpt. Shutdown by clouds. Joined by T.P., she on Jupiter. JUPITER(Startling clear at ss!). SATURN(3-moons) VISIT: Sally H. leaving work; lots of "glad to see you back" comments.\$28.88(\$24.00)
- 9 1529)12/11/99(SAT)HPL(4:49-9:57PM). Great sky; cool. Teresa. Chas. Lee, singer, performing in Amphitheater--got his ok to setup. Busy night, T. on Jupiter and I on Sat. SATURN (4 moons) at 220X briefly, then 167X. \$255.00 + \$18.31 = \$273.31 (\$53.28/hr.)
- 8 1530)12/17/99(FRI)HPL(5:01-10:11PM). Place looked a bit empty till mid-eve., then somewhat busy. Hassled by intermittent clouds from 7:30-9:15PM). 10-d. MOON(Jura Mts.). JUPI-
#12004-33 TER(Seb trailing spot looked weak for few hrs.). SATURN(2-moons).\$95.71 (\$18.54/hr.)
- 9 1531)12/18/99(SAT)HPL(5:11-9:26PM). Quit a bit early due to cold wind. Joined by Teresa. Very busy night, with T. on JUPITER and the MOON and me on SATURN. VISIT:Arriving at HPL discovered Discovery Channel store ~~ETX-90 operated~~ by Meade sales mgr., Bryan Dunaj. Inside store was astrophotographer Jack Newton, who visited me briefly and to whom I gave a Comet card and my astrophoto art. Adjourned to Pizza Uno w/Teresa. Another night w/adverse weather rpt. but good sky! \$231.00 + \$20.17 = \$251.17 (\$59.06/!)

TOTAL THIS PAGE = \$ 1,944.30

TOTAL THIS YEAR = \$12,255.50

4 1532)12/22/99(WED)ROTUNDA(4:50-8:20PM). NIGHT OF THE "SUPER" MOON--FULL MOON AT WINTER SOLSTICE(TODAY) + CLOSER THAN USUAL PERIGEE(221,482mi) + EARTH APPROACHING PERIHELION (JAN. 3RD), MENTIONED IN THE OLD FARMER'S ALMANAC, THANKS TO INTERNET IT CAUSED CONSIDERABLE EXCITEMENT AMONG THE PUBLIC, WHO EXPECTED THE MOON TO BE STARTLINGLY BRIGHT. BUSY NIGHT, BUT NOT NECESSARILY BECAUSE OF MOON BUSINESS. I ONLY HAD ONE UEL INQUIRY (ANN GORDON). JOINED BY TERESSA WHO, ONCE MOON GOT ABOVE BUILDINGS, SHOWED IT FROM THE PARKING LOT, WHILE I DID JUPITER AND SATURN (4 MOONS!) FROM MY USUAL SPOT. VISITS: I was accompanied by my new friend, Janet Morehouse, who I picked up at the State Office Bldg. and, after stint, drove to Owings Mills; Teressa's friend, Janet; Lorinda, Val, and many more. Rec. 6-pack of beer as contrib. MOON WAS VERY BIG AND YELLOWISH RISING BUT, TO ME, DIDN'T LOOK ANY BRIGHTER THAN USUAL WHEN HIGHER. \$103.00+\$7.53=\$110.53(31.58) Visits: Dr. Joseph Zebly. THIS MOON SHOULD BE TITLED "THE MILLENNIUM MOON".

12/23/99 Wanted to, but didn't go out tonight because of clouds at sunset. Of course, it cleared up nicely later! Checked out HPL. A line of people at the "Santa Claus House", plus some strollers. Prob. would have done ok. Seeing a beautiful Moon rising as I was driving home (stopped in Fpt. for supper at Jimmy's and beer/pretzels at Bertha's), I thought about how sensational it would look thru the scope and how by my not being out I was depriving people of that thrill. I thought, "When I'm not out with my telescope, it is like shutting down the Grand Canyon!"

9 1533)12/29/99(WED)HPL(4:46-8:40PM). Cold(mid-30's, windchill). Hesitant to go to HPL tonight, fearing it would be cold and empty, Happily, despite the cold there were lots of people. JUPITER(3, then 4; Neat!). SATURN(3-moons; poor seeing, tho). Could have stayed longer but was getting cold + a bit bored. Lots of families! Spent an untoward amt. of time w/ a group of deaf lookers who were very assertive & demanding. \$139.00+\$5.20=\$144.20(36.97) +/-5 people said they'd rec. telescopes for Xmas, to all of whom I gave star maps. They were very appreciative. Lots of \$5 contribs. tonight!

TOTAL THIS PAGE = \$ 254.73

TOTAL THIS YEAR = \$12,510.23

Year = 1,466

$$1/1 \rightarrow 3/31 = 261 \times \$0.325 = \$84.83$$

$$4/1 \rightarrow 12/31 = 1205 \times \$0.310 = \$373.55$$

$$T = \$458.38$$

1/3/99	SP to Hpl. derilict for helping me w/problem derilict	\$ 1.00
1/4	SP 5-star maps (10 sides) (Hopkins Store)	\$ 0.50
1/7	SP 4-copies solar max info for Roylance (Staples)	\$ 0.21
1/7/STA	stamp pad inker (Staples)	\$ 1.88
1/20/99	SP 10-cps.(20 sides) winter star map (Hopkins Str.)	\$ 1.00
1/20/99	BOOKS 1-copy "924 Elem. Probs. & Answers (Chicago Dist. Ctr.) VISA	\$ 9.50
1/20/99	EQUIP 1-12-volt 7-amphours rechargeable battery (Battery Warehse)	\$ 24.10
1/20/99	EQUIP 1-3 ft. battery connector (Salvo Auto Parts)	\$ 3.14
1/21/99	EQUIP soldering job on battery connector (Amateur Radio Ctr.)	\$ 6.53
1/21/99	SP 5-cpys. "Hero" article (Kinkos)	\$ 0.37
1/22/99	SP 5-cps. Roylance art. on stars for 1999 (JHU)	\$ 0.25
1/22/99	TEL bill of 1/13/99	\$ 2.29
P 1/25/99	12-copies SC educational handouts (JHU)	\$ 0.60
TA 1/28/99	1-marking pen (Enochs)	\$ 0.89
1/28/99	SP 2-cps. blue moon BLUE letters (Hopkins Str.)	\$ 0.10
2/1/99	PHOTO "Blue Moon" shots at HPL. (Dark Room)	\$ 5.35
2/2/99	SP-6-cps. Gift Certificate materials (JHU)	\$ 0.30
2/2/99	SP 4-cps. "GIFT CERTIFICATE" (Hopkins Str.)	\$ 0.21
2/3/99	PHOTO 6 "Blue Moon" prints (Dark Rm.)	\$ 3.21
2/3/99	SP 15-cps. "Gift Certificate (JHU)	\$ 0.75
2/5/99	SP 10-cps. Gift Cert. (JHU)	\$ 0.50
2/5/99	SP 10-maps + 5-G.F.'s (Hopkins Store)	\$ 0.79
2/9/99	SP 6-cps. "Nightwatchman" art. (Hopkins Str.)	\$ 0.32
SP 2/10/99	SP 4-cps. Iran materials (JHU)	\$ 0.20
2/11/99	POST misc. astro mats. to Dana Boltersdorf	\$ 0.99
2/13	STA LIQUID PAPER (Staples)	\$ 3.45
2/18	SP 50-sides SC handouts (JHU)	\$ 2.50
2/22	SP gas money to Miriam Braly to take conjunction film to SUN	\$ 2.00
2/23/99	SP 14-sides SC handouts (JHU)	\$ 0.70
2/23/99	PHOTO 9 (process & print) Venus-Jupiter conjunction (Dk. Rm.)	\$ 4.25
2/27/99	TEL bill of 2/13/99 + bill of 1/13	\$ 4.30
2/27/99	SP 14-cps. SUN photo of L. Wyskiel looking thru my scope (JHU)	\$ 0.70
2/28/99	SP 3-copies SUN photo of L. Wyskiel/planets (Hopkins Str.)	\$ 0.15
3/1/99	POST stamps	\$ 6.60
3/1/99	FEES Md. Science Ctr. Membership thru 2/28/00 (Visa card)	\$ 27.00
3/2/99	STA file folders + 6x9 envcls. + type ribbon (Staples--Visa Cd.)	\$ 7.02
3/3/99	ECLP 6copies Shams letter for AH and EH (JHU)	\$ 0.30
3/4/99	ECLP letter to Iran	\$ 0.60
3/6/99	SP tip to Frankie at HPL for helping pack-up	\$ 1.00
3/11/99	ECLP (Geographic eclipse mats. to A. Hale)	\$ 0.55
3/15/99	BOOKS (5 Equasions That Changed The World) (Normals	\$ 10.50
3/15/99	SP 7-copies sunspot templates for Tom McIntyre) (JHU)	\$ 0.35
3/17/99	SP 1-jar green glitter for "green star" sign (Hopkins Str.)	\$ 1.56
3/17/99	SP 1-Irish green boutonniere (Images Cafe)	\$ 2.05
3/18/99	SP 1000 post-it notes (Staples)	\$ 4.40
3/18/99	STA bike repair (Horizon)	\$ 4.79
SP 3/20/99	15-star maps (JHU)	\$ 1.55
3/21/99	TEL (bill of 3/13/99)	\$ 2.68
3/23/99	POST FAX to Alan Hale (Hopkins Store)	\$ 1.05
3/23/99	SP 10-sides SC handouts (Hopkins Store)	\$ 0.50
3/25/99	POST letter to Boonesboro Elem. + stamps	\$ 7.15
3/26/99	POST (mats. to Deep Run Elem. Sch.)	\$ 0.77
SP 3/28/99	40-sides (SC handouts) (JHU)	\$ 2.00
SP 3/31/99	26-sides (SC handouts) (JHU)	\$ 1.30

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\$166.75

4/2/99	SP	9-copies of materials for MARS sign (JHU)	\$	0.45
4/2	SP	9-copies of mats. on Venus cycles for Prof. Cooper (JHU)	\$	0.45
4/2	POST	4-postcards	\$	0.84
4/10	SP	30-sides (SC handouts) (JHU)	\$	1.50
SP 4/12/99		5-cps (Venus phases diagram) (JHU)	\$	0.25
POST 4/13/99		(mats. to Tom McIntyre)	\$	0.55
SP 4/13/99		10-sides astrophoto handout(JHU)	\$	0.50
POST 4/14/99		materials eclipse to J. Sarsgard	\$	0.77
SP 4/14/99		10-sides (mats. for J. Sarsgard)	\$	0.50
SP 4/15/99		3-sides (reduction of Venus diagram) (JHU)	\$	0.15
SP 4/16/99		18-sides (36 ea. SC handout) (JHU)	\$	0.90
STA 4/21/99		3-boxes (Staples) (to rest telescope on)	\$	3.12
POST 4/21/99		star maps to Boonesboro Elem Sch.	\$	0.55
SP 4/21/99		9-sides (star maps for Boonesboro Elem Sch.) (JHU)	\$	0.45
STA 4/21/99		piece of wood for telescope support platform(Home Depot)	\$	3.38
TEL 4/23/99		tel bill of 4/13	\$	1.80
SP 4/25/99		24-sides star map	\$	2.20
POST 4/29/99		FAX to Alan Hale resigning from Iran eclipse expedition(H.Store)	\$	1.05
SP 5/5/99		1-copy "Rpt. On My Presentation...Boonesboro Elem." for Anikis	\$	0.05
SP 5/17/99		7-sides mats. for Karen Gordon, poet (JHU)	\$	0.35
POST 5/18/99		add'l. stamp for Gordon letter	\$	0.22
POST 5/20/99		consultant job letter to Smithsonian	\$	0.55
SP 5/20/99		7-sides misc. (JHU)	\$	0.35
TEL 5/21/99		bill of 5/13/99	\$	2.95
POST 6/1/99		stamps	\$	6.60
* EQUIP 5/21/99		1-.965 Explorer II 17mm eyepiece (Orion order #429520)	\$	32.95
SP 6/7/99		tip to Frankie for pushing scope to car at HPL	\$	1.00
SP 6/8/99		8-copies for VENUS sign (JHU)	\$	0.40
POST 6/12/99		return ocular to Orion for exchange (insured)	\$	2.06
SP 6/17/99		5-cps. sunspot info (JHU)	\$	0.25
SP 6/23/99		5-cps. MARS PARTY '88 Sun article (JHU)	\$	0.25
SP 6/25/99		11-cps. Moon photos for SC use (JHU)	\$	0.55
ECLIP 6/22/99		18 Eclipse Shades (Rainbow Symphony Inv.7002)	\$	25.00
POST 6/25/99		eclipse shades to Ehsan in Iran	\$	1.00
TEL 6/26/99		bill-of 6/13/99	\$	1.21
EQUIP 6/15/99		return eyepiece to Orion (Orion order #429520)	\$	(27.95)
* received		13mm in exchange		
SP 7/9/99		3-copies materials to Minnesota A.S. (JHU)	\$	0.15
SUBS 7/2/99		Science News (credit card) 1 year	\$	42.97
STA 7/12/99		2-typewriter ribbons (Staples)	\$	5.64
STA 7/12/99		brake repair (Horizon)	\$	3.00
SP 7/16/99		10-copies 3-day Moon pictures (JHU)	\$	0.50
SP 7/19/99		2-copies Albireo mats. for MN Astro(JHU)	\$	0.10
SP 7/20/99		2-copies letter to Garrison & Beattie (RASC) (JHU)	\$	0.10
POST 7/20/99		letter to Garrison & Beattie	\$	0.55
ECLIP 7/20/98		filter test shots (Dk. Rm.)	\$	4.22
TEL 7/21/99		bill of 7/13/99	\$	3.05
SP 7/24/99		15-cps. Albireo mats. for newsletters, McIntyre, etc.(JHU)	\$	0.75
SP 7/27/99		Central Parking System (HPL)	\$	6.00
SP 7/27/99		tip to Central Pk. Sys. guy (HPL)	\$	1.00
PHOTO 8/3		"Sunscope" telescope photos (Dk. Rm.)	\$	4.06
SP 8/18/99		5-copies art. on woman astronomer (JHU)	\$	0.25
TEL 8/23/99		bill of 8/13/99	\$	2.26
SP 8/23/99		3-copies materials for Steve Rifkin (JHU)	\$	0.15

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\$169.91

SP 8/28/99	10-copies blue flame materials for David (JHU)			\$ 0.50
SP 8/29/99	2-cps. Albireo correction notice (JHU)			\$ 0.10
SP 9/8/99	6-copies xxx K star materials for Bob Garrison (JHU)			\$ 0.30
POST 9/8/99	add'l for letter to B. Garrison in Canada			\$ 0.22
POST 9/9/99	letter to Geo. Garrison in Canada			\$ 0.48
STA 9/18/99	replace tire/tube (Horizons)	ST. JHU	92	\$ 6.54
TEL 9/21/99	bill of 9/13/99			\$ 0.63
STA 9/27/99	typewriter ribbon (Staples)	ST. JHU	AT2	\$ 3.13
POST 9/30/99	stamps			\$ 3.30
STA 9/31/99	battery for wrist watch (Greenmount Loan & Jewelry Co.)	BOOKS		\$ 2.00
SP 10/6/99	1000 postit notes (Staples)	BOOKS		\$ 4.40
SP 10/16/99	6-copies star charts/maps for Roylance (JHU)	BOOKS		\$ 0.30
SP 10/19/99	1235-copies (JHU Inv. #447 for 3/98-6/99) (pd. ck. #408)	BOOKS		\$86.45
TEL 10/19/99	bill of 10/13/99			\$ 1.74
SUBS 10/20/99	1-yr. membership American Geophysical Union (pd. by credit cd.)			\$ 30.00
SUBS 10/23/99	2-yrs. membership Planetary Society (ck. #409)			\$ 45.00
POST 10/25/99	10-stamps (shared with PHOTO)			\$ 3.30
BOOKS 10/25/99	(Obsv. Hdbk+2-"Cycles"+M-I Moon Map+SkyWch2000+Almanac(S&T)(credit cd.)			\$24.79
SP 10/28/99	to Frankie in HPL for pushing handtruck w/ scope to car			\$ 1.00
SP 10/30/99	2000 postit notes (Staples)			\$ 8.79
SP 11/1/99	to Frankie in HPL for pushing scope up hill			\$ 1.00
SP 11/3/99	20-sides SC handouts (JHU)			\$ 1.00
SP 11/6/99	40-sides SC handouts (JHU) (+ misprints)			\$ 2.10
SP 11/10/99	40-sides SC handouts--Porco+handbill+mnemonic (JHU)			\$ 2.00
STA 11/12/99	arch supports for my cold weather SC boots (Bite Aid)			\$ 7.76
POST 11/15/99	stamps			\$2.20
SP 11/15/99	1-copy of Covington 1e-mail (JHU)			\$ 0.05
STA 11/15/99	#10 envelopes, Scotch tape			\$ 1.92
SP 11/20/99	1 JHU copy mach. ed. + \$1.00 lost on previous ed. (JHU)			\$ 1.75
SP 11/20/99	50-sides SC handout materials (JHU)			\$ 2.50
SP 11/21/99	52-sides star maps (JHU)			\$ 1.60
SP 11/22/99	screws to fix telescope case (Hamden-Hwe)			\$ 0.95
TEL 11/23/99	bill of 11/13			\$ 1.76
SP 11/29/99	40-sides SC handouts (map, Porco, J's moons, handbill) (JHU)			\$ 2.00
SP 11/30/99	2-cps. letter to Planetary Rpt. (JHU)			\$ 0.10
SP 12/4/99	tip to Frankie for pushing scope back to car			\$ 2.00
SP 12/5/99	98-sides SC handouts (JHU) @ \$0.05/ea.			\$ 4.90
EQUIP 11/16/99	1-18mm Orthoscopic eyepiece (UNIVERSITY OPTICS) (credit card)			\$60.90
FEES 12/7/99	1/3 of driver's lic. renewal			\$ 6.67
SP 12/7/99	2000 stick-on notes (Staples)			\$ 8.79
SP 12/11/99	to Teresa Palomar for parking at HPL			\$ 5.00
STA 12/12/99	typewriter ribbon & whiteout (Staples)			\$ 5.13
SP 12/18/99	to Teresa P. for parking at HPL			\$ 5.00
POST 12/20/99	stamps			\$ 2.20
SP 12/21/99	43-sides, SC handouts (JHU)			\$ 4.30
TEL 12/21/99	Bill of 12/13/99			\$ 2.18
SP 12/26/99	2-copies letters to ed. to City Paper, ASTRONOMY (JHU)			\$ 0.10
SP 12/29/99	50-sides Star Maps (JHU)			\$ 1.50
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