

The Mason-Dixon Astronomer

Westminster Astronomical Society of Maryland

July 1986, Vol. 3 No. 7

A.L. Halley Expedition Subject of July 30 Meeting

At the next monthly meeting on July 30, Curt Roelle shall talk about his summer vacation, which he took in April while down in Peru. The meeting shall be held at 7:30 in room 102, in Lewis Hall, on the campus of Western Maryland College, in Westminster. Professor Achor has provided us with an air conditioned room. Those who remember last summer will appreciate the difference an air conditioned meeting room makes.

Approximately 260 persons traveled to Peru on several tours organized by the Astronomical League. While there, participants in Curt's tour visited several cities including Lima, Arequipa, and Cuzco, explored numerous Inca ruins at dizzying heights in the Andes mountains, and flew over the puzzling lines of Nazca, which have been reported by some to be runways for ancient astronauts who visited earth in the past. Although P/Halley faded in early April, this did not detract from the allure of southern sky splendors. It was as if this region, like Peru itself, was a foreign land to be explored. A photograph of P/Halley taken by veteran Canadian astrophotographer Jack Newton, who was along on the tour, appears on the front page of the May Reflector, and also on page 39 of the August Astronomy magazine.

WAS Welcome Wagon

In June the WAS ranks expanded by two memberships. The family of Robert and Judy Smith (Michael and Ryan) of Hampstead joined June 2, and John R. McCauley of Finksburg joined June 12. John and his wife Rosalind attended the same childbirth class with Curt and Cheryl in Hampstead. An updated club roster is included in this issue.

President's Report

Last month's joint meeting with the Tristate Astronomers in Frederick was well attended. As fate would have it, Cheryl had a baby that day. Erin Nicole arrived five days early, making her a spring rather than summer baby. Do comets bring life to earth as some have postulated? Erin was born nine months and four days after the first time I saw Comet Halley on September 14. Despite Halley's influence, we were not the first to be blessed with a comet baby, as is evident in the following anonymous 19th century poem, "The Comet of July 1819 and Signora Bietta", included by Carl Sagan in his book Comet:

Oh what a fix! What a damned fix
I got into, if only I'd known, my husband and me!
I'm two weeks late with my...
So that...you know, Mrs. Bietta!

And you know what? All this trouble on account of the Comet
With that tail that amazed everyone so!
The same thing also happened to Amelli,
And to Gina, and to Bina, and to Babetta.

And Nunziada's a full month late,
You know what a little fool she is:
Just imagine, that sneaky Comet!

And do you remember? We were there
laughing at that enormous tail
and playing under it! Can it be?

Next month is the convention we've all been waiting for, Alcon 86. For those of you who have not yet registered, send in your registration forms as soon as you can. Use the form found on page 4 of the May Reflector, or call me. The convention runs August 5 through 10 at Notre Dame College, in Baltimore. The paper sessions will be held Thursday, Friday, and Saturday.

Volunteers are still needed for the convention. Each of you shall be contacted during July to see if (a) you are planning to be there, and (b) if so, then can you help? We still need photographers and personnel to help with the audio-visual equipment.

I have sorted through my slides from Peru and will show a subset of them at the meeting. In order to encourage attendance I will not tell you how many, but will give you a clue. I had 400 slides to choose from.

Finally, have you seen Mars lately? The astronomy bug bit in 1972 and I have never seen Mars in such detail or as large as it appears now. This has given me a fresh new interest in planetary observing. If you would like to see Mars, make sure to attend at least one of the star parties this summer.

-- Curt Roelle, 848-6384

August Star Parties

WAS will have two star parties in August. The Friday, August 1 star party will be at Kenney Flynn's in Mt. Airy. Ken has a marvelous 3" refractor that gives superb views of the planets. Mars will still be well placed for observing and you must see it for yourself. The address is 503 David Court, 829-0582.

The next night, Saturday August 2, Mike Scalion and the Active Amateur Astronomers of Maryland are having their monthly star party. Mike's star parties are held on the Saturday nearest new moon. The address is 2201 Green Haven Way, Hampstead, 239-3105. Maps for both star parties are included in this issue.

Mars

On July 10 Mars reached opposition, meaning that it is now visible nearly all night. On July 16 Mars came the closest to earth it has been since 1971, shining at magnitude -2.6, with an

angular diameter of 23.2 arcseconds. The late George O. Abell has written, "Mars is the most favorably situated of the planets for observation from earth and has excited more interest and comment than any other. Only on Mars and Mercury is the solid surface visible with terrestrial optical telescopes".

This summer, Mars' detail is clearly visible with moderate sized instruments. As viewed through a telescope, the intense glare can overpower the subtle shadings of Mars. Various colored filters are helpful in bringing out the maria, clouds, dust, fog, ice caps, or other features. In a telephone conversation, Stephan O'Meara of Sky and Telescope magazine, recommended a red Wratten 25a filter for the dark surface features, a yellow #12 to search for dust storms, and a blue filter for seeking clouds and hazes. See pp. 594-596 and pp. 80-85 respectively of the June Sky and Telescope and Astronomy magazines for information on filter selection. You will find for instance, that an orange #21 may be substituted for the red.

WAS member Mike Scalion suggests that dense filters are too dark and may mask delicate surface features. He recommends using lighter colored filters. Herb, a salesman for Meade Instruments, recommends the #8 light yellow or #23a light red for those who prefer the lighter filters.

My favorite eyepiece for viewing Mars with my 12.5" f/6 Newtonian is a 7 mm Nagler eyepiece (270x). Identifiable dark regions, and of course the south polar cap, stand out clearly. These features may be identified using the photographs and maps of Mars found in the references cited above.

An effective method of planetary observing employed by Mike Scalion is stopping down the instrument's aperture. By placing a cover with a 3.5" hole over his 10" telescope, he increases the focal ratio of the instrument and also cuts down on glare, enabling crisp detail to be seen on Jupiter. Does stopping down a telescope aid in observing Mars?

Traditionally, photographing Mars is not recommended for reflectors with apertures smaller than 6 inches or refractors smaller than 3 inches. I photographed Mars with a 4" Schmidt-Cassegrain using eyepiece projection at 140x, but will have to wait for the film to be processed before judging the effects of breaking the 6 inch rule. Another good way of recording your observations is by making sketches of the Martian surface. Stephen O'Meara said that our sketches are always welcome, so get out there, and observe Mars!

In 1609 Galileo discovered four moons orbiting Jupiter using his newly invented telescope. When Kepler heard of Galileo's discovery, he speculated, using numerology of the day, that Mars should possess two moons. In Johnathan Swift's story of Gulliver's Travels in the miniature land of Lilliput, written in 1726, Laputian astronomers discovered two satellites revolving around Mars. One hundred and fifty years later, in August of 1877, Asaph Hall discovered Phobos and Deimos with the 26" Clark refractor at the U.S. Naval Observatory in Washington, D.C.

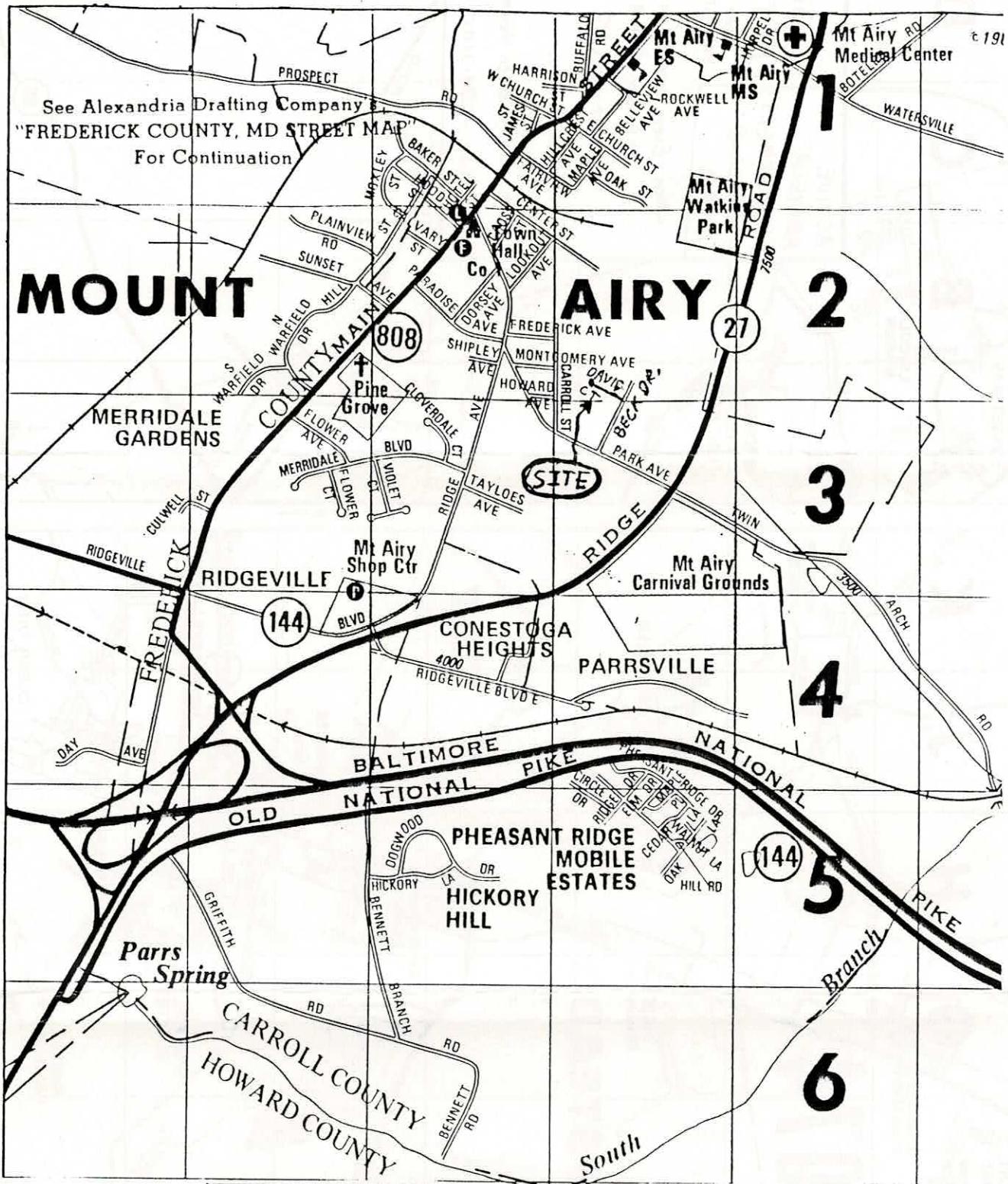
One hundred and nine years later on August 5, 1986, and only 20 days after Mars' close approach to earth, registrants of the Alcon 86 convention will have a rare opportunity to observe Mars using the same 26" Clark telescope, during a special evening tour at the Naval Observatory. Be seeing you at the convention.

Dr. William Achor [H]	Phys. Dept. WMC, Westminster	848-7000 X481
Tom & John Appler [F]	737 Lees Mill Road, Hampstead	239-8070
Jim Bittle [S]	3208 Woodring Road, Baltimore	254-9169
Andrew S. Blumberg [S]	337 Old Trail, Baltimore	337-8717
Todd Bonner [S]	518 Geneva Drive, Westminster	848-7839
Andrew Jack Demario Jr. [S]	2605 Bert Fowler Road, Manchester	374-9177
Russell A. Dick [S]	22 Middlegrove Court West, Westminster	848-9054
Frank Filemyr [S]	2112 Woodview Rd., Finksburg	876-1924
Kenneth Flynn Jr. [S]	503 David Court, Mt. Airy	829-0582
* Bernie Fortenbaugh [F]	2430 Braddock Road, Mt. Airy	635-6397
* Lyndon Gibbes [S]	2526 Uniontown Road, Westminster	876-7649
Eileen A. Killoran [S]	1306 Dalton Road, Baltimore	
John R. McCauley: [S]	2316 Bollinger Mill Road, Finksburg	795-7241
Dennis Mishler [S]	606 Roundtree Court, Sykesville	795-6330
Peter Neumann [F]	4210 Middleburg Road, Union Bridge	775-2921
Joe Pekala [F]	3300 Hooper Road, New Windsor	635-2601
Dave Pessagno [S]	45 Franklin Valley Circle, Reisterstown	526-5128
Mike Potter [S]	2809 St. Paul Street, Baltimore	1-235-2017
Nancy Raab [S]	1513 Patapsco Street, Baltimore	837-3449
Steve Rice [S]	8328 A Walter Martz Rd., Frederick	301-663-6054
Clifton A. Richards [F]	338 Leyton Road, Reisterstown	833-8247
Walter Richards [S]	2645 Robert Arthur Road, Westminster	346-7596
Blaine Roelke [F]	6700 Keysville Road, Keymar	756-2886
Frank Roelke [N]	422 Sycamore Avenue, Westminster	
Curt & Cheryl Roelle [F]	3481 Salem Bottom Road, Westminster	848-6384
Carole Sakamoto [S]	8782 Tamar Drive, Columbia	1-997-0058
Mike Scalion [S]	2201 Green Haven Way, Hampstead	239-3105
William H. Shuey [S]	96 Carrollview Avenue, Westminster	848-0247
Robert Sier Jr. [S]	10219 Liberty-Daysville Rd, Walkersville	1-898-5949
Mike Smith [F]	1217 Winside Lane, Hampstead	374-2209
Ray/Sharleen Sternier [F]	6648 Woodbine Road, Woodbine	795-6443
W. Eugene Sternier [S]	4625 Old Hanover Road, Westminster	346-7725
Don Thatcher [F]	187 Opal Avenue, Westminster	876-7762
Stewart Tick [S]	1607 Ohio Street, Bluefield, WV	848-2422
Barry H. Willen [S]	18 Cree Court, Randallstown	521-4269

Memberships: F-family, S-single, N-newsletter/junior, H-Honorary

* indicates expiring membership

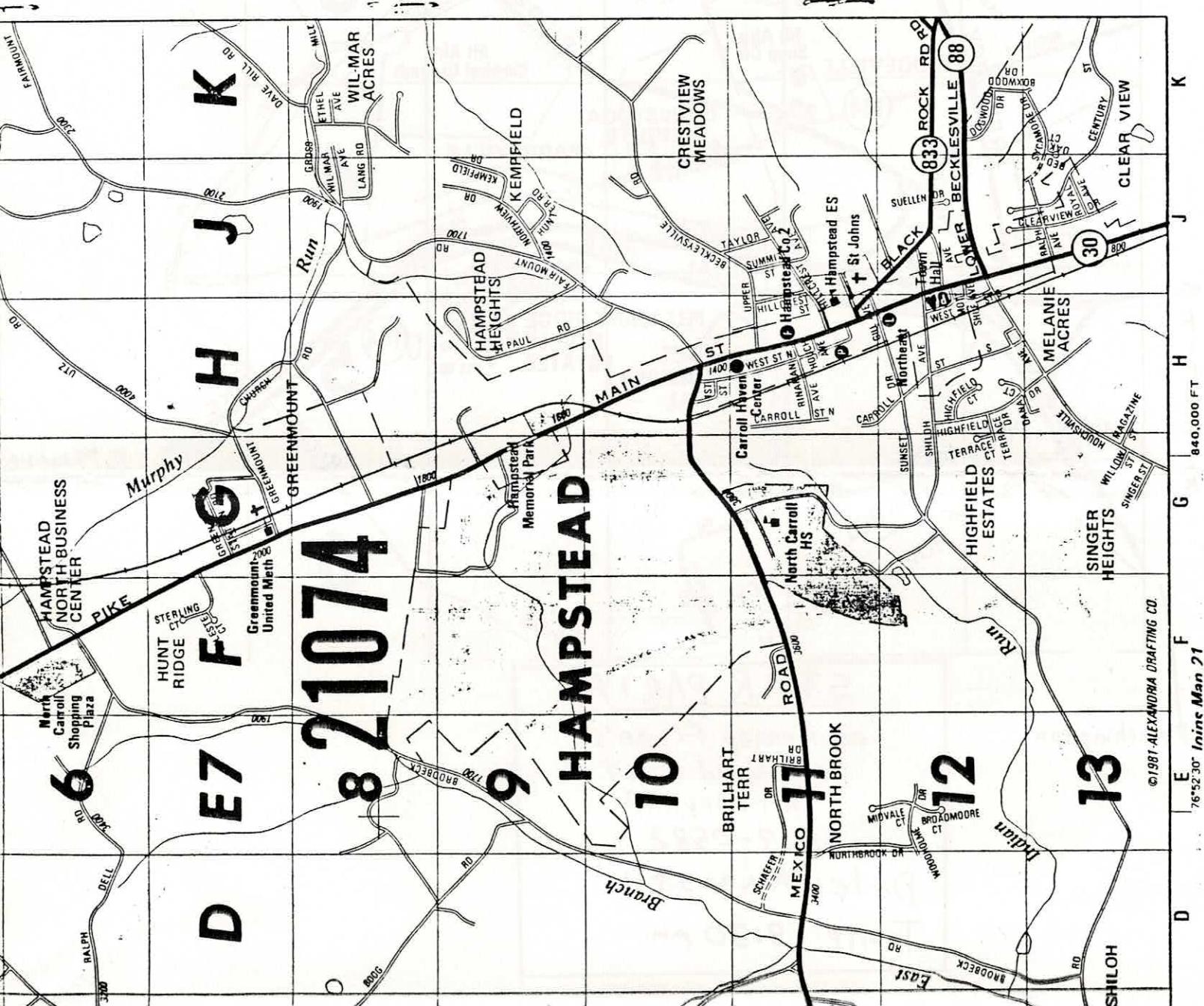
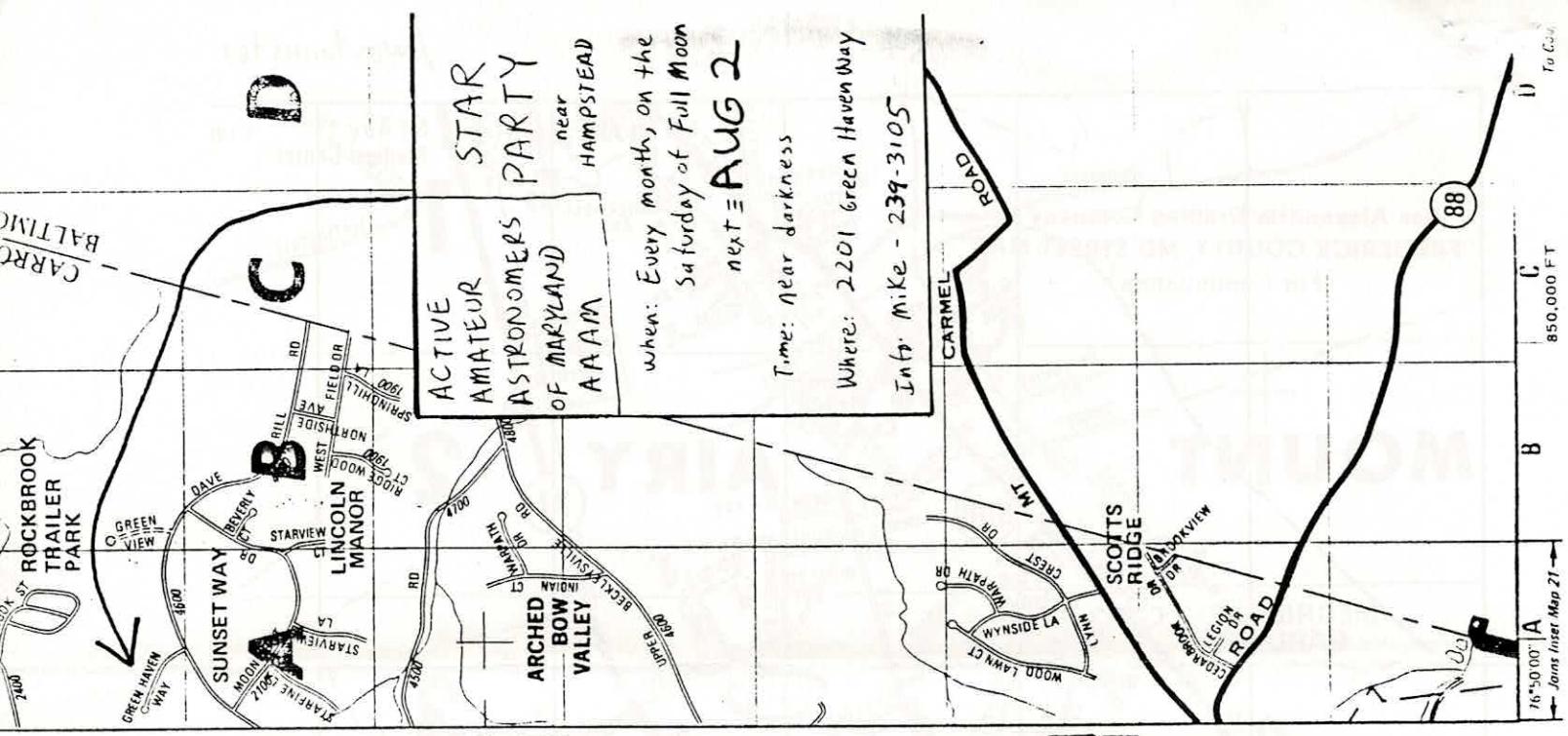
Westminster



Frederick

Washington

Baltimore



Mars Seminar at NAS July 21-23

A three day Mars Conference, chaired by Dr. Geoffrey A. Briggs, shall be held at the National Academy of Sciences, in Washington, D.C., during July 21 through 23. The agenda for each day is "our current knowledge and understanding of Mars" on the 21st, "current and future unmanned exploration of Mars program" on the 22nd, and "issues and options for manned exploration of Mars" on the closing day. The talks include plans for missions ranging from a proposed Mars sample return, to an eventual manned Mars base and "living off the land". A panel discussion, "Mars: Another Giant Leap for Mankind", is also scheduled. The conference is sponsored by the NASA Headquarters Office of Space Science and Applications and registration is \$50. Curt Roelle has more information for those who are interested (848-6384).

Mars Symposium at Smithsonian on July 23

Those of us who cannot afford \$50 and three days off from work can still learn all about Mars at a symposium being held in the Einstein Planetarium, at the Smithsonian Air and Space Museum on July 23. The talks, commemorating the 10th anniversary of the Mars Viking landing on July 20, 1976, will start at 1:30 p.m. and end at 5:00 p.m.

May and June Meeting Summary

The May 28 meeting was held at Camp Hashawa, north of Westminster. The meeting covered the June star party at Key Observatory, the A.L. convention, and the upcoming June meeting with the Tristate Astronomers of Hagerstown.

The speaker was Dr. Daniel Lufkin, astronomy professor at Hood College in Frederick. Dr. Lufkin spoke of the recent Halley fly-bys and the amount of new knowledge sent back by the armada of spacecraft, most of which has yet to be interpreted. What we did not know was that the nucleus was very dark, with an albedo of only one or two percent. The nucleus was observed to be emitting jets of gas to form a tail which reacts to fluctuations in the solar wind and magnetic field. The jetting affects the speed and direction of the comet.

Following the meeting, Steve Rice set up his telescope and members did some observing of Saturn and several Messier objects. Curt Roelle finally found Halley's Comet low in the haze over the horizon. Members who stayed to observe included Mike Scalion, Steve, Curt, Frank Filemyr, Don Thatcher, and Andy Demario Jr.

The joint meeting with the Tristate Astronomers of Hagerstown was held on June 18 at Hood College in Frederick. Those attending for WAS included Blaine Roelke, Frank Filemyr, Mike Scalion, Steve Rice, Joe Pekala, Kenneth Flynn, William Shuey, Carole Sakamoto, and Andy Demario Jr.

Dr. Lufkin gave a brief description of the observatory built in 1923, and one of Maryland's registered historical buildings. The objective of the 8" Clark Refractor was one of the first telescopes used for spectral analysis at Harvard University. The optics were remounted and the observatory was moved to Hood

College in 1923. The telescope was used by NASA for final visual checks of lunar landing sites during the Apollo program in 1968-69.

Blaine, representing WAS, gave a short talk about our club history, good eyesight, and the upcoming A.L. convention in Baltimore. He also told of WAS members who went south to view Halley's Comet, especially Curt's trip to Peru, as well as Curt's new baby girl. Congratulations to Curt and Cheryl!

After both clubs talked, we got down to business and did some observing with the Clark refractor. The moon was first, followed by Saturn. An attempt at Uranus showed only the limb of a locust tree, so we went next to Epsilon Lyra, a beautiful double-double star. At 10:00 p.m. Bill and myself left, but Mike, Frank, Steve, and others were still observing. Ken and Joe were busy discussing telescope making. They would like to get together sometime with other members interested in making telescopes.

-- Andrew Demario Jr., WAS Secretary

For Sale:

Hand built 6" reflector. Mirror better than 1/10 wave. Very sturdy dobsonian mount, finder, and eyepieces. \$220 or best offer. Contact Max Mirot 1-889-1819 (Baltimore).

WAS CALENDAR

July 30	7:30	Monthly meeting -- Lewis Hall, WMC
August 01	dusk	Star Party -- K. Flynn, Mt. Airy
	02 dusk	Star Party -- M. Scalion, Hampstead
	5 through 10	A.L. National Convention - Baltimore

Westminster Astronomical Society

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