

The Mason-Dixon Astronomer

Westminster Astronomical Society of Maryland

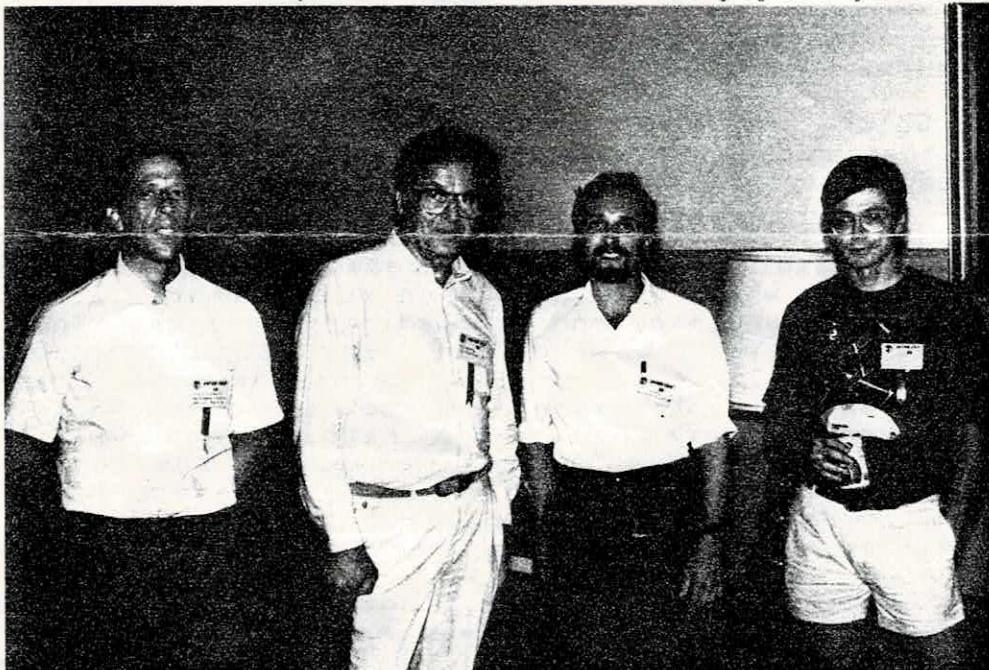
August 1986, Vol. 3 No. 8

Voyager-Uranus Mission Presentation at August 27 Meeting

Dr. John Pearl, of NASA-Goddard Space Flight Center's Planetary Systems Branch, will speak about the Voyager 2 flyby of Uranus at the August 27 meeting of the Westminster Astronomical Society, at 7:30 p.m., in Room 102 of the Lewis Hall of Science, at Western Maryland College in Westminster. Members are invited to attend dinner with our guest at 6:00 at Fan's Chinese restaurant, located at 59 W. Main Street.

The Voyager 2 flyby of Uranus on January 24, 1986 yielded many surprises. Strong prograde winds show less variation with latitude than do those on Jupiter and Saturn. The rings are populated by relatively more large particles than are Saturn's rings. Neptune's moon Miranda has undergone the most extensive surface evolution of the Uranian satellites. The extreme tilt of the planetary magnetic field provides a unique magnetospheric geometry. Dr. Pearl shall use slides to illustrate his discussion of these and other results. He shall conclude his talk with remarks and a movie which preview the coming encounter with Neptune in 1989.

Dr. Pearl was co-investigator on Mariner 9 (Mars) and Voyager infrared spectroscopy experiments, the latter involving studies of the Jovian and Saturnian satellites. He has been with NASA since 1970, and was awarded the NASA Exceptional Scientific Achievement Medal in 1981. Dr. Pearl is a member of the American Astronomical Society and has had over 20 papers published.



Convention Co-Chairmen Dave Pessagno (far left) and Mike Potter (far right) with banquet speaker Ben Mayer (center left) and Stephen O'Meara from Sky and Telescope magazine.

## President's Report

It was officially over on August 10, finally! Astrocon '86, the National Convention of the Astronomical League hosted by the Baltimore Astronomical Society (BAS), included a number of other participating organizations such as the International Occultation Timing Association (IOTA), International Amateur Professional Photoelectric Photometry (IAPPP), International Halley Watch (IHW), Association of Lunar and Planetary Observers (ALPO), the LS Society, as well as several others. The convention was an experience that I enjoyed, and thanks to many BAS and WAS members, it was a complete success.

One of the big events was the announcement during a scheduled news conference on the first day of talks, that amateur astronomers shall share data gathered by, and in some cases actually observe with, the Hubble Space Telescope, currently scheduled for launch in 1988. Sky and Telescope magazine will be covering this exciting story in detail in a future issue.

I was lucky enough to personally meet such astronomical notables as Stephen Edberg of the International Halley Watch, Dr. Riccardo Giacconi, Director of the Space Telescope Science Institute (STScII), the infamous Ben Mayer, and Sky and Telescope's Stephen O'Meara, the first person in the world to visually observe Comet Halley during the 1985-86 apparition.

This is a good place to thank the members of the Westminster Astronomical Society that participated in the convention. The Convention Co-Chairmen Mike Potter and Dave Pessagno each also chaired a number of subcommittees, taking on an enormous share of the responsibility. Mike prepared the program book, given to each registrant upon their arrival. Dave was in charge of the Astromart and organized the field trips. What a fascinating choice of field trips too: Observing Mars with the 26" Clark refractor at the U.S. Naval Observatory, and tours of Goddard Spaceflight Center, Smithsonian Air and Space Museum, and the Space Telescope Science Institute. The convention never could have happened without these two persons.

Blaine Roelke and Nancy Raab were convention co-treasurers. Blaine was also responsible for Audio-Visual equipment. Barry Willen served as paper chairman, and by the way is Vice President of the BAS.

I was responsible for making arrangements with NASA for the loaning of exhibits which were displayed at Astromart. I was also Photographic-Video Chairman, and Proceedings Chairman. This work was completed only with the help of many of our members who pitched in. Walter Richards, working in his area of expertise, became the convention photographer and took the group photo using his large format cameras. Dennis Mishler and Bill Shuey photographed the speakers and other aspects of the convention, making a permanent record on film. The L-5 society provided a second video camera and operator, videotapes, and will also prepare a catalog and distribute copies of the videotaped talks.

The most agonizing physical work of the entire convention was performed by the "ant troop" who manhandled large crates several times their size, packed with NASA materials. Three of the crates weighed 565 pounds each. These grunting and puffing men, and the ever-smiling Dave Pessagno, luggered the crates off the truck, and up the stairs on Tuesday, hauled them back down on

Sunday, and onto the truck Monday. These hard working persons included from WAS, Dennis Mishler and son, Dave Pessagno, Mike Potter, Blaine Roelke, Frank Roelke, Bill Shuey, and Barry Willen, as well as a number of BAS members and their families.

Last but not least are those members who attended the convention for the sheer pleasure, Jim Bittle, Steve Rice, Carole Sakamoto, and Andrew Blumberg. It was these and others from around the country that made the convention worth working for.

Thanks again to the 14 members of WAS who participated in Astrocon '86. It has since been suggested that the 1988 national convention be held in Westminster. I have no "official" comment at this time. Dave Pessagno predicts the next convention in Baltimore will be in 40 years, after we've all had a chance to die. Mike Potter said it well after the last crate was loaded onto the truck, "Now we can do some astronomy."

-- Curt Roelie

#### August and September Star Parties

A star party shall be held on Saturday night, August 30 at Dave Pessagno's home in Reisterstown. This is a first light party for Dave's new 17.5" Odyssey telescope. After "stealing" 17.5 inch optics from an Odyssey II for his homemade open-frame reflector, Mike Potter gave the discarded Dobsonian tube/mounting to Dave Pessagno. Dave sold his 13.1" Odyssey I to Walt Richards and ordered new optics for the 17.5". Finally, with Halley gone, the optics have arrived and David is ready for us to try it out. See this issue for map.

Mike Scalion's monthly star party shall be on Saturday, night September 6 at his home in Hampstead, 2201 Green Haven Way, in Hampstead. See map in last month's MDA issue.

#### T-Shirts Still Remaining

Mike Scalion reports that several T-shirts and sweatshirts remain unclaimed. If you have not received your order, see Mike at the August meeting, or call him at 239-3105.

#### Dark Skies Vacation Invitation to Maine

Carole Sakamoto will be vacationing at Monhegan Island, Maine, in early October and invites anyone interested to meet her and her husband there for some really good viewing. She reports that the island has no commercial electricity, and so we conclude, no streetlights as well. They visited the island last year and liked the dark skies so much that they are going to return again. For more information call Carole at 1-997-0058. A guidebook, "Introduction to Monhegan Island", may be obtained by calling the Trailing Yew Hotel at 207-596-0440.

#### Mars Symposium at Smithsonian on July 23

I attended an afternoon symposium at the Smithsonian Air and Space Museum on July 23 entitled *Viking on Mars: 10 Years Later*. The Viking 1 lander touched down on Mars on July 20, 1976 on

Chryse Planitia, after travelling some 460 million miles through space for nearly one year before arriving. While the Viking 1 and 2 landers performed scientific experiments such as examining soil for signs of life, the two orbiters imaged more than 50000 photographs. The landers took about 6000.

Four speakers talked during the symposium. The titles and speakers were: "Planning For Viking: A Mission History", Linda Ezell, National Air and Space Museum; "Landing on Mars: Past and Future", Harold Masursky, U.S. Geological Survey; "Six Years On Mars", Raymond Arvidson, Washington University; and "The Legacy of the Viking Orbiters", Joseph Veverke, Cornell University.

Ms. Ezell spoke of the long often frustrating history of NASA's Mars exploration program, from the perspective of a historian, obtained from rooting through the trash for this memo and that.

Dr. Masursky lectured on Mars geology, and discussed the landing sites which he personally has selected for a possible sample return mission. Some sites contain geology from several periods, making them attractive. A mission to drill a core sample at the polar cap has also been considered.

Raymond Arvidson summarized experiments conducted on Mars, including the construction of a martian engineering milestone: Several dirt piles made by the lander's remote arm. A careful eye was kept on the dirt to detect any drifting caused by faint martian breezes. After many months of careful scrutiny and no apparent change, they were suddenly wiped out by a 100 mph wind gust.

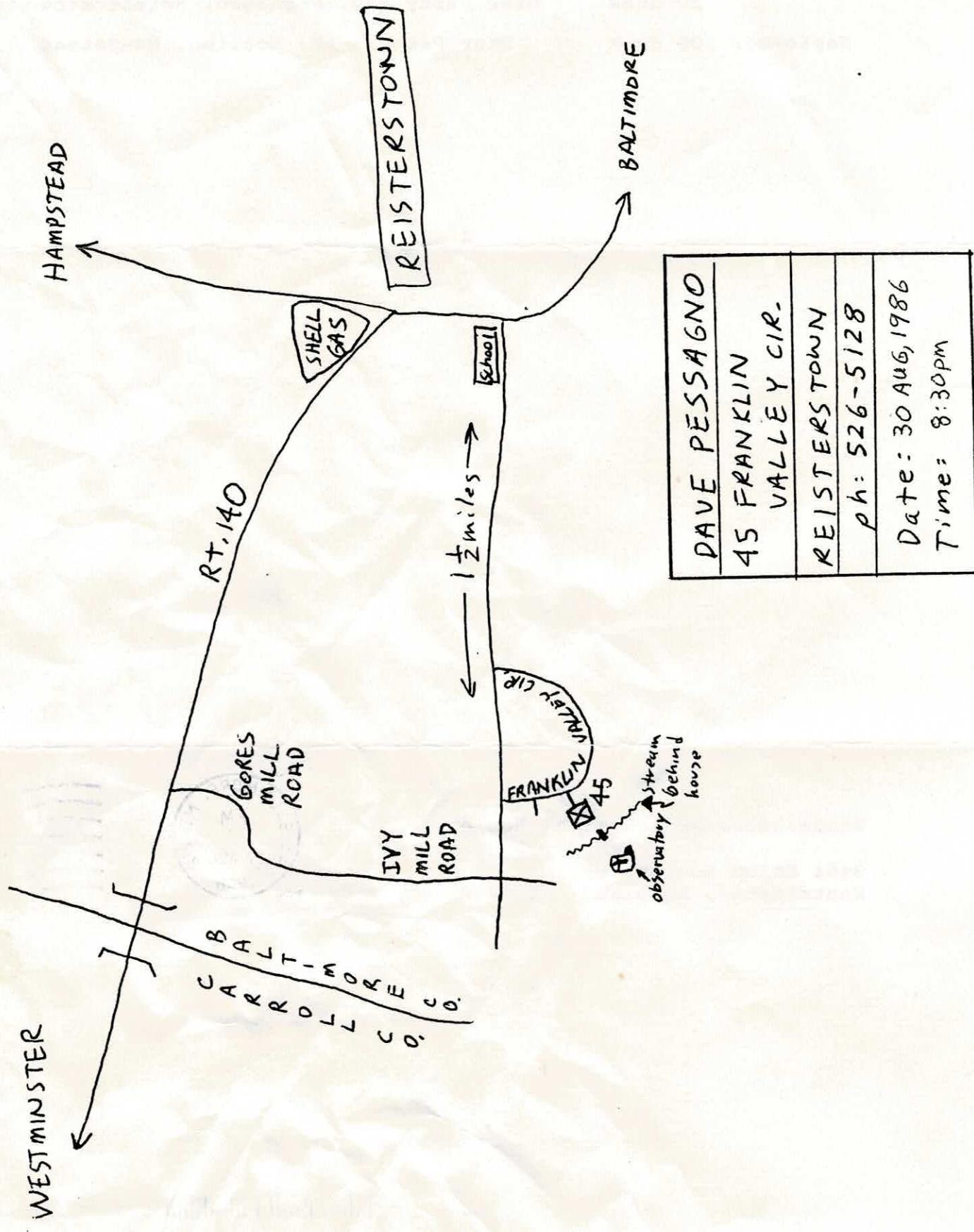
Veverke pointed out that while the landers were getting all of the glory the orbiters were performing a very important mission. The landers had a view of the surface with a radius of under two miles. The orbiters were able to monitor nearly the entire planet with resolution exceeding any previous Mars mission. (C. Roelle)

#### July Meeting Summary

Curt Roelle showed slides from his April trip to Peru where he and his wife Cheryl viewed Halley's Comet and the southern Milky Way. While in Peru he visited the line drawings on the planes of Nazca and the Inca ruins at Machu Picchu. The most promising observing site, Arequipa, is a desert city at an elevation of over 7,000 feet. The constant haze provided mediocre observing, and the three giant volcanoes that surround the city, one rising to 19,000 feet, were not seen until their last day there. Cuzco, the least promising observing site, was the best. At an elevation of 12,400 feet, clear velvety black skies revealed many of the Inca Indians' "dark" constellations, animals outlined by dark patches in the Milky Way rather than the familiar dot-to-dot patterns we have been taught. One tourist from Arizona said the best nights there are "misty" compared with those found in the Andes.

Slides of Halley revealed that the comet's tail appeared to shrink during April. This foreshortening effect was caused by the earth-comet-sun geometry. The Astronomical League is planning another trip to Peru in August, 1987 to view a solar eclipse.

# STAR PARTY



WAS CALENDAR

August 27 6:00 Dinner with Speaker -- Fan's Restaurant  
7:30 p.m. Meeting -- Rm. 102 Western Md. College

30 dusk Star Party -- D. Pessagno, Reisterstown

September 06 dusk Star Party -- M. Scalion, Hampstead

Westminster Astronomical Society

3481 Salem Bottom Road  
Westminster, Maryland 21157



Curt & Cheryl Roelle F-11/86  
3481 Salem Bottom Road  
Westminster, MD 21157