

The Popular Astronomy Club

A History

By Paul R. Castle

I have always thought it a shame that the history of an organization, specially an all volunteer society like the Popular Astronomy Club, often gets forgotten. The turnover of members and officers through the years is great, and it is difficult to keep track of the previous events, people, successes and failures that made the society what it is.

PAC is fortunate to have had only a few changes of administration in its over sixty year history. Many people remain who have been interviewed for this accounting, but two stand out: Dr. Harry Nelson, second president of the club, and Dr. Melbert Peterson, president number three. Both of these gentlemen were very helpful and provided many remembrances.

I am especially indebted to Dr. Nelson's book, *In the Astronomy Tradition at Augustana*, printed by the Augustana Historical Society in 1992. All quotes and photos from that book are used by the permission of Dr. Nelson.

I am dedicating this history to my wife, Marrietta, not only for her support and encouragement, but also for the many hours she spent correcting my errors in grammar and spelling. I could not have done it without her.

This history covers the years 1936 - 2000. A long time for a society whose only glue binding the members together is a love for the night-time sky and an unfailing desire to know what it is all about. Perhaps, more importantly, however, in the grand scheme of things, is the desire to encourage that same love of the Universe in others. Sixty-four years is just a cosmic blink, but to the members of PAC It is a blink we do not want to be forgotten.

Paul R. Castle
2000

The Early Years

No account of the early days of PAC can begin without a look at its founder and mentor, Carl H. Gamble.

Mr. Gamble never spent a day in a college or university as a student, but eventually received a Doctor of Humanities and was generally recognized as one of the leading amateur astronomers in the United States.

It all started during his boyhood days on a small western Pennsylvania farm. He was often fascinated by the stars as he walked from the barn to the house at the end of a long workday. "There were no electric lights on the farm in those days. We were far enough away from town so the air was clean, making the stars stand out. I couldn't help being interested in the picture of the heavens in early boyhood. I learned then by visual observation and without optical aides much about the different kinds of stars, the ever varying positions of the Moon In the sky, the cause of the change of seasons, and many other fundamentals of the great science of astronomy.

Carl left home at the age of twenty, moving to Moline, a small city nestled between the fertile valleys of the Mississippi and Rock rivers in northwestern Illinois. There he entered the employ of Deere and Company, a major agricultural manufacturer. Here, being an honest and hard worker he rapidly rose through the ranks. Noticed as leadership material he was transferred over to management. He continued to make progress and by 1919 became General Manager of the John Deere Moline Spreader Works, a post he held until his retirement in 1947. Unfortunately his industrial career left little opportunity for observation and the stars were all but forgotten.

However, on one January evening he was standing with a friend on the roof of the Pioneer Hotel in Tucson, Arizona. The day had been a busy one with company business, but here they were taking time out to relax. They had binoculars and were looking at the mountain peaks in the distance. "My friend remarked that the Orion Nebula was particularly beautiful that night. I had never heard of it. I picked up my binoculars and something snapped inside of me that set me going on this hobby."

As soon as he returned to Moline, Carl Gamble began to acquire a library on astronomy. This led to a desire to see more than could be seen with the naked eye or even with good binoculars. But Gamble was not satisfied with enjoying his hobby alone. "I borrowed a good 6-inch telescope and frequently invited friends to observe with me. When the crowd grew too big for the front lawn, we moved out to the country and spent many pleasant evenings with groups ranging in size to several hundred people."

From then on he was in constant demand. He traveled at every opportunity all around the mid-west lecturing and giving demonstrations on his favorite topic. Astronomy was indeed becoming popular! Delighted with the good response from sizable crowds, he received a letter from Oscar DeVanney of Monterey Park, California. Mr. DeVanney suggested the idea of forming an astronomy club. Gamble was later to refer to Mr. DeVanney as the spark plug: A small notice was placed in the local papers announcing the possibility of forming a club by persons interested in the study of astronomy.

"The purpose of the club," Gamble said, is to gain knowledge of the universe, not to make any great scientific discoveries." October 29, 1936, was a most memorable occasion as it was on this date that the Popular Astronomy Club was organized." Its first meeting was held at the People's Power Company in Moline. The new club's first paid guest speaker was Dr. George Van Biesbroeck of the Yerkes Observatory in Williams Bay, Wisconsin. The Gambles offered to entertain the guests in their home to save the club's fledgling treasury. The Van Biesbroecks were only the first of many notable guests who visited under similar arrangements.

By July of the following year the crowds had grown to over a thousand at Oakwood Country Club, each waiting patiently to glimpse the heavens through three modest telescopes. Finally, the officers at the country club asked the astronomy club to quit meeting on the premises, fearing potential damage to their fairways. It was then Gamble conceived the idea of his own observatory. With his wife Margaret, he drove up and down the Mississippi and Rock River valleys, looking for a suitable location. At last they found an ideal 20-acre tract lying on a high bluff 120 feet above the Rock River bottoms on Coaltown Road on the southern outskirts of Moline. Here they constructed not only the observatory, but also, fifty yards away, a new home. The property had an excellent horizon to the east, south and west and "a fairly good horizon to the north." Dates were set aside each month during the season when the sky was clear for observing by the public.

He had previously secured a fine 5 1/2-inch aperture lens, 70-inch focal length Zeiss refracting telescope mounted on a sturdy cast iron alt-azimuth mounting. Knowing that an equatorial mount would be capable of tracking the heavens and make observations much easier, Carl sold the alt-azimuth mount to a fellow club member and acquired an Alvin-Clark and Sons motor driven German equatorial mounting. The telescope was now complete so the next step was to install it in a dome. Carl's observatory design showed the dome mounted on an open air deck measuring 22 feet by 32 feet. Underneath was a concrete block two-room structure 18 feet by 28 feet. In the larger of the two rooms was Carl's science library and a lecture room furnished with a stove, desk and telephone. The building was a perfect place for the astronomy club's meetings. The dome, 16 feet 8 inches in diameter had been a silo top that had been reworked by engineers from the John Deere Spreader Works. Carl's observatory was written up in the 'Amateur Astronomers' column of Sky and Telescope, a national astronomy enthusiast's magazine.

On July 4-6, 1941, 150 amateur astronomers from across the country met in Washington, D.C. at a convention hosted by the National Capital Astronomers. The agenda included a series of organizational meetings to complete a two-year effort to develop a constitution for a national organization of astronomy clubs. In mid-October, 1941, a final draft of the constitution was mailed out to the clubs. By the end of November the Popular Astronomy Club was one of the twelve Initial clubs which ratified the constitution. Any further efforts were postponed until after the war.

July 30, 1941, was the first meeting of the club in the newly named Sky Ridge Observatory. An early evening downpour did not dampen members enthusiasm. It was a proud moment for Carl.

The war years finally passed, and the national effort to organize a federation of astronomy clubs resumed. By the end of 1946 twenty-two societies were on board as Charter Members. Each was given until January 15, 1947, to nominate representatives to the organization's first interim council. This interim council was chosen to serve until formal elections of officers could be held. Among these interim council members was Carl H. Gamble. Carl and his wife, Margaret, had been present at the original meeting that discussed the formation of what was soon to be named the Astronomical League.

When asked why he devoted so much time in trying to disseminate astronomical information Carl came forward with one of his favorite quotes: " 'The diffusion of knowledge can be placed secondary only to discovery.' There is a shortage of interpreters and, in my small way, I feel that I am able to serve as one of these interpreters." Carl Gamble was elected the first president of the Popular Astronomy Club - a position he held for the next seventeen years. On July 3, 1948, he was nominated for the presidency of the Astronomical League, but he declined, saying it would interfere with his own program of popularizing astronomy.

Dr. Gamble and his club continued to be hosts to the public by the thousands. On July 17, 1953, the Convention of the North Central Region of the Astronomical League was held in Moline at Sky Ridge. It included a picnic supper on the grounds, a brief lecture, and the observatory as the main attraction. That same year Dr. Gamble presided at the annual convention of the League held on September 6th at Washington, D.C.

June 4th, 1954 - "This date will stand out during the remainder of my life as the crowning Glory of my hobby career if not my entire lifetime. It was the occasion of Augustana College Convocations and awarding of diplomas and honorary degrees, at which time I was awarded the Honorary Degree LH.D., Doctor of Humanities. I was showered with praise and compliments of the highest degree for days after. Mrs. Gamble and I were included among those attending the luncheon at the Fort Armstrong Hotel at noon that day. A wonderful write-up in the local press including picture of Dr. Bergendorf handing me the degree diploma. Dr. F.F. Fryxell head of the Science Department presented the citation. What a day for me!"

On June 29-30, 1954, sixty-two members and friends of PAC drove to Cumberland, Wisconsin, to view a total Solar Eclipse. Vague plans had been in the making ever since 1945 when I had traveled to Wolesely, Saskatchewan, to view a similar eclipse. Plans were made during the entire year preceding June 30th. We virtually took over this beautiful little village, filling the two motels and a very old hotel. Mr. Wendt, chairman of the telescope committee, made numerous exposures of the eclipse with special equipment of his own design." Totality lasted one minute and sixteen seconds. Afterward, the club ate breakfast and embarked for home.

October 29th, two years later, was the 20th anniversary banquet meeting of the club. It was held at the First Congregational Church of Moline, catered by the ladies of the church. Dr. Gamble was later to write in his scrapbook:

"This was a most wonderful occasion for the Popular Astronomy Club, for Margaret, and for me. Dr. Harry Nelson very kindly agreed to assume the leadership and most of the responsibility for this meeting. ... He made it known that the theme of the program would be to honor me as the founder and leader of the Club through the years. Dr. Bergendorf, President of Augustana College was engaged as the guest speaker. Without my knowledge letters were sent to all members of the club asking for contributions to get a suitable gift for the observatory and me. This resulted in a sidereal electric clock, a standard electric clock to match, and a beautiful 'sunburst' clock for Margaret."

Dr. Nelson also wrote to leaders of groups where I had lectured, observatories where I had visited, and a number of dignitaries, asking for letters of commendation for my work in popularizing astronomy. This resulted in about seventy letters including one from President Eisenhower. Naturally I was so nearly overcome emotionally that I could not adequately thank all who had cooperated to make such a wonderful event. All who sent letters and who contributed to the gifts were suitably thanked by letters. All in all the occasion will be fresh in my mind so long as I live as one of the highlights of my entire life."

Dr. Gamble conducted his last meeting of the Popular Astronomy Club on November 20, 1957, with seventy-five in attendance. He passed away on January 25, 1958.

By his own reckoning he had lectured 1,145 times, speaking to a total audience of over 81,500 people. Truly, he was an "interpreter" par excellence.

The Torch Is Passed

Upon Dr. Gamble's death, Dr. Harry Nelson, a professor of mathematics and astronomy at Augustana who had been serving as the club's Vice-President, took over as President. He was soon to leave for a two year teaching assignment in Indonesia. In his absence Margaret Gamble was elected Honorary President and took over as an interim.

Shortly after Dr. Gamble's death, the following statement from his will was made public:

"I do hereby give and bequeath unto Augustana College, located in Rock Island, Illinois, my observatory equipment, namely the observatory dome, track and equipment including the 5 1/2-inch Zeiss refracting telescope together with mounting and accessories, the same to be removed from the site where it is all now located at Sky Ridge Observatory by Augustana College and relocated at such point as Augustana College may deem to be most appropriate. I direct that the Executor of my Will shall authorize such removal as soon after my death as is practical."

The 22nd Annual Banquet on October 11, 1958, was of special significance. A special meeting was called to prepare for the Dr. Carl H. Gamble Memorial Fund Drive to be jointly undertaken by Augustana College and PAC. The public announcement of the project was reported in the local papers on October 31st. The fund drive itself began in November of that year. An advisory committee named primarily from the members of the Popular Astronomy Club presented the recommendation to the college that the observatory be expanded to include a planetarium when the observatory was moved to the campus. A look at the recollections of Dr. Harry Nelson tells how this came about.

Dr. Nelson, a graduate of Augustana, had returned to his Alma Mater in 1946 to teach mathematics after receiving his doctorate. He felt the need for the college to have an observatory. He discussed this idea with Dr. C.C. Wylie, professor of astronomy at the University of Iowa who had been Harry's advisor for his Ph.D. Professor Wylie informed Harry that there was a first class observatory just south of Moline, Sky Ridge Observatory. Harry immediately became involved with this very active club and was shortly asked to serve as Vice-President.

Early in the 1950s Gamble had approached Dr. Conrad Bergendorf, who was president of Augustana College. Carl said, "Harry's ideas on popularizing astronomy coincide with mine. If I will my equipment to Augustana, will you find a place for it on the campus?" Dr. Bergendorf agreed to do so.

To aid in soliciting contributions to the Gamble Memorial Fund, the college printed up a pamphlet entitled "The Man Who Unfolded the Heavens."

"For the past 17 years, this site (Sky Ridge Observatory) has been the meeting place of the Popular Astronomy Club, an amateur astronomy group organized by Dr. Gamble. Monthly meetings incorporate a broad variety of astronomical subjects. Grade school and high school students with their science teachers are frequent visitors.

In the 22 years since the Club was organized, it has grown to a current membership of 179 people representing 17 communities of the greater Quad Cities area.

Since Dr. Gamble's death, the Popular Astronomy Club has continued its regular program. Mrs. Gamble has continued to make her home and adjoining grounds available for the social part of the meetings. What Dr. Gamble brought to so many of this area has now become the foundation for serving our Quad-City communities in an even broader way."

The brochure went on to describe the proposed facility and how it would continue to serve both as the Popular Astronomy Club's headquarters and the community at large. The project soon became part of the Augustana's Acceleration Program of the 1960's, a ten million dollar program.

In October of 1960 Dr. Harry and Lillian Nelson returned from Indonesia and the South Seas. While they were gone club meetings had continued and had attracted large numbers of people. They were entertained by letters from the Nelsons describing their adventures. During this time the club's Gamble Memorial Fund had grown to over \$2,300. October's meeting of that year was a big homecoming for the Nelsons.

The slate of officers for 1961 will serve to show how the club was organized at the quarter-century mark:

President:	Dr. Harry Nelson
Executive Vice-President:	August Wendt
Vice-President, Junior Group Activities:	Harold Benson
Vice-President Programs:	Sam Harris
Honorary President:	Margaret Gamble
Secretary:	Lawrence Thiering
Treasurer:	John Schieck
Press Relations:	George R. Baker
Charge of the Observatory:	Mel Peterson

This note was included in the minutes of the June 1966 meeting:

“The June Picnic and Business Meeting of PAC was held at the Sky Ridge Observatory in Moline, Illinois on Wednesday, June 2nd. I am sure we felt not only sadness because this was our last potluck supper and business meeting at Sky Ridge Observatory, due to the construction of the new highway, but we also felt a deep appreciation to the Gambles for allowing us to meet for so many years at their gracious home.”

By the October meeting of the same year Mrs. Gamble reported that workmen from Augustana had removed the telescope and mounting from the Sky Ridge Observatory and had very carefully repaired the hole that had been left in the roof of the building. The remaining structure became a storage shed. The Popular Astronomy Club had met there for twenty-five and one quarter years. An end of an era had come.

A New Beginning

The following excerpts are taken from the Augustana College Bulletin Volume 1, Number 4 June, 1967:

“Ground was broken June 19 for a new Augustana College building to be known as the John Deere Planetarium. The naming of the building recognizes the pace-setting gift from the John Deere Foundation, and the leadership of many individuals within the Deere and Co. organization.

Included in the structure will be an observatory which will honor the memory of Carl H. Gamble, and a lobby will be named by the Harry W. Getz and Howard H. Rogers families. (For their generous support to the College.)”

Dr. Sorensen (Augustana's president) noted that the ground-breaking marks the beginning of a building that in a unique way will serve this community and this college for many, many years to come.’

The president said the observatory is named in memory of the late Dr. Gamble, widely known amateur astronomer who died in 1958. Dr. Gamble bequeathed to Augustana his telescope (description). This equipment will be mounted in the new observatory tower on the planetarium building. The New John Deere Planetarium will be the only facility of its kind between the Quad Cities, Chicago, Des Moines and Peoria. It will not only be a valuable teaching resource at Augustana, but an important cultural asset in the community.”

The courtyard north of the building was filled to capacity on May 2, 1969 for the Planetarium's dedication ceremony. Dr. C.W. Sorensen, Dr. Harry E. Nelson (newly appointed Director of the Planetarium), Henry Newman, president of the student representative assembly, spoke briefly. The main address was given by William Hewitt, Chairman of the Board of Deere and Company, who emphasized the common dedication to the community of both the college and his company.

The November 13, 1968, meeting was a preview tour of the new award winning planetarium. Installation of the projector by Spitz Laboratories, Inc., an A-3-P model, had just been completed, and the chairs put in place. The Popular Astronomy Club members and their guests were the first ones to view the new astronomical facilities on the Augie campus. The club enjoyed a guided tour conducted by Dr. Nelson which included the new Carl H. Gamble Memorial observatory with its new dome by the Ash Manufacturing Company. This took place a little over ten years after Dr. Gamble's death. March 24th the following year the club saw the first program presented with the new planetarium equipment. Presented by Dr. Nelson, it was called "The Sky Tonight."

At the end of 1969 Dr. Nelson retired as President of the club. He was not only heavily involved in teaching both mathematics and astronomy at the college, but was now also Director of the John Deere Planetarium. Dr. Mel Peterson was elected to serve as president. Dr. Nelson was retained, however, as Consultant Officer, and Mrs. Gamble remained as Honorary President.

Dr. Melbert Peterson had graduated from Augustana In 1953 and was a former student of Dr. Nelson's. Mel had earned his Ph.D. from Oklahoma State University in 1967 and had served the Popular Astronomy Club in various capacities. He also taught at Augustana in the Chemistry department. Until this time the club had met once a month from March through October. Starting in 1970 meetings were held only four times a year: every three months: February, May, August and November. The August meeting coincides with the Perseid Meteor Shower, an enjoyable time of sky-watching and warm fellowship.

1972 began with much excitement. A Seminar on Space Exploration was held at Augustana College, and the astronomy club members were invited to attend all the sessions. Panel members at the Seminar were:

THOR KARLSTROM, member, Astrogeology Branch, United States Geological Survey, Flagstaff, Arizona, which was responsible for preparation of geological maps used by astronauts on the moon;

E.J. OLSEN. Curator of Mineralogy. Field Museum of Natural History, authority on meteorites and meteoritical research;

ROALD FRYXELL, Director of Marmas Archaeological site in Washington, member of preliminary examination time to analyze Apollo 11 Lunar materials;

JAMES VAN ALLEN. Leader in the American Unmanned Space Program and discoverer of the Van Allen Radiation Belts;

NEIL ARMSTRONG, spacecraft commander for Apollo 11, the first man to set foot on the Moon.

A display of a moon rock was available at the Planetarium, and a painting of Dr. Gamble was placed in the Planetarium's office. As a cap on an eventful year, Dr. and Mrs. Nelson were invited to witness the launch of Apollo 17 on the 6th of December.

The highlight of the 1974 year occurred on April 24th when Don L. Chaffee, father of Apollo astronaut Roger Chaffee, who was tragically killed on January 27, 1966, in a ground test fire, visited the college. He spoke to a packed crowd in the John Deere Planetarium Lecture Hall on the "Benefits to Mankind of the United States Space Program."

The January 1975 meeting was held in the planetarium at Bettendorf High School. Mr. Don Schaefer, Director of the high school's planetarium, presented a special program for the astronomy club demonstrating the capability of the new instrument. Earlier, Mr. Schaefer had sent a letter of commendation to Augustana saying it was through the inspiration of Dr. Nelson and Dr. Peterson that Bettendorf decided to build the new facility.



May 24th was billed as the total Lunar Eclipse of the decade. The moon passed closer to the center of the Earth's shadow than any other eclipse of the seventies. The general public was invited to the Gamble Memorial Observatory, and club members were on hand to help out with their own telescopes.

By 1979 the club had its own Logo. Paul Castle, club member and artist at John Deere, designed the emblem for the club. It was shaped like a heraldic shield with the words "POPULAR ASTRONOMY CLUB, QUAD CITIES, USA" around the perimeter. In the center of the shield was a stylized reflecting telescope focused on outline of the states of Illinois and Iowa, but centered on the location of the Quad-Cities marked with a star. The club unanimously adopted the design and voted to have patches made available to the membership.

In the spring of the next year, March 24, 1980, visiting astronomer, Dr. James Van Allen, provided a fascinating illustrated lecture entitled "Satellite Exploration of the Planets." After the lecture the club voted to make Dr. Van Allen an Honorary Member, a position he graciously accepted. He was presented with a club patch.

In November, survey sheets were sent out to all the members asking several questions regarding their interests and the direction they would like to see the club go. At the December meeting, the survey results and a constitutional proposal were presented by Paul Castle for the club's consideration. The proposal was accepted with a couple of minor changes. It was to be rewritten and presented at another special meeting in January. In the meantime a Nominating Committee had been selected to obtain a slate of officers to be voted upon at the January meeting. Dr. Peterson's .schedule at the college was becoming heavier and he let it be known that he was seeking to retire as president of the club.

Turning a Corner

The January 1981 meeting of the Popular Astronomy Club signaled what was expected to be a new era: a time of further expansion and public awareness, together with a full program of observing and learning experiences. The revised constitution was voted in unanimously, and the John Deere Planetarium was officially adopted as the club's address. At the same meeting a club newsletter was established, REFLECTIONS, to keep the membership informed about club functions. A cover for this newsletter had been designed and printed. The constitution called for the membership to be more fully served through monthly meetings instead of quarterly only. The club also decided to register with all the local Chambers of Commerce, and membership in the Astronomical League was renewed. It was felt that all of these decisions would help the club fulfill its objectives as outlined in the new constitution:

"This club is designed to secure the pleasures and benefits of an association of persons interested in amateur astronomy; to promote astronomical work and craftsmanship in its various fields; to correlate amateur activities; and to act as interpreter of astronomical developments and events to the public. To this end we organize and constitute ourselves..."

New officers were also elected:

President:	Paul R. Castle
Vice-President:	Cliff Newman
Secretary and Astronomical League Correspondent:	Dennis Means
Treasurer:	Mark Schroeder

On the 25th of April, 1981, the club took a field trip to the Adler Planetarium in Chicago, the oldest planetarium in the United States. The previous year had been their Golden Anniversary, and several new exhibits had been installed. "Search for the Edge of the Solar System" was the current sky show. After the show PAC members had lunch in the "Craters of the Moon" restaurant and then spent the rest of the day browsing through the exhibits and shopping at the gift shop.

May of that same year was the first time the club had taken part in the observance of Astronomy Day. An open house was held at the John Deere Planetarium and notices were sent out to schools and the media. NASA movies were provided, Dr. Nelson presented planetarium shows, and club telescopes were on display. Various exhibits lined the building's hallways. In spite of a short planning time and even shorter publicity time, about 150 people attended. Members were surprised to have radio reporters and a TV-film crew show up to cover the event.

The Annual Picnic was re-established after a long hiatus. Twenty-two members met at Wild Cat Den State Park. The group enjoyed a brisk session of hiking and rock climbing on the beautiful park trails. The food was delicious, and the hungry hikers readily devoured it. Members then viewed sunspots through one of the member's 8-inch telescope. At dusk the day's activities ended by observing Venus, Mercury, Jupiter and Saturn. It was a perfect June day. The picnic became a regular affair each June.

By the middle of 1981 Dennis Means and Mark Schroeder had jointly sponsored a Messier Club project. The Messier Club is an Astronomical League program whereby an amateur can gain recognition for observing most or all of the 107 Messier objects. A certificate and a lapel pin can be earned as well as recognition in the newsletter of the Astronomical League, the "Reflector." All wondered who would be the first to qualify.

On October 29th, PAC's 45th Anniversary, the Annual Banquet was reinstated. It was held at Sir George's restaurant in Moline. Fifty-two of people enjoyed good food, a NASA film and a stimulating talk by Dr. Nelson, Debuted at the banquet was the Carl H. Gamble Memorial Award. It is to be given by PAC to that person the club feels has made an outstanding contribution to the science or hobby of astronomy, or to its popularity. The very first plaque was given to Dr. Harry Nelson. The report of the Nominating Committee was also given at the Banquet, the nominees were:

For President:	Paul R. Castle
For Vice-President:	Robert Lundstrom
For Secretary:	Dennis Means
For Astronomical League Correspondent:	Cliff Newman
For Treasurer:	Mark Schroeder

Balloting was held at the December meeting. All the nominees were approved and would become the PAC Board for 1982. Some minor adjustments were also proposed for the constitution. 1981 proved to be a very good year, ending with three times the membership than when it started.

By the time May of 1982 had rolled around the club was better prepared for the second observance of Astronomy Day. There were a number of additions: a sound-slide show giving highlights about the club, which people asked to be played over and over again if they had missed any part of it; a space and astronomical flea market, which did very well and fattened up the treasury; and, a space model-building contest. The winners of the model contest were then invited to display their handiwork at the Putnam Museum in Davenport. Twenty-three models were entered, some of them exhibiting excellent workmanship. The overall winner was Tim Lott of Port Byron. Tim had built from scratch a scale model of the "Millennium Falcon" spacecraft from the Star Wars series. Built entirely of balsa wood and cardboard, the tiny master model, which would fit in the palm of your hand, had movable parts so small that they had to be operated with a pair of tweezers. Attendance figures that year were double that of the previous year.

July of 1982 found the national convention of the Astronomical League practically at the club's back door, Peoria, Illinois. Nine members were fortunate enough to be able to go down for the three-day affair. A highlight was a humorous account of the discovery of the planet Pluto by its discoverer, Dr. Clyde Tombaugh.

In September the club announced it had purchased a telescope that the members could check out like a library book and take home. The telescope was an Odyssey Compact by Coulter Optical, a 10.1-inch Newtonian with a 14.5 ratio on a Dobsonian alt-azimuth mount. Excellent optics, large aperture and ease of use made it an extremely good club scope. Mounted on it was a finder scope donated by Cliff Newman that he had won as a door prize at the Peoria convention. The purchase price of the Odyssey was more than the club treasury could handle at the time, so the club solicited loans and gifts from the members. The idea was to rent the scope out for a small fee until the loans could be paid back. After this time the scope would be free to use by any member.

Officers for 1983 were to be:

President:	Paul R. Castle
Vice-President:	Mark Schroeder
Secretary:	Dennis Means
Astronomical League Correspondent (AICor):	John Waack
Treasurer:	Cliff Newman

Work with the Public

In the previous August Business Meeting, the club voted to develop an astronomy educational curriculum for its members and the public. Don Anderson, an astronomy and physics instructor at Black Hawk College, a local community college, was given the task of assembling an Educational Committee and developing the classes. Don revealed the program at the 46th Annual Banquet titled "Beginning Astronomy." It was designed to be twelve weeks long, two hours on each Thursday evening of January, February and March of 1983.

Kennedy Drive Baptist Church of Moline was kind enough to offer the use of their building for the classes. This gave the club an excellent facility, a lecture hall and class rooms. Donations covered the extra heating costs. The course was given media coverage, and a total of fifty-three people signed up, paying six dollars apiece. The following was the course outline:

- Introduction to Astronomy, Registration, Brief tour of the Cosmos in slides. Instructors: Don Anderson and Paul Castle.
- Location of Stars upon the celestial sphere, times used in astronomy, tour of the John Deere Planetarium. (This class was located in the planetarium). Instructor: Dr. Harry Nelson.
- Planetary Motion. Instructor: Don Anderson
- Physical Characteristics of the Moon, phases and eclipses. (This class was located in the planetarium). Instructor: Dr. Mel Peterson.
- Tools of the Astronomer: Telescopes, spectrometers, photography. Instructors: Robert Lundstrom and Bill Lyons.
- Evening viewing of the brighter objects from the parking lot of Kennedy Drive Baptist Church.
- The Solar System: scale, the terrestrial planets and comets. Instructor: Paul Castle
- The Solar System: The gaseous planets and asteroids. Instructor: Paul Castle
- Physical characteristics of the sun, its motions and eclipses. Instructors Fred Henninger and Cliff Newman.
- Daytime Solar viewing. Located At Kennedy Drive Baptist Church.
- Physical characteristics of the stars. (This class was located in the planetarium). Instructor: Dr. Harry Nelson.
- Clusters and Nebula. Instructor: Dennis Means

- Evening viewing of deep-sky objects. Located at Crow Creek Park in Bettendorf, Iowa.
- Galaxies, Hubble's law. Instructor: Dennis Means.
- Student evaluation of the course and graduation

Attendance was taken at each class, and a certificate was given at the end to everyone who had attended eleven out of the fifteen sessions.

The May 1983 Business Meeting saw some important changes and developments in PAC's direction. As the result of a membership survey, a regularly scheduled monthly meeting and a regularly scheduled observing meeting were proposed to the club and adopted. Beginning with July the club would be meeting every month on the second Monday. Also, beginning in January of the following year the official PAC observing time would be the Saturday evening following that second Monday. Of course special meetings could still be held at any time if necessary.

Also, at that same Business Meeting, a new Observational Site Advisory Committee was formed. Dennis Means and John Waack were to act as co-Chairmen. This committee was to begin the arduous task of determining the feasibility of the club acquiring a deep-sky observing site of its own. Also, they were to determine short-range and long-range goals for such a site, and determine how such goals could be accomplished. The deep-sky site was an ambitious program, one that depended to a great extent upon another on-going project, that of getting recognition as a charitable institution by the Internal Revenue Service under its educational organizations provision.

For several months a correspondence had been going on between the club and the IRS office in Chicago. Finally, after seemingly all the requirements had been met, the Chicago IRS office transferred us to a Missouri office. The Missouri office recommended some changes in the constitution to be more in line with IRS regulations. These were adopted at a special business meeting held in October. Once those not-for-profit regulations were taken care of, the club settled down to await the outcome. In December a letter arrived dated the sixth of the month. It read in part:

Based on Information supplied... we have determined you are exempt from Federal Income Tax under section 501(C)(3) of the Internal Revenue Code. Donors may deduct contributions to you as provided in section 170 of the code. Bequests, legacies, devises, transfers, or gifts to you or for your use are deductible for Federal estate and gift tax purposes.... Because this letter could help resolve any questions about your exempt status and foundation status, you should keep it in your permanent records."

A new era had begun.

When 1984 began there were a few vacancies in the slate of officers. Paul Castle had been re-elected as President, Mark Schroeder as Vice-President, and Nina Means as Treasurer. However, it was not long until Don Anderson accepted the position of ALCor, and Theresa Shay volunteered for the position of Secretary.

In February the club lost one of its Charter Members with the death of Sam Harris. Sam had served as Vice-President from 1958 through 1960 and was responsible for numerous monthly programs throughout the years. He had been Chief Toll Tester at Northwestern Bell and had access to the Bell Telephone Film Library. Because of this, he was able to provide scientific films when a program was needed. He had also spent many hours as an amateur telescope maker and had advised many club members who were working on their own scope projects. He had sold many smaller telescopes at minimal cost to younger members of the club hoping to get the young stargazers started off with good observing techniques. Sam and his wife Lois exemplified what the club was all about.

Also, a 3-inch Edmund Scientific reflector was donated to the club. A decision was made to rent it out to the members in a similar manner as was done with the 10-inch. The fee was set at \$1.00 per week.

By the March Business Meeting the club was registered with the Better Business Bureau. We had given them a copy of our exemption letter from the IRS plus copies of our constitution, history, and other papers.

Anticipation was building rapidly with the approach of an Annular Solar Eclipse predicted for the 30th of May. The central portion of the lunar shadow was to pass through very heavily populated areas across the southern and eastern part of the country. The media was playing up the event nicely. Partial phases of the eclipse were to be visible over all of North America. In the Quad City area a coverage of 69.5% was expected at 11:27 CDT.

"SOLAR EVENT THRILLS ECLIPSE VIEWERS" was the headline in the quarter page story in the Rock Island Argus. Included was a 6x9 inch photo of Dr. Mel Peterson showing some young people a projection of the eclipse in the Carl H. Gamble Memorial Observatory. Mel reported that almost 300 people came by to view. At one time about 30 people were in the dome itself and a line of views spiraled down the staircase and out onto the entrance area. "We were surprised at the attendance," Dr. Peterson stated, "and we could have used more help. The solar event did not receive much publicity until a day or so before its occurrence, so the interest that was shown was surprising. Paul Castle and his wife, Marrietta, traveled to Atlanta where the annulus was complete and brought back slides for a club program.

ALCon '84, the 38th Annual Convention of the Astronomical League, was held in the Region. The Milwaukee Astronomical Society was hosting it at Carroll College in Waukesha, Wisconsin. It is also true that when the national convention is located in the local Region, the Regional Convention is a part of the event and runs simultaneously. PAC began to really push attendance at ALCon '84 for two reasons: first, it was practically in PAC's own backyard, and secondly, PAC wanted to make certain that it put in a bid in for hosting the Regional in 1986, the club's 50th Anniversary year.

Several club members were able to attend the four day event, and all came back enthused about the Region's response to the bid to host the Regional. The North Central Region did indeed grant PAC's request to host the Regional. This was an unprecedented move because convention sites have traditionally not been chosen further than one year in advance. PAC knew this project would be a lot of work, but was were certain it would accomplish the task. This would be the second time PAC had hosted the Regional, the first time back in 1953. President Paul Castle also came away from ALCon '84 having taken first place in the Astro-Art Contest.

For Astronomy Day of 1984 PAC decided to do something a little different. Instead of sponsoring an open house at the planetarium, a full day of displays, contests, programs, films, and talks, the club scheduled a well-known astronomer to give a public lecture. On May 19th Dr. Ed Olson, a meteorite expert from the Field Museum in Chicago, gave an excellent presentation on his experiences hunting for meteorites in Antarctica. The lecture/slide presentation had approximately 100 in attendance. The Rock Island Argus gave very good newspaper coverage both before and after the talk.

At the September Business Meeting the club approved two proposals which were designed to increase membership participation: The first, a "Member-of-the Year" award, was to be determined by a point system based on membership activities. Points would be accumulated during the twelve months prior to the September meeting so that the award could be given at the annual banquet in October. The second was an "Annual Astrophotography Award." This also would be presented at the banquet, with winners selected on the basis of photos taken and submitted by the membership during the twelve months prior to the September meeting. Junior and senior divisions were created for the photo contest.

A Disappointment

Late in 1984 our hopes were raised concerning an observing site. The Deep-Sky Observing Site Committee (the old Observational Site Advisory Committee) had walked around the Loud Thunder Boy Scout Camp to determine if there was an area suitable for club activities. The hike resulted in a recommendation that PAC seek permission to establish an observatory there. Letters were sent to the members of the Illowa Region Scout Camp Committee, and a meeting was subsequently set up for the Camp Committee to get together with the Deep-Sky Observing Site Committee to discuss a proposal. The Executive Director of the Illowa Council and the Chairman of the Camp Committee both had given positive responses to the club's proposal.

Several months and many phone calls and meetings later, things were still looking good. Hopes were high because there was practically no one in the local scouting community who did not think an observatory at the camp was a great idea. It was a logical extension of the Scout's emphasis on becoming familiar with the night skies. Finally, after almost a year, the club was informed that the National Boy Scout Office had recommended that the local council NOT give permission because of insurance problems with the extra non-scouts on the property. This seemed ridiculous since bird watching clubs were given free rein at the camp at the time. This promised to be the first of a double blow because at just about the same time a similar request to the Loud Thunder Forest Preserve was rejected.

For 1985 a new Treasurer took office, Bob Tracinski. The rest of the Board was retained.

1985 was the 125th Anniversary year for Augustana College. An open house for all the college buildings was planned for April 27th. This date, by a fortunate coincidence, was also the one designated for National Astronomy Day. Literally hundreds of people would be on the college's campus touring the buildings, so Dr. Nelson asked the club to help him make the planetarium open house as interesting as possible. The members of PAC responded beautifully, as usual, and telescopes, exhibits, displays, slide presentations and planetarium shows ruled the day. The only literal damper on the festivities was a soggy sky that prevented observing that evening.

The 39th Annual Convention of the North Central Region was held at the Fermi National Accelerator Laboratory in Batavia, Illinois. Quite a few from the club attended, all wearing "PAC IN '86" lapel tags. Paul Castle presented a slide program to the assembled delegates telling about the Popular Astronomy Club and promoting the 1986 Regional gathering in Rock Island. He was also elected Vice Chairman of the Region for 1985-'86.



One way of celebrating the upcoming 50th Anniversary was the modification of the club logo. The traditional shield was surrounded with a square which also enclosed wording under the shield saying "Est. 1936." The original shield shape was difficult to work with when making patches or decals, PAC immediately ordered new club patches with the updated logo.

Dr. Harry Nelson was honored at a surprise reception in the Augustana College Center in celebration of his fifty years of teaching. Dr. Nelson had retired in 1980 as a full time professor of mathematics and astronomy, but he had continued as a part-time instructor of astronomy and Director of the John Deere Planetarium. He had been the only Planetarium Director since it was dedicated in 1969.

In September of 1985 a series of classes for the public were held entitled "Beginning Astronomy and Halley's Comet." The classes were conducted by the club's president, Paul Castle for two hours on Tuesday evenings at Kennedy Drive Baptist Church in Moline. There were 28 enrolled. By the end of the course, five of the students had joined the club. By the closing months of the same year the national media was picking up on the return of Halley's Comet. The Popular Astronomy Club scheduled several observing sessions and promoted them for public viewing. Most of the time the weather was very uncooperative, one month had only eight clear days! During those viewing sessions for which the weather cooperated, several hundred people got to see a fuzzy little ball that was indeed THE COMET! In spite of the lack of a visible tail, most people were impressed with being able to catch a glimpse of the comet. A lot of favorable comments were received, and some were even incorporated into the local newspaper speak-out columns.

PAC often fielded a considerable number of inquiries from parents thinking about purchasing telescopes for their children for Christmas. Most of the parents were in a dilemma. They wanted to spend enough money to get a worthwhile instrument, but not too much money in case the child decided not to pursue the hobby. PAC sympathized and did its best to advise them of the various alternatives.

In the meantime, the slide program the club had put together titled "Comets: Key to the Solar System" was being booked throughout the area. Requests came in for showings from Aledo, Sherrard, Geneseo, Port Byron, and Preemption, as well as the local Illinois Quad-Cities. PAC received many excellent comments from the several hundred people who viewed it.

The new "Member-of-the-Year" award was presented for the first time in October 1985 at the Annual Banquet. This was the first year of the PAC participation point system. It was a hard fought race from which the whole club benefited. When the smoke had cleared Bob Tracinski, club Treasurer, came out on top.

Elections held in December resulted in:

President:	Paul R. Castle
Vice-President:	Mark Schroeder
Secretary:	Cindy Kulhavy
Astronomical League Correspondent (AICor):	Don Anderson
Treasurer:	Bob Tracinski

The Year of the Comet

By the opening of 1986 Halley fever was rampant. The plan was to hold three special monthly meetings using the Halley theme. At January's meeting PAC showed the Videotape "Halley's Comet," produced by the Planetary Society. It was an excellent overview about comets. A large number attended, and Dr. Nelson fielded many questions after the screening. February's meeting was more ambitious. PAC held a Telescope Users Clinic and invited anyone who has received telescopes or binoculars for Christmas to come and learn how to properly use them. Don Anderson, Paul Castle, Jim Champion, Frank and Brian Haysbrook and Dr. Nelson were the resident experts: Bob Tracinski coordinated the efforts. The March meeting followed up with a class on comet photography.

The 50th Anniversary Year was already special, but it was especially so because it was the year of the comet. The revised logo was incorporated into the newsletter covers, and special 9x12-inch envelopes were printed with the logo in the corner. These were used for New Member Packets and to hold Convention information. A gold self-adhesive label was produced, stating that it was the club's 50th year, and these were placed on all correspondence and newsletters sent out during the year. A mylar decal of the logo was commissioned for purchase.

Special too was PAC's hosting of the NCRAL convention. Work on the convention had begun in earnest even before the year started. The membership really pitched in. Letters were sent to all the clubs in the region, in addition to some clubs not in the region but bordering it. Notices were also placed in Sky and Telescope, Astronomy, Reflector, and Northern Lights, the regional newsletter. Letters were also sent to Astronomical League Members-at-Large living in the region. Having done everything possible to spread the word, the members stepped back to see what would happen.

The Convention was well organized and had excellent facilities and top speakers. Dr. James Van Allen, the University of Iowa, was Keynote Speaker. Dr. Edward Olsen of the Field Museum of Chicago, was the Banquet Speaker. On the negative side, the convention was held during a peak weekend for observing the comet and a lot of people were heading to southern latitudes where the comet could be seen better.

Final attendance was 139. PAC was able to hand over a tidy profit to the Regional Treasury.

In order to give some idea of the activities, reproduced here is the convention program. It was a lot of work, but we all felt it was worth it. Many compliments were received from those who attended and, even years later, people were heard remembering the convention fondly. It was a great start for the next 50 years.

The Popular Astronomy Club, Inc. and Augustana College
Welcome You to the
40th Annual Convention
of the
North Central Region of the Astronomical League
in this our 50th Year.
Saturday, April 12, 1986
John Deere Planetarium

Officers

President:	Paul Castle
Vice-President:	Mark Schroeder
Secretary:	Cindy Kulhavy
Treasurer:	Bob Tracinski
ALCor	Don Anderson

This is your 1986 N.C.R.A.L. Convention packet. Please check to see that your packet contains your correct meal tickets. The 3x5 stamped cards are color coded
:

Blue	Lunch
Pink	Banquet, Prime Rib
White	Banquet, Chicken Cordon Bleu

You must present the appropriate ticket at the door as you enter the serving areas.

North Central Regional Officers

1985-86

Chairman:	Francisco Roldan	Milwaukee, WI
Vice-Chairman:	Paul Castle	Rock Island, IL
Sec. / Treas.	Richard Wend	Spring Grove, IL
Regional Rep:	Larry Jahn	Naperville, IL

Convention Committee

Chairman:	Paul Castle
Registration:	Sherril Custer Arlene Newman Mark Schroeder
Papers:	Don Anderson
Publicity, Regional:	Don Anderson
Publicity, Local:	Bob Tracinski Andy Zeglin
Guest Speakers:	Paul Castle Dr. Harry Nelson
Exhibits / Swap Meet:	John Douglas Brian Haysbrook Cliff Newman
Astro Photo:	Cindy Kulhavy
Astro Art:	Bob Shay
Telescope Contest:	Frank Haysbrook
Star Parties:	Don Anderson
Food:	Arlene Newman Mark Schroeder
Door Prizes:	Sherril Custer
Data Processing:	Jim Champion
Facilities:	Dr. Harry Nelson

Program

8:00 - Noon	REGISTRATION - John Deere Planetarium, Upper Hall
8:00 - 8:55	Coffee and doughnuts, set up telescopes, exhibits, displays , astro-photos, astro- art and swap meet - New Science Building
9:00 - 9:15	Welcome and Opening Remarks - John Deere Planetarium Lecture Hall
9:15 – 10:00	KEYNOTE ADDRESS: Dr. James VanAllen - Planetarium Lecture Hall " <i>The Exploration of Outer Planets</i> "
10:00 - 10:30	PAPER SESSION I - Planetarium Lecture Hall Norman P. Lillybeck " <i>Deere in Space</i> "
10:35 - 11:30	REGIONAL COUNCIL MEETING - Planetarium Lecture Hall Planetarium Program: Dr. Harry Nelson - Planetarium Round Room " <i>A Comet Called Halley</i> "
11:30 – 12:30	LUNCH - College Student Center, Board Room View exhibits, Contests, Swap meet - New Science Building
12:30 – 1:15	PAPER SESSION II - Planetarium Lecture Hall Sherril Custer " <i>A Preliminary Study of the Circle in the SW Corner of the Carocal</i> "
1:15 - 2:15	REGIONAL BUSINESS MEETING - Planetarium Lecture Hall
2: 15 - 3:15	Afternoon Break - View Contests , etc.
3:15 - 4:00	PAPER SESSION III - Planetarium Lecture Hall Robert Schmidt " <i>Plotting an Asteroid's Position</i> " Sherril Custer " <i>The Mechanics and Methods for Doing Work on Archeoastronomy</i> "
4:05 - 4/45	SLIDE PRESENTATION - Planetarium Lecture Hall Paul Castle " <i>Starvoyage</i> "
5:00 - 5:15	GROUP PHOTO: Front (North) Steps, John Deere Planetarium
5:15 - 6:00	Tour of Dr. Carl H. Gamble Memorial Observatory
6:00 - 7:00	Before Banquet Wine and Cheese – New Science Building
6:30	TURN IN CONTEST BALLOTS – New Science Building
6:30 - 7:15	Pick Up Art and Photo Entries – New Science Building
7:30	BANQUET – Westerlin Center Banquet Address: Dr. Edward Olsen " <i>Extinction by Asteroid: Is It Real?</i> "
9:30? -	Observing with Portable Instruments – Deere & Co. Administration Center

PLEASE NOTE:

1. Door prizes will be given away in the Planetarium Lecture Hall right before the Group Photo.
2. Telescopes on display in the New Science Building and NOT being used at the evening star party must be removed BEFORE 7:15
3. Telescopes on display in the New Science Building and BEING USED at the evening star party may be left in place until after the banquet.

We would like to thank...

...the following for their donations:

Marty and Kitty Cosentine
Sherry Cosentine

Illinois Quad City Chamber of Commerce

Lumicon

NASA

The Planetary Society

The Rock Island Corps of Engineers

Sky and Telescope

Zeglin's Home TV and Appliance

The following for their generous help:

Camera Corner, Davenport, Iowa

Graph-a Tech, Rock Island, Illinois

Joseph Hanson, Jr. – Deere and Co.

Ken Johnson – Augustana Food Services

The members of the Quad-Cities Astronomical Society

Kathy Stout – Secretary, New Science Building, Augustana

The following members of PAC who gave their time though not officially on the Convention Committee:

Dick and Hazel Albrecht

Marietta Castle

Bill Ralph

Theresa Shay

And you, the attendees of this convention!

Clear skies!

A Surprising Discovery

In May of 1986 Dr. Nelson received a call from the janitor of Augustana's Centennial Hall. Harry was asked when he was going to remove the telescope from the Hall's basement. "What telescope?" Was Harry's response. It seems that a telescope had been stored there when Centennial Hall was built in 1960 and had then been forgotten. Dr. Nelson called Paul Castle, and Paul called Frank Haysbrook.

Harry, Paul, Frank and Frank's son Brian ventured down into the bowels of the Hall on the afternoon of May 28th. When they emerged they had found not one but TWO telescopes! The first was a 5-inch 115 retractor with an aluminum tube, brass fittings, and a heavy cast iron alt-azimuth mounting. The second was an 8-inch 18 Newtonian reflector on a German equatorial mount with an electric induction-motor drive and a unique wood lattice tube. Plaques on both of them were inscribed: "In memory of Carl Schreiber." Carl was a member many years ago and not much information was available on him. Dr. Nelson knew that Carl preceded his wife in death and that she passed away in 1949. Harry believed we could assume that the scopes were donated to the Popular Astronomy Club sometime before that year.

Neither of these scopes were commercially made. The club was heavily involved in telescope making in its early years and Dr. Nelson believed that both of them were made by club own members. The reflector had the date 1934 written on the wood lattice-work in black ink. Having seen other instruments also dated in ink in a similar manner, PAC concluded it had evidence of the telescope's maker. August (Augie) Wendt was an accomplished telescope maker and long-time member of the club who was known to have built many telescopes during his long career, including one in his own backyard observatory in Davenport, Iowa PAC had been given a fine project for its 50th Anniversary year - that of restoring and/or upgrading these fine old instruments. Both were in a bad state, having been laying essentially unprotected in a dusty basement for over 20 years. Frank Haysbrook accepted the task of chairing the Restoration Committee. He was joined by six other members.

The lattice-work tube of the Newtonian had several broken pieces. Marty Cosentine, a retired carpenter volunteered to do the tube's restoration. When he finished it looked as good as new. Paul Castle disassembled the equatorial mount, cleaned and painted it and put it back together. The main problem to be solved involved the drive motor. The old 1930's AC induction motor was in sad shape. Al Scheidler not only refurbished it, but built a clear Plexiglas housing for it to keep it clean and still allow its unique character to be seen. The motor was supposed to be connected to the equatorial mount by a shaft which was missing. It was not just any shaft; it needed to be double-jointed. Joel Marshall proceeded to design and make a tiny double universal-jointed shaft. Cindy Kulhavy made a zipper-enclosed carrying/storage bag for the optical tube. The mirror needed re-silvering but it was decided not to do that as the scope was probably going to be used simply for display purposes.

The 5-inch retractor did not appear to need as much work (a mistaken impression). The heavy, cast-iron alt-azimuth mount was stripped, primed and repainted by Marty Engh. That was all it needed. The optical tube was given to Frank Haysbrook. He took it apart, removed a couple of dents in the aluminum tube, stripped it and gave it a new coat of paint. The rack and pinion focuser was taken apart, checked for wear and re-assembled. The original eyepieces, which had disappeared, were not of a standard diameter, so Frank machined an adapter for the focuser so it would take standard 1- 1/4-inch eyepieces. He also machined a dust cap for both ends of the optical tube. Once all mechanical work was done, the refractor's objective lens had to be investigated. Both telescopes were now ready to exhibit and were shown at the 50th Anniversary Banquet at the Iowa Machine Shed in northwest Davenport.

Several years were to pass with the club preoccupied with other projects. When it finally got around to star testing the 5-inch f15 lens it became painfully apparent that the object glass had some serious problems with astigmatism. No one in the club had the expertise to figure out just exactly what the problem was, so Frank Haysbrook contacted Roland Christen of AstroPhysics, a retractor making company in Rockford, Illinois. Roland, after a cursory inspection; said that the problem might be the balsam with which the two elements of the lenses of that era were glued together. Over the years of storage the balsam might have flowed down between the elements forcing them apart on one side creating an astigmatic condition. He said we could try slowly heating the lens in an oven and then letting it slowly cool. The balsam, if indeed that was the problem, might re-melt and redistribute itself correcting the problem. The restorers felt uneasy about this procedure and put it off for a couple of years. Finally they decided to go ahead, since the lens wasn't any good the way it was.

Very slowly the lens was heated to 300 degrees and then very slowly cooled. Upon star testing, only a slight improvement was seen. After much discussion the Board decided to lay it all out before the club and let the members decide what to do. It was at that point that the club decided to send the lens to D&G Optical to have it professionally tested. D&G's report was the astigmatism was polished in and that a corrective procedure would cost almost as much as a brand new lens. A new lens and cell was \$695.00, less the \$25.00 testing fee. The club voted at the March 1995 Business Meeting to go ahead and spend \$670.00 for a new lens.

There was only one problem: the club didn't have enough money available in checking and savings, and a CD wouldn't mature for another six months. PAC decided on an incentive program to raise the money. For \$25.00 the contributor would receive a 1996 Astronomy Calendar. For a contribution of \$50.00 the contributor would receive their choice of "The Star Hopping Book;" or "The Planets" video tape. This program was pushed hard over the next several months, the goal being to raise the money by the October Banquet. The program was enhanced by an anonymous donor who said they would match every \$2.00 given with \$1.00 up to a maximum of \$300.00. By the Annual Banquet the club not only made its goal but had enough left over to buy a Telrad Finder and a couple of eyepieces. The order was sent to D&G.

A few years previously It was discovered that the cast-iron alt-az mount that Marty Engh had restored was actually the original Zeiss mount for Dr. Gamble's 5 1/2 inch retractor. Even though it would leave the Schribner retractor without a mount, it was agreed that the alt-az should go back to Augustana. The club certainly could not afford to replace it so the Schribner refractor lay dormant again. The problem of was solved when Paul Castle bought a new mount for the 6-inch telescope in his backyard observatory. He donated the old mount and tripod to the club for the 5-inch. This German equatorial mount had been machined out of aluminum by Frank Haysbrook.

In September of 1986 Sherril Custer organized a field trip to Adler Planetarium in Chicago. Club members enjoyed touring the exhibits, lunching in the "Craters of the Moon," practically buying out the gift shop, and attending the sky show: "Stonehenge to the Space Telescope." They then car-pooled over to the Museum of Science and Industry and spent the rest of the afternoon touring the Henry Crown Space Center and attending the Omnimax theater.

The greatest asset of any club is not its property or equipment, but its members. At the Banquet there was point tie for the "Member-of-the-Year Award." After a year of activities Cindy Kulhavy and Don Anderson were presented with matching plaques.

Elections that December gave the new officers for 1987.

President:
Vice-President:

Paul R. Castle
Mark Schroeder

Secretary:
Astronomical League Correspondent (ALCor):
Treasurer:

Cindy Kulhavy
Sherril Custer
John Douglas

The Loaner Program Grows

Mark Schroeder, who also served as Equipment Chairman, reported that the 10-inch loaner scope needed some upgrading. The scope had seen a good amount of usage and had generated enough income to make some worthwhile improvements. Andy Zeglin volunteered to do some research on what could be done. At the March 1987 business meeting he recommended the purchase of 28mm and 15mm eyepieces. Andy was authorized to purchase them. Later a barlow lens was also included.

That same year a second scope, a 3-inch Edmund ScienMic Newtonian reflector, was donated to the club as a result of its owner talking to Dr. Nelson. It required a little bit of work, including improving the tripod, fixing the finder's cross-hairs and repairing a crack in the tube assembly. After this refurbishing, it was added to our loaner scope program. Another addition was made in 1993. A 4.5-inch Celestron Newtonian reflector was donated. It did not have a mounting but it did include several eyepieces and filters. Paul Castle made a wooden equatorial mount for the scope and this home-made mount served for the next three years until a motorized Edmund equatorial mount was donated to the club by the Rock Island High School.

Gary Wolber, physics teacher at Rock Island High, had contacted Augustana College to see if they would be interested in acquiring an old telescope that was sitting around taking up storage space. No one was using it nor had anyone used it for a number of years. Gary was referred to Dr. David Reneke, head of the Physics Department, who declined the offer but suggested that the Popular Astronomy Club might be interested. Mr. Wolber was getting desperate by this time. If someone could not be found who would take the telescope, it would have to be junked. Paul Castle was contacted and he readily agreed to take the scope. When Gary brought it over Paul saw that not only did all the pieces seem to be there, but there were extras! These extras turned out to be the Edmund mount on which the 4.5-inch was later installed.

The telescope Paul received was a RV-6 Dynascope made by the Criterion Scientific Instruments company. The scope was originally purchased by the High School in the spring of 1964. The physics teacher at that time was an astronomy enthusiast and wanted to pass on his interest in the skies to his students. Unfortunately, he soon accepted a transfer to another school and the 6-inch Newtonian reflector saw little use. Over the next thirty years the scope fell into disrepair, and by late 1996 it was discarded.

The club president spent a good part of the month of November refurbishing the classic scope. Everything was disassembled and cleaned, paint was touched up, new finder cross hairs installed, the drive clutch was repaired, and the drive motor was replaced. It was worth the effort. The 6-inch was as good as new. It was then added to the club's telescope loaner program.

The Renewed Search

In the January 1987 issue of Reflections the president issued a call to renew Deep-Sky Observing Site Committee efforts. During the previous year the club had been so involved with its 50th Anniversary Year and hosting the Regional Convention that site pursuit took a back seat. Now it was time to continue the search. Bob Tracinski became Committee Chairman. At the March business meeting Bob announced that he had been talking with the Mississippi Valley Girl Scout Council. They were looking favorably upon allowing PAC to use either Camp Shabonee or Camp Conestoga for observing in exchange for astronomical programs presented to the girls.

Paul Castle volunteered to go to the camps and take a series of long exposure photographs to determine each site's suitability. After touring both camps it was obvious that Camp Conestoga was far superior. Camp Shabonee was not very far, but it was too near the populated areas. The worst sky glow was in the south-southwest, exactly the direction the glow would most interfere with viewing.

The news broke in the October 1987 newsletter.

**“AGREEMENT REACHED WITH GIRL SCOUTS
ON DEEP SKY OBSERVING SITE”**

The agreement was signed on September 17th after a vote taken at the third quarter business meeting ratified the proposal by Mississippi Valley Girl Scout Council Director of Program/Properties Vicki Wright. Ms. Wright's letter, dated September first, outlined her ideas for a pact between ourselves and the Council.

WE ARE EXCITED. The Deep-Sky Committee will be meeting to draw up some guidelines for our members at the site which will include a waiver for both the Council and our protection. In the meantime you are encouraged to use the site. The camp ranger, Shane Nesselhauf, has been given a membership list for him to refer to as we go out there. I am certain we can take visitors with us, but that is to keep unauthorized people from wandering around the camp. Be certain to read all the material on the camp very carefully. Happy Observing!

The following is the text of the letter received from Vicki Wright of the Girl Scout Council:

The Mississippi Valley Girl Scout Council is delighted that we are able to develop a mutually beneficial arrangement with the Popular Astronomy Club of the Quad Cities, to use Camp Conestoga as an observation site. As per our telephone conversation, this letter outlines the agreement.

1. The Popular Astronomy Club will supply a membership list to the Mississippi Valley Girl Scout Council (MVGSC).
2. MVGSC is not responsible for any accidents or injuries incurred by members of PAC while on the Camp Conestoga property.
3. PAC will use the large open field near the Outpost Unit for observation.
4. Procedures for using the site will be as follows:
 - PAC will most likely observe on the 2nd Monday and/or Saturday of each month. However, they may use the sites on other days provided the Camp Ranger is notified and the site is available.
 - Prior to the use of the site, PAC will contact the Camp Ranger indicating the approximate time of arrival and number of people.
 - Upon arrival, PAC members will check in at the Ranger's house near the entrance to the camp.
 - Vehicles may be driven to the site, observing a 15 mile per hour speed limit. Please try to park near the Outpost Unit or wherever the Camp Ranger indicates.
 - Upon leaving the site, one person will notify the Camp Ranger that all PAC members have left the site. If it is late at night, a note attached to the door of the maintenance building is sufficient. Also, the last person leaving is to shut and chain the entrance gate.
 - NOTE: Procedures during the summer resident camp season may vary. PAC will be notified at least three weeks in advance of any changes.
5. In return for using the observation site, the PAC agrees to do presentations for Girl Scout events where possible.
6. The contact person for PAC is Paul Castle, President. The contact for MVGSC is Vicki Wright, Director of Program/Properties. Any concerns or problems will be discussed and resolved by these two people.
7. This agreement is to be renewed yearly, and may be revised or revoked as needed by MVGSC.

The first observing at the camp was held in October of 1987.

Under consideration for a long time was the concept of a club library. The membership thought it would be great to have access to astronomy books, slides, videos etc. because there was a distinct lack of such items in the area. The problem to be solved first, however, was where the library could be placed so it could be accessible? Two members stepped forward and provided the solution. Dr. Nelson agreed to provide floor space in the planetarium's "round room" storage area, and Marty Cosentine, a retired carpenter, volunteered to build a portable library unit. A portable unit could be rolled out of the store room during club meetings, and then would be rolled back in and out of the way. In March Larry Fuller accepted the position of PAC Librarian and Archivist. Larry maintained the library and archives, making materials available at each monthly meeting and assisting members in checking out books, tapes, etc. The library proved to be a very popular feature of the club. Larry served for six years. Donna Schroeder took over the position in 1994.

For years the club picnic had been held at Wild Cat Den State Park in Iowa's Muscatine county. It is a beautiful park with lots of hiking trails. By 1987, however, they had begun charging for park usage. So, by June of that year, the site of the annual picnic was changed to Crow Creek Park in Bettendorf, Iowa. Twenty-two people met for an evening meal. There were three scopes and numerous objects were observed. The elusive planet Mercury, looking like a tiny quarter moon, bright against the twilight sky, was very popular.

At the June business meeting the membership voted to conduct a monthly lottery for raising money for the new club library and a future observing site. The lottery would be conducted only at club meetings among ourselves, not at public events. On a purely voluntary basis a member would drop a dollar into a container and take a numbered ticket stub. At the end of the evening's program a ticket stub would be drawn. The matching stub holder would win the pool with the understanding that half of the amount would automatically be donated to PAC's special projects.

The eighth annual Astrofest, sponsored by the Chicago Astronomical Society, was held on the weekend of September 18-20. Several members attended taking with them the restored 1934 8-inch reflector. Astrofest is an informal convention of amateur astronomers featuring, among other activities, telescope judging. It was a great day of programs, guest speakers, vendor booths, a swap meet and a star party. But what made this year special was the award given to PAC for the restoration of the 8-inch! The club received a very nice certificate and got several photos published in Telescope Making magazine.

Two Honorary Memberships were approved at the September business meeting for John and Cheryl Waack who had been long-term members before moving to Tucson, Arizona. They had been introduced to astronomy through PAC. In Tucson, John accepted the position of Maintenance Supervisor for Steward Observatory located at Kitt Peak National Observatory. Cheryl also began to serve there as a technician. They kept their doors open and encouraged members to come out for a visit. Several took advantage of the opportunity as John and Cheryl actually lived on top of the mountain among the observatory domes right next to the 90-inch. We were very proud of their accomplishments and for the chance to have personally guided tours and/or views through the professional instruments.

All the current officers were re-elected for the coming year.

Mars Approaches

Even before the beginning of 1988, excitement was beginning to build. September of that year was to be the best appearance of Mars in this decade - and the biggest and brightest Mars would be until August of the year 2003. Mars, therefore, presented the best topic for amateur astronomers to make contact with the general public since the apparition of Halley's Comet. Interest could be particularly high since October would be the 50th anniversary of Orson Wells' famous radio broadcast of the "War of the Worlds." This would help the event to have a high media profile.

The previous October, at the Annual Banquet, Paul Castle challenged the club with the idea of a public seminar on Mars in the fall of 1988. The idea was readily accepted and adopted as policy in December of

1987. It was to be called simply, the MARS SEMINAR. Plans and excitement began to grow as the time neared. The astronomy magazines and public media dutifully began publishing Mars stories just as anticipated. Planning meetings began to be held by the club in the month of April.

The seminar would be held in late September or early October, depending on the availability of a suitable guest speaker. Sherril Custer suggested someone she had heard present a program on Mars at the Adler Planetarium. The Seminar Committee asked her to make contact.

William Higgins was Vice-President of the Chicago Space Frontier Society, a chapter of the National Space Society and a Fellow of the British Interplanetary Society. He was currently involved in the transporting of particle beams as an Engineering Physicist at Fermilab in Batavia, Illinois. He also served as a consultant for the Crown Space Center in Chicago. He agreed to come on the 17th of September if only we would pay his expenses.

Now that the guest lecturer was scheduled the club really went into action. Special fliers were printed and posted or mailed throughout the Quad-Cities. Mars observing guides and packets were mailed to all the schools and libraries within a 20-mile radius of Rock Island on the Illinois side of the river. All radio and TV stations, as well as newspapers were sent promotional releases and information packets. The Planetary Society, the largest space interest group in the world, was contacted and the seminar was integrated into their own "Mars Watch" program. This meant that they would help PAC promote the seminar. Indeed, they sent out personal invitations to all of their members in the mid-west. PAC also had ads in Astronomy and Sky and Telescope magazines.

Elementary school students were encouraged to enter a "Design a Martian" art contest. Seventh and eighth graders were likewise encouraged to write an essay, "Why We Should (or Should Not) Go to Mars." The Quad-Cities Computer Club was invited to have a display, and they did so, demonstrating various Mars related programs. Their "What do you weigh on the Planets?" booth proved extremely popular. What follows is a copy of the flyer and the first page of the October newsletter which summarized the event:

THE MARS SEMINAR

MARS. No other planet has been the object of so much fascination, research, controversy and fiction. (This year is also the 50th anniversary of Orson Wells' 1938 radio broadcast of H.G. Wells' "The War of the Worlds.")

In September Mars will be closer to the Earth as it has been since 1971 or the closest Mars will be to us until 2003. Take advantage of "THE MARS SEMINAR" to do your own personal exploring.

SATURDAY, SEPTEMBER 17

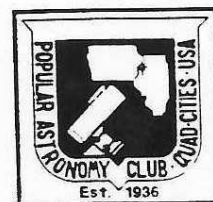
John Deere Planetarium, Augustana College

- 7:00 pm Mars displays, Information booths, Telescope display, Essay contest for grades 7 and 8, Space art contest for grades 1 through 6
- 7:30 Planetarium "star dome" presentation
- 7:45 Planetarium "star dome" presentation
- 8:00 William Higgins from the National Space Society will be speaking on the subject "The Exploration of Mars."
- 9:00 Questions and Answers on Mars
- 9:45 Art and Essay Contest Awards
- 10:00 Telescope observing of Mars (weather permitting), in case of poor weather, the movie classic "The War of the Worlds" will be shown and the observing will be rescheduled.

For further information call 786-6119 evenings.

Sponsored by

THE POPULAR ASTRONOMY CLUB



**John Deere Planetarium
Augustana College
Rock Island IL 61201
SOME AFTERTHOUGHTS**

The MARS SEMINAR is now history and was a huge success. I estimate somewhere around 230 in attendance, the most we have had for a planetarium "open house" for a long time. Our guest speaker, Bill Higgins, was also pleased with the turn out and the great job we did with the total seminar package. PAC, you can pat yourselves on the back! In spite of the observing time being clouded out, I believe people went away with a good feeling about astronomy and the Popular Astronomy Club. We had six new members join that very evening and we have high hopes that some more will come in through the mail.

We also received a great response to our "Design a Martian" art contest. Although I did not count them I estimate somewhere around 200 entries from various elementary schools.

3rd Place	Grades 1-2 Ben Requet Jordan Schools
2nd Place	Grades 1-2 Darin Blodgett George O. Barr Elementary
1st Place	Grades 1-2 Lindsey Smith Roosevelt Elementary
3rd Place	Grades 3-4 Nora Almanza Jordan Schools
2nd Place	Grades 3-4 Ian Schroeder Jordan Schools
1st Place	Grades 3-4 James Richards Jordan Schools
3rd Place	Grades 5-6 Chris Liljedahl Alwood Elementary
2nd Place	Grades 5-6 Dana Marrocco Willard Elementary
1st Place	Grades 5-6 Joshua Ketner Willard Elementary

The mailing that the Planetary Society did for us helped to bring people from a much wider area than we would have ordinarily reached. Their help was most appreciated.

Demographics:

Of those attending*

70% from Illinois, 30% from Iowa

Illinois: 33% from Rock Island
 15% from East Moline
 9% from Moline

Remainder from various other communities.

Iowa: 36%. from Davenport
 19% from Alburnett
 14% from Muscatine

Remainder from various other communities.

\$46.02 collected from the donation jar.

based upon those addresses obtained from the door prize entries,

We also owe a special "Thank You" to Dr. Nelson who put on twice as many planetarium programs than was originally scheduled in order to accommodate the number in attendance.

Our thanks also goes out to all those members who helped. I would like to name you all, but in fear of leaving someone out I will just say a big THANK YOU to you all.

A big help was Dr. Nelson who made it possible for Bill Higgins expenses to be taken care of by Augustana. We all owe you a big one for that Harry!

The Quad-Cities Computer Club had a fantastic display. It was really impressive and very popular with those in attendance. My wife is a good example. Marrietta panicked when, late in the evening, she discovered she had lost her planetary weight card. Fortunately she was able to go back downstairs and get re-weighed. Many thanks to the Q.C.C.C.

PRC

This year, after serving Augustana College and the public for almost twenty years, Dr. Harry Nelson decided to step down as Director of the John Deere Planetarium. A reception was given for Harry and Lillian by the college. For over thirty years Dr. Nelson had been "Mr. Astronomy" in the Quad-City community. Numerous public lectures, newspaper quotes and TV news interviews made Harry synonymous with astronomy. He was the one to call when anything unusual was happening in the heavens. He was approachable, both by his students and the man on the street. Dr. Melbert Peterson took over as Planetarium Director.

Always well attended, the annual Perseid Meteor Shower is one of the most enjoyable events in the club's calendar year. Members and guests have a great time talking, laughing and watching the fiery display. The only seriousness is the counting of meteors and the accumulation of these numbers into a report that is sent to Sky and Telescope magazine. The count usually begins around 10:00 PM CDT, and this year a large number of extremely bright Perseids made their brief appearance before the official count began. This was the first year PAC held the meeting at the Dark Sky site at Camp Conestoga.

At the September Business Meeting two changes to the Constitution were proposed. The first would change the month of officer's nominations to September instead of the Annual Banquet. The second would change the dues, increasing it two dollars and adding a one-time processing fee of three dollars to the dues of a first-time member. Both proposals were tabled until the December meeting where the changes were approved.

The Annual Banquet was held at O'Melias Supper Club in Rock Island where the 1988 Member-of-the-Year recipient was a recent member with infectious enthusiasm and an eagerness to learn, Roberta Wright. Again, all the officers were re-elected for 1989.

Plans were going forward to hold some public astronomy classes in the Spring. The idea had been proposed by the president in his "state of the club" address at the previous banquet. The classes were to have the title "Practical Astronomy" and were to be held in the month of April. Targeted would be those with an interest in observing, from 6th grade through adult. The following would be the schedule:

Astronomy by Eye: Two-hour class on Thursday, April 6
Lab: Naked eye observing session on Saturday, April 8

- History
- Constellations
- Stellar Magnitude
- Using star charts
- Naked-eye planets and their motions
- Meteors and Comets
- The Moon: Its motion, phases and eclipses
- The Sun: Its motion and eclipses

Astronomy by Binocular: Two-hour class on Thursday, April 6
Lab: Binocular observing session on Saturday, April 15

- Binoculars: Types, buying, using
- The Moon: Maria, craters, rays, terminator
- Prominent star clusters, nebular objects and other binocular sights

Astronomy by Telescope: Two-hour class on Thursday, April 20
Lab: Telescope observing session on Saturday, April 15

- History
- Telescope types and mounts
- Telescope buying and using

Astronomy by Camera: Two-hour class on Thursday, April 27

- Cameras for astrophotography
- Films for astrophotography
- Stationary astrophotos
- Tracking devices
- Piggy backing your camera
- Prime Focus, eyepiece projection and other setups
- Duplication and photo enhancements

Certificate Awards, wrap-up questions and fellowship: Thursday, May 4
Lab: Astrophotography session on Saturday, May 6

These classes were the results of requests. There would not be anything on black holes, pulsars, or any kind of theoretical stuff, just solid information on getting started in the world of amateur astronomy. The classes were well-publicized in the media, and the club was pleased to have twenty-three enrollees.

During the month of May, 1989, the icy planet Pluto was at opposition, and also at perihelion. That meant it was the nearest and brightest it would be for decades to come. Still, it would only be about 14th magnitude, which required a fairly large scope with good optics to see it. Knowing that the Southeast Iowa Astronomical Society operated a 12-inch Alvin Clark and Sons refractor, Paul Castle asked those members of SEIAS attending the North Central Regional Convention that year if they would be searching for Pluto. He strongly hinted the PAC club would like to come down and take advantage of their scope. Of course they said yes. Sixteen PAC members made a field trip to the Burlington area. Pluto was just a dot, but what a thrill it was to be able to see the outermost planet of the solar system!

What has been called the “perfect Lunar Eclipse” occurred on the 16th of August. The weather was warm and beautiful, the skies were just a little hazy, but not enough to detract from the event. The call had gone out in the June newsletter for telescopes. Dr. Mel Peterson was going to open up the Gamble Memorial Observatory for public viewing and wanted extra scopes for the observing deck and grounds. The event was publicized in the media by Augustana and a nice crowd was anticipated. The Moon passed very nearly through the center of the Earth’s shadow. The Lunar surface became a very dark coppery red. Approximately 300 people showed up that evening to view the Moon and the planet Saturn, which was also in a favorable position. Eager viewers lined up at each of a half dozen telescopes, and PAC received many excellent comments.

A Close Encounter

PAC was always looking for material for the club newsletter. An article had been published in the January issue that was a conversation between a new club member, Barry Ward, and a Mr. Moslan of the Public Information Service of the Jet Propulsion Laboratory. Barry was asking JPL if it was possible for anyone to receive video images from the Voyager spacecraft as it would be flying by the planet Neptune in August that year. Little did the two realize, at the time, the importance of this conversation. It was to seed an idea in both parties that would come to fruition later in the year as the biggest event in the club's recent history, with national consequences.

By the middle of 1989, preparations were well under way for the “Voyager Watch.” A public program scheduled for John Deere Planetarium. The night of August 24-25 marked the main goal of this stage of the Voyager program - the closest encounter with Neptune and its primary moon, Triton. The planetarium was one of the down-links of Voyager transmissions from the Jet Propulsion Laboratory.

The media had picked up on the story of this last planetary encounter, and for a week or so prior to the event Voyager was in the news every day. The doors to the planetarium officially opened on 9:00 PM Thursday, although people began arriving earlier. Several TV monitors were awaiting the viewers provided by PAC member Andy Zeglin, and a down-link set up was brought in by Augustana's WVIK-FM public radio station. The Gamble Observatory was open for viewing, and additional PAC scopes were set up on the planetarium grounds. Dr. Nelson presented star-dome programs, and other PAC members staffed a club display and answered any questions that came their way.

Barry Ward was the Voyager Watch Area Coordinator and oversaw not only this public meeting but also subsequent ones on the Iowa side of the river. In all, some 27 area organizations were involved. WVIK tried their best to take attendance, but the crowds were so great that in the end all they could do was make an estimate. Between 1,500 and 2,000 people had attended in the twelve hours of the Watch -- between 9:00 PM Thursday and 9:00 AM Friday. Barry Ward later reported that approximately one million people were involved across the nation.

Cindy Kulhavy, in an article published later in the club newsletter, stated that before midnight on Thursday, several hundred people had climbed the stairs to the Gamble telescope for a glimpse of Saturn. She and Roberta Wright were kept busy aligning the planet in the telescope and answering questions. The crowds kept pushing into the dome even when the sky had clouded over, patiently waiting their turn for when the sky would clear. Meanwhile, down on the grounds, Gene Harding, Al Shiedler and Scott Sample were kept busy with lines of people at their scopes looking at Saturn and Uranus. Larry Fuller entertained in the upper hallway of the planetarium demonstrating Voyager encounter simulations with a computer.

When the dust had settled, the members of the Popular Astronomy Club proved they were a great group. They responded to the call for volunteers, and once again the public received a new appreciation of the heavens. It was just great to hear people's comments. Two teenagers, coming out from visiting the

Gamble Observatory, were overheard to say to one another "Wow! Did you see THAT?" (Saturn) "It was fantastic!"

That remark was typical of reactions during the summer public events. In this day of high-tech, television, special effects movies and fast-paced action, young people still say "Wow!" at a tiny image swimming in a sea of darkness. Amateur astronomy is one of the most rewarding pastimes available.

The 53rd Annual Banquet was held on the evening of October 27th, again at O'Melia's Supper Club. The program was the premiere presentation of Paul Castle's newest astronomy slide programs, "The High Frontier." The Member-of-the-Year award went, for the second year in a row, to Roberta Wright. But, the highlight of the evening was the second presentation of the coveted "Carl H. Gamble Memorial Award." It was presented to Barry Ward for his role in implementing the national Voyager Watch Program.

Elections at the December Business Meeting found Ernie Poani as the new Astronomical League Correspondent for 1990.

As in any organization there have been occasions when speakers or programs were hard to come by. In years past the club borrowed movies from NASA or some other science organization, since the planetarium had a projection booth at the rear of the lecture hall. By the '90s 16mm movies were passé; everything was on video tape. To show a video tape, some member would have to lug their TV set and VCR to the club meeting. This was discussed at the March Business Meeting. Dr. Peterson indicated that if PAC decided to buy its own video equipment it could be kept at the planetarium. Jay Cunningham volunteered to loan the club the money. PAC purchased its own TV equipment in April. Marty Cosentine built a roll-around video cabinet that also held a large number of video tapes in a locked compartment. First use of the equipment came at the June meeting with the showing of a 30-minute movie, "Space Scapes." For being able to store the cabinet in the planetarium's round room PAC told Dr. Peterson that he could use it when he needed it.

April 22, Earth Day 1990, was shaping up to be a big event in the Quad Cities. The media was devoting a lot of coverage to it, and many organizations were participating in some way. The main observance was being held at the Rock Island RIMCO Exhibition Center where the Popular Astronomy Club was invited to provide an exhibit. Two telescopes were displayed; the antique 8-inch reflector and a modern 6-inch apochromatic refractor. PAC members also showed slides of colorful astronomical subjects and passed out literature on light pollution. Several thousand people probably heard about PAC for the first time

Larry Fuller, club librarian, walked away with the Member-of-the-Year award at the Annual Banquet in October.

At the December Business Meeting, a constitutional change was approved by the club. The length of Board Members terms of office was changed from one year to two years. Also, at the same meeting, a letter was read from Hal Provenmire of Florida concerning the asteroid Vesta. The planetoid was going to be occulting a fairly prominent star on the 3rd of January and the Quad Cities might be in the shadow path! The letter asked for volunteers to observe this and help out the International Occult Timing Association. In response to this request, PAC fielded three teams of two people each; one observer at the eyepiece and one timer-recorder. Members were spread out over a twenty-mile wide line perpendicular to the projected shadow path. Members were told that even if they saw nothing they were to report it, for this indicated the shadow path missed us. Which, indeed it did, as we found out later. But participating in a scientific endeavor was a great experience for the club.

While attending this year's Astronomical League convention Paul Castle talked to Jerry Sherlin, the League's Vice-President and Book Service Chairman. Paul learned that Jerry's new job as chief weatherman for the state of Colorado was causing him to neglect his book service duties. Jerry was very concerned about this because he had spent considerable time and energy making the Book Service one of the League's best services to the amateur astronomical community. In the conversation Jerry stated that he would like to find someone who could take the service over and do it justice. So Paul, being an avid reader himself and having church library directing experience, decided to volunteer. He was duly

confirmed in the position by League President Jim Fox and officially took over the Book Service on the first of January 1991.

In early 1991 thoughts turned to Astronomy Day. In the past, the club had always had open houses at the John Deere Planetarium, had invited guest speakers, or had held public astronomy classes. While these activities made the news and attracted perhaps a few hundred people, PAC wanted to try to introduce astronomy to a larger audience. Inspired by the Sidewalk Astronomers of San Francisco, members began talking about a sidewalk observing program. But where could it be done? Where would the most people stroll by? The answer was obvious. Ben Butterworth Parkway in Moline. During nice weather literally thousands of walkers, bikers, joggers and skaters used this ribbon of asphalt along the Mississippi shoreline. So, in the summer of 1991 the parkway programs began. Roberta Wright was put in charge of getting it organized. She contacted members who owned telescopes and asked if they would be willing to put in a couple of hours at the Parkway allowing people to look through their scopes. A schedule was created around the First Quarter Moon. A number of members volunteered. Since that time, Parkway walkers have been likely to pass by one of the sidewalk stargazers every summer.

On July 11th, 1991, a total eclipse of the Sun occurred. Though it was only partial in the Quad-City area, it still generated a lot of interest. Club members helped Dr. Peterson with public observing at the Gamble Memorial Observatory, but some went far afield, as far away as Baja Mexico, and the Big Island of Hawaii where totality could be seen.

In December of '91 the constitution was tweaked once again. This time a Student Membership category was reinstated. This class of membership was opened to young people of Junior or Senior High School age. The dues were established at half the regular member rate. The following year, another change in the dues structure came about. For as long as anyone could remember Sky and Telescope magazine was a required part of PAC membership. This is because Sky Publishing Corporation required every member to get the magazine if the club members were to receive it at a club discounted rate. When Astronomy magazine was introduced, it became an optional addition, only *five* members had to subscribe to it to get a similar club discount rate. It went on this way for several years. Finally, Sky Publishing dropped the all-or-nothing policy and also went to the five club members requirement. When their policy changed, PAC's did also. Now a base dues rate was set for our membership and both magazines became available as options. This has worked out well.

Elections that December established the new officers for 1992-93

President:	Paul R. Castle
Vice-President:	Roberta Wright
Secretary:	Cindy Kulhavy
Astronomical League Correspondent (ALCor):	Robert Custer
Treasurer:	Gene Harding

Cooperative Efforts

In February of 1993 Paul Castle wrote to Bill Brown, President of the Quad-Cities Astronomical Society, suggesting that there were a number of areas in which the two clubs could cooperate. In the letter he proposed the formation of a joint committee to be made up of each club's President, ALCor, and those general members that the two clubs had in common. He proposed that the committee be called the "Greater Quad-Cities Astronomy Club Joint Committee" (subsequently shortened to simply the "Joint Committee") and suggested that this committee could meet together at least quarterly over 1993 and 1994 to see if some sort of cooperative efforts could be achieved. He felt that joint goals would result in more efficient functioning if the two clubs worked together. The Boards of both clubs approved the idea.

The first cooperative effort of the two clubs was the annual Perseid Meteor Watch in the month of August. The event was scheduled for Crow Creek Park in northern Bettendorf and letters were sent out to the media. It turned out to be a great success except for the weather! Over 400 people showed up for nature's fireworks display including a Channel 8 TV News truck and crew. Unfortunately, clouds rolled in,

and by midnight a drizzle began. It was a big disappointment, but both clubs believed their cooperative efforts had been a success.

The second cooperative effort was a "Saturn Watch." Paul Castle had spoken with the General Manager of the Saturn of the Quad Cities division of Lujack Auto Plaza, Tom DeSalvo. Paul proposed a star party be held in the auto plaza's parking lot during the upcoming viewing window for the ringed planet. This had been done previously in the Northwest and had been extremely successful. Tom was immediately enthusiastic and began thinking of ways to make this an entire evening of value and fun for his customers. Most of people had never even seen a good astronomical telescope, much less looked through one. The 24th of September, a Friday evening was set as the primary date; that put the first quarter Moon also in view as additional interest.

Tom DeSalvo had sent out letters to everyone who had bought a Saturn automobile from them, inviting them to come for an evening of events: Saturn and Lunar observing, a catered barbecue supper, a slide illustrated lecture of the namesake planet, and a class on do-it-yourself auto maintenance. PAC's concern was, of course, the weather. As it turned out, concerns were justified. The evening turned out to be mostly cloudy. Fortunately enough holes in the clouds drifted by to allow everyone a look at the primary targets, Saturn and the Moon. Everything else went off without a hitch and the Saturn dealership people were extremely happy. Approximately 180 Saturn owners attended. Both clubs received many kind remarks by the participants.

These events began what was to be a series of successful cooperative efforts between the two clubs over the next three years of shared star parties, banquets, field trips and picnics.

At the March, 1994, Business Meeting the club voted to begin a new "Attendance Prize." This award, to be given away at the club banquet, was to be based on club members' attendance at the regular club meetings throughout the year. If, for example, a member attended all twelve monthly meetings of the club, his/her name would be entered in a drawing for the Attendance Prize twelve times. If, on the other hand, the club member only attended three times, their name would be entered into the pot only three times. The winning name would take the prize. Lori Teghtmeyer won the first Attendance Prize at that year's banquet, a deluxe Color Star Atlas 2000.0.

The club received a letter from the Rock Island Arsenal, promoting the upcoming Armed Forces Day Open House on April 10th. Many Quad-City organizations were being asked if they could provide an informative display for the open house's attendees, and if so, what kind of help could the arsenal provide? Tables? Chairs? A tent? The club replied in the affirmative, and the morning of the Open House dawned cool and clear. Several club members had been recruited to staff a table with giveaway information on the club, dark-sky material, and monthly sky maps. Visitors could look at the Sun through solar-filtered scopes, inspect the antique 8-inch telescope or be amazed at Bob Custer's computer driven 10-inch Schmidt-Cassigrain. PAC also had a place where interested parties could sign up for more club information or enter a Moon map give-away. Moon maps were given away every hour on the hour. PAC felt satisfied that it had made good contacts with the public and we even attracted some new members. The Arsenal must have been pleased also for they kept asking the club back every year for several years.

The Regional Convention of the North Central Region of the Astronomical League was held on April 30th in Burlington, Iowa, sponsored by the Southeast Iowa Astronomy Club. A number of PAC members went down. PAC's president was elected Regional Chair for 94-95. At the club's own elections, Jerry Schroeder was elected Treasurer. Other officers remained the same for 94-95.

Meteor lands at kids' museum

By **Barbara Ickes**
Staff writer

MOLINE — A 50,000-year-old meteorite has fallen into the hands of the Quad City Kids and Company children's museum in Moline.

Paul Castle, of the local Popular Astronomy Club, said his group donated the 7-ounce meteorite to the museum because "It's kind of neat to be able to touch something from outer space."

When the meteorite fell from outer space more than 100 years ago, it was part of the meteorite that created the Barringer Crater in Arizona. That meteorite impact carved out an earthen depression measuring 4,000 feet across and 600 feet deep.

A meteorite is a piece of a meteoroid, or asteroid, that has survived passage through the atmosphere and reaches the earth's surface. While meteorites reportedly come in many different compositions, the one making its home at Quad City Kids and Company

— located at 600 Valley View Drive — is made up primarily of iron.

Museum Director Roxanne Steffens said the meteorite will be a welcome addition to the facility's hands-on collection.

"This is pretty exciting. We've always had an interest and have done things with stars. We have a planetarium with glow-in-the-dark stars, and this will go hand-in-hand with that nicely," she said.

The meteorite was donated to the museum Saturday. It will be on display in a Plexiglas showcase, but Mrs. Steffens said it will be removed periodically so groups can hold the meteorite.

"Some kids might think it's a rock, and rocks usually go into kids' pockets," she said. "They're always collecting rocks.

"But we'll take it out for field trips and things so they can find out what a falling star feels like."

The Year of Astronomical Spectaculars

Excitement was mounting. On the 10th of May 1994 an Annular Solar Eclipse's shadow path would be crossing through Central Illinois! What luck! Bob Custer became the "Eclipse Master." He arranged a viewing spot on a grassy field on the farm of Steve and Loraine Kuntz, a few miles southeast of Bloomington, Illinois. Bob's friends' farm was right on the shadow's center line. The expedition had been taken on as a project of the Joint Committee. Unlike previous projects, this day was clear! Fifty-three amateur astronomers and friends gathered that day near Bellflower, Illinois. Not only PAC and QCAS members came, but amateurs from Iowa, Wisconsin and Colorado. Several types and sizes of telescopes were represented and available to view the spectacle. A great time was had by all.

Club members had hardly recovered from the eclipse's excitement when they had to get ready for an equally spectacular, but much more distant, phenomena.

It was in March of 1993 when the astronomical team of the Shoemakers and amateur David Levy discovered a fragmented comet in orbit about the planet Jupiter. The comet would, in fact, collide with the Jovian planet in July of 1994. As the impact month neared, the dates for the event were narrowed down to between July 16 and July 22. Both the professional and the amateur communities prepared for this unusual event. It was not known if anything would be visible in amateur telescopes, but PAC got ready for it just in case. The club prepared a series of observing dates for viewing the comet from the grounds of the Coal Valley Baptist Church, a private area with a good horizon and with restrooms readily available. Meanwhile, Dr. Mel Peterson planned a week-long open house at the Gamble Memorial Observatory and Planetarium, with lectures and telescope time available to the public. PAC members helped out with these also.

The day the first impact occurred, the amateur community was surprised to find large obvious scars in Jupiter's atmosphere. These blemishes were easily visible even in the smallest of amateur scopes. As soon as the sky had darkened enough to find Jupiter, there were the scars. The Hubble Space Telescope may have shown more detailed views, but this was nothing compared to seeing this once in a lifetime event with your own eyes.

Yet two more highlights remained in 1994. A joint Banquet with the Quad-City Astronomical Society was held in October. The guest speaker was Richard Drieser of Yerkes Observatory. Richard gave a very interesting and humorous slide-illustrated talk on the history of the observatory and the many personalities who touched it. Cindy Kulhavy was awarded Member-of-the-Year.

In November, David Levy, co-discoverer of Comet Shoemaker/Levy-9, was a guest lecturer at Augustana College. He thrilled the crowd at Centennial Hall with his account of the comet's discovery and the subsequent science that had so far been derived from its impact with Jupiter. Several PAC members then got to talk to him personally after most of the crowd had dispersed.

The Annual PAC Picnic, traditionally held on the Saturday following the Regular Meeting of June, was held in 1995 at the Castle's home in Rock Island. Paul and Marrietta have a large yard, patio, outside gas grill and, not the least important, an observatory. Paul was anxious to show off the new Losmandy German equatorial on which he had mounted his 6-inch refractor. This instrument is housed inside a 10-foot fiberglass dome. Many members enjoyed a game of croquet that was brought by Jay Cunningham. Three other telescopes were brought by members. There were 25 in attendance, and some stayed until the wee hours of the morning.

In the month of July a Joint Field Trip to Adler Planetarium was held. In August, a joint meeting was held with the QCAS for the Perseid Meteor Shower and also another field trip, this one to Rockford to visit the Time Museum and the observatory of the Rockford Amateur Astronomers.

At the October Banquet the Treasurer announced that PAC had exceeded the goal for the purchase of the new lens for the 5-inch refractor. Jerry Schroeder was awarded Member-of-the-Year.

Elections that December gave the new officers for 1996-97

President:	Paul R. Castle
Vice-President:	Roberta Wright
Secretary:	Cindy Kulhavy
ALCor:	Robert Custer
Treasurer:	Gene Harding

Our 60th Anniversary Year

Early in 1995 a 60th Anniversary Committee was formed to plan a very special year for us. The Committee consisted of:

Paul Castle
Marty Cosentino
Robert Custer
Roy Gustafson
Darrell Hagerman
Cindy Kulhavy
Donna Schroeder
Jerry Schroeder
Roberta Wright

Normally the month to month programs of the club are given by PAC's own members, and only occasionally is there an invited speaker from the outside. The committee decided that this year would be different. PAC would try to get as many guest speakers as possible. After a considerable amount of work, the year's roster of meetings came out like this:

January kicked off the year with a look back at the history of the club in slides. A real trip down memory lane.

February introduced the first guest speaker. Dr. Cecelia Vogel of the Physics Department of Augustana College brought a special update on the findings of the Galileo Jupiter atmospheric probe.

The March meeting was held on a special day so PAC would be able to have NASA Lunar Certified teacher, Jan Gustafson, bring her program on Lunar materials. She brought with her samples of Lunar rocks and soil.

April was a demonstration of the greatly expanded capabilities of the John Deere Planetarium courtesy of Dr. Mel Peterson.

In May the speaker was award-winning science teacher, Carol VanDeWalle, who demonstrated some of the techniques she uses to teach astronomy to children.

Don Anderson, retired physics instructor at Black Hawk College, treated the members in June to beautifully colored spectrums when electrically excited gasses were viewed through diffraction gratings.

July brought an update on the appearance of Comet Hale-Bopp by president Paul Castle. A book sale organized by Donna Schroeder enriched the club's Dark Sky Site Fund.

August was, of course, the traditional viewing of the Perseid Meteor Shower, a spectacle unhampered by the weather or a bright Moon.

In September, Dr. Mel Peterson presented a movie, a tour of the world's major observatories. Dr. Peterson was also elected an Honorary Member.

October is Banquet month and PAC's favorite speaker, Dr. Harry Nelson, brought some reminiscences and amusing stories from the early days of the club. Marty Cosentino became Member-of-the-Year.

November was a special presentation just for club members of "The Season of Light; a planetarium show concerning the Star of Bethlehem.

December was a "Show and Tell." Club members gave a variety of short programs from "Constellation Reports" to showing off special astronomical collections.

Other Anniversary Year activities included the ordering of lapel pins with the club logo, the use of gold labels on all club newsletters and correspondence announcing PAC's 60th year, and special bound booklets handed out at the club banquet. These booklets included letters of congratulations from past club presidents, from Astronomy magazine, and from Dr. Conrad Bergen doff, President Emeritus of Augustana College.

Other events, not really connected with the anniversary but held that same year, included an astronomy display at the Rock Island Arsenal's Armed Forces Day Open House, and another display at the Humanities Conference at Black Hawk College where the guest speaker was the well-known science fiction writer, Ray Bradbury.

Little did the club know when the planning began the year before that a sky spectacular would also occur in this special club year. It was almost as if the universe itself was celebrating with PAC.

January 30, 1996 Japanese amateur Yuji Hyakutake, using a set of large binoculars, discovered a comet. On calculating the comet's orbit, astronomers found that it would put on a great show. In March the comet swung past Arcturus on a speedy northward route that caused it to become a circumpolar object. Its brightness and tail length exceeded even the most optimistic predictions. On March 19 it shone at 2nd magnitude and displayed a 5° long tail. By the 25th, its closest approach to Earth, it shone at a -0.5 and its tail stretched some 50° across the sky. The object was unmistakable (though much less pronounced) even right in the middle of the Quad-Cities! For a short, while during PAC's anniversary year, astronomy got the media's attention. PAC members gathered in little groups throughout the area to witness what may have been a once in a lifetime spectacle.

PAC members considered a bright comet a fitting conclusion to the Popular Astronomy Club's first sixty years.

The Search Goes On

Our seventh decade opened with the continuing tale of trying to find a piece of property on which to build an observatory. This time we were negotiating with the Rock Island Park and Recreation Board for an observing site at the Highland Springs Golf Course. Talks had been going on for several months beginning in December of 1996. A meeting had been scheduled between the Park Board, Paul Castle and Jerry Schroeder. Other Park business came up and bumped us into January of 1997.

In the meantime, Bob Custer, who had been serving as our Astronomical League Correspondent for the last five years, decided that it was time to step down and let someone else take the position. The club was saddened by his decision for he had done a great job. PAC gave him a big thank you for always being there when he was needed.

The President appointed Lee Farrar to fill out the remainder of Bob's term of office. Lee had been very active in PAC, attending the previous two Astronomical League conventions. Lee had graduated from Wisconsin State University with a double major in Physics and Business Administration, had owned several telescopes and had earned the League's Lunar Observing Certificate. He was currently working on the Binocular Messier and Double Star Certificate.

In the opening months of 1997 Mars was approaching its opposition of March 17th. It would be subtending an angle of only 14.2 arcseconds so the planet would not be large as oppositions go. However this time the red planet would be at least 54 degrees above the horizon, which was up and out of the lower atmospheric murk. For seven nights Paul Castle opened his backyard observatory for club viewing.

When January arrived, Jerry Schroeder and Paul Castle presented the club's case for an observatory at Highland Springs Golf Course. Both of them felt that the information they gave was well received by the Park Board. The Board complimented them on their presentation. The next step, that of walking through the golf course with Jack Fogel, Park Director, was scheduled.

By now, Comet Hale-Bopp was beginning to make a spectacular appearance in the sky. The PAC Board felt this comet presented a good opportunity to get members acquainted with Highland Springs, With the Park Board's approval PAC scheduled comet observing at the golf course, Letters were sent to the media advertising the event. Three successive week-end comet observing sessions were planned in April on Friday, Saturday and Sunday evenings. Members were asked to supply telescopes.


Some of the designated times were clouded out or snowed out, and all were quite chilly, but the club felt that the number of telescopes provided, and the eighty or so members of the public that showed up made the event quite successful. Members were now familiar with the potential of the observing site.

The club had been considering several ideas for funding the future observatory. One idea was to write a grant request and send it to the Davenport Riverboat Development Authority who, PAC had heard, was seeking ways to dispose of their accumulating profits. Jerry Schroeder volunteered to write the request. PAC teamed later that the Riverboat Authority primarily gave grants only to Iowa-based organizations. "If the observatory was portable and could be taken to Iowa," PAC were told, "funding could have been provided." This portable idea was to bear fruit tater.

Shortly after PAC was turned down by the Riverboat Authority the club received a letter from Jumer's Casino Rock Island. They suggested that if PAC ever considered a fund raising program, they might be able to help. Jerry, the club Treasurer, and Paul met with their representative and the result was the *PAC Dark Sky Benefit* at the Casino Rock Island.

The second Monday of June was chosen for the event. Members were already used to saving that day of the month for club activities. Club members sold dinner and boat cruise reservations and offered raffle tickets on a 3-inch Newtonian reflector as the evening's prize. This telescope had been donated, and members had refurbished for use as a dub rental scope. It had received minimal usage. Raffle tickets were printed and made available to members in books of ten.

Popular Astronomy Club, Inc.	
Name _____	
Add. _____	
City/ST _____	Zip _____
Phone _____	

Popular Astronomy Club, Inc.	
\$1.00	
TELESCOPE RAFFLE	
Chance	
Fund raiser will help build an observatory available for public use.	
PRIZE: 3-inch primary mirror Reflecting Astronomical Telescope complete with star maps. Excellent beginner or young person's scope. Approximate Retail Value \$200.00.	
Drawing held June 9th at Casino Rock Island's Dark Sky Site Bennett Banquet.	
(Bennett Tickets available.)	
	

By the evening of the dinner cruise our members had sold 421 tickets producing a net profit of \$387.11 for the Dark-Sky Site Fund. Forty-six dinner tickets for the dinner netted \$570.30. Passing the hat that night gave PAC an additional \$70.00. This first fund raising effort brought in \$957.41. The winner of the 3-inch scope was Robin Taylor of East Moline.

Another opportunity to publicize astronomy came in March of 1997 when Roy Gustafson and Paul Castle put on a mini-astronomy workshop for *Quad City and Kids Company* children's interactive museum in Rock Island. The topics included 1) The Solar System 2) Comets and Meteors 3) Telescopes 4) Mars. A very nice group of children and their parents were present, and all showed interest and enthusiasm. Hopefully, some were inspired to take up the hobby.

Some Constitutional Changes

At the March Business Meeting some new membership categories were proposed:

Article 3 – Membership

D. Supporting Membership

Any person with a sincere interest in astronomy and a desire to contribute to same, may be admitted to membership as a Supporting Member. The Supporting Member has all the rights and privileges of General Membership but also includes appropriate additions as determined by the club. (Supporting Members would pay twice the base dues rate.)

E. Sustaining Membership

Any person with a sincere interest in astronomy and a desire to contribute to same, may be admitted to membership as a Sustaining Member. The Sustaining Member has all the rights and privileges of General Membership but also includes appropriate additions as determined by the club. (Sustaining Members would pay four times the base dues rate.)

F. Patron Membership

Any person with a sincere interest in astronomy and a desire to contribute to same, may be admitted to membership as a Patron Member. The Patron Member has all the rights and privileges of a General Membership but also includes appropriate additions as determined by the club. (Patron Members would pay six times the base rate.)

The new membership categories were created primarily to make it easier for members to financially donate to the club. Tax receipts would be offered for the appropriate amount in each category.

The proposal also outlined what each of these higher cost membership categories would receive as additional membership perks. They ranged from a subscription to *Abram's Sky Calendar* to free use of the club observatory. The proposal was voted on at the next Business Meeting, held on month early in May. (June was taken up by the Rock Island Casino fund raising dinner). The proposals passed.

Opportunities

While PAC was still waiting to hear from the Rock Island Park and Recreation Board, two extraordinary opportunities came its way in the Spring of 1997.

On April 3rd the University of Iowa, in partnership with the Planetary Society, presented a seminar entitled – *Galileo: The Adventure Continues*. Tickets were free but had to be reserved ahead of time. PAC had very short notice and only those who were present at the March meeting had the opportunity to get tickets. Fourteen PAC members and friends were able to attend the lectures which were held at the University of Iowa. Dr. James Van Allen led the series which included several top-ranked astronomers. The talks concluded with a panel question and answer session.

The second opportunity came from Yerkes Observatory in Williams Bay, Wisconsin. Yerkes was commemorating its 100th Anniversary. As part of the celebration they were offered use of the 40-inch refractor (the largest in the world) for observing sessions to astronomy clubs in the region. Groups were limited to 15 people. Interested clubs were to submit a proposal for what they wanted to observe. The proposals would be reviewed by Yerkes's director and the clubs with the best proposals would have the opportunity to visually use the 40-inch. Several of our members formed a proposal committee. We needed to select a list of objects that we wanted to observe during a 2-hour window anytime between May 26th and the 31st.

The proposal was accepted! PAC was assigned a time slot of 9:00-11:00 PM on the 30th of May. Fifteen people were selected by pulling names out of a hat of those 24 who indicated that they wanted to go.

The club members arrived at the observatory shortly before 9:00. After a comprehensive tour the dome was opened to discover – CLOUDS! After hanging around for a while, most of the PAC members gave up hope. The observing time was over and another club was arriving. A van full of disappointed members headed home. Bob Custer, who had driven himself, and Jay Cunningham who had ridden up with him, decided to stay on for a while. By 2:00 AM, as members of the Chicago Astronomical Society arrived, some stars started to poke their way through the "Wisconsin Nebula." With permission of the CAS, Bob and Jay tagged along. The night cleared increasingly and the one word which kept popping up in Bob's conversation for a long time after that was "WOW!"

The Search Boggs Down

By October of 1997 things were still in flux regarding PAC's agreement with the Rock Island Park and Recreation Board and request for observatory space. The Board's Director, with whom PAC had a good working relationship, announced his retirement. A considerable amount of time passed as the Park Board sought a replacement. PAC eventually discovered that Mr. Fogel's leaving essentially killed the talks.

Meanwhile, Paul was urged by Kitty Cosentine, the wife of PAC member Marty Cosentine, to contact Tom Stalf, the director of Niabi Zoo. Kitty was a member of the Niabi Zoological Society. She felt that perhaps the zoo would be interested in an observatory. Contact was made.

Tom was very interested in having an observatory on the zoological grounds. He and Paul walked around the Zoo and found what they felt was an excellent location. There was a large grassy area on one side of the parking lot that had a good horizon and reasonably dark skies.

The Zoo was tied in with the Rock Island County Forest Preserve District. PAC's intentions would have to be submitted to them. Paul met with a Jim Welling, Forest Preserve Director. Mr. Welling seemed quite willing to hear the proposal, and he personally liked the idea. But he had to check with the States Attorney before submitting the proposal to the whole Board. Ted Davies, Chairman of the Board, told PAC that he personally would like to see an observatory on the zoo grounds. He knew the Zoological Society was for it, and he had also received several letters from the community in favor of the proposal. Mike Millar, the States Attorney, received the material on the request the week before Thanksgiving.

The next thing the club knew, someone had retired in the States Attorney's office and the whole department was being reorganized. We were reassigned to attorney Ron Stradt. A conversation with him

made it evident that all parties involved wanted to make this thing work. A sample agreement was typed up and sent for the club's perusal.

The proposed agreement (received early in 1998) from the Rock Island County Forest Preserve District was disheartening. There were several points induced that PAC felt were not in the club's best interest. More than that, however, the District felt that if an observatory was to be built it needed to be first class and needed to include sanitary facilities and handicap access. PAC agreed that was desirable but concluded the addition of these items would price the facility out or reach. The District also wanted any contract between themselves and PAC to be good for an *indefinite* time period. This term was not acceptable. Paul asked the Board for a commitment of at least five years. The District felt this was too long. They had received interest from another group to use the same area and this group had financial backing. Most of the club members felt that even a five year commitment was not enough. PAC and the Park District had reached an impasse.

December 1997 was an election month. Uncontested offices were: President, Secretary, Treasurer and ALCor. Running for Vice-President were Mark Zell and Dr. Robin Hall. Roberta Wright, who had held the V.P. position for the previous six years had served admirably, taking on several responsibilities that made life a little easier for the President. Mark Zell was elected the new Vice-President.

Things Begin Looking Up

The Dark-Sky Site Fund continued to grow. In May of 1998 a book and video sale was held with proceeds going to the fund. Through the generosity of Jerry and Donna Schroeder 49 books and 27 video tapes had been donated. In addition, a 4.5-inch Celestron Newtonian reflector, previously, given by an anonymous donor, was offered for sale. The total received from the telescope and the books was \$344.00.

In September of the previous year, we had received a letter from Alan L. Egly, Executive Director of the Rauch Family Foundation I, Inc. of Rock Island, stating that the club had been awarded a \$1000.00 grant to put toward a public observatory. Members were elated but apprehensive, since the money had to be used within one year. Acquisition of property was continuing to drag on. PAC asked for, and received, a year's extension on the grant.

It was at this point that members remembered a statement made by the Davenport Riverboat Development Authority - *"If the observatory had been portable, we could have funded it."*

The PAC Board asked Jerry Schroeder to write another grant proposal, this time for a *Mobile Observatory!* One that could be taken to the people instead of making them come to the club! The Board was thinking in terms of a 14x7 foot utility trailer and a 6-foot rotating fiberglass dome housing a 12-inch telescope. The Board estimated the project would cost \$20,500. Jerry wrote it up and the idea would be laid out before the club at the September 1998 Business Meeting.

In the meantime. Mark Zell had an idea. Why couldn't the club hold a telescope building class? Something like this could be used to get some media attention. The club agreed, and articles were sent out to the media. To get the idea rolling, PAC agreed to purchase a 4.25-inch telescope kit from Star Gazer Steve. A three person leadership team would assemble the demonstration scope and afterward the same builders (now experienced!) would lead the class members to build their own scopes using similar kits. PAC would throw in complimentary one-year memberships to each of the class members. Mark Zell, Bob Custer and Marty Cosentine volunteered to be the leaders. The individual class members would be responsible for sending for their own kits.

The demo scope was assembled in Paul Castle's garage and put on display at the July meeting. The class itself needed more space. New Hope Baptist Church in Coal Valley donated their basement / recreational area. The class was publicized to all of members and press releases were sent to the

newspapers in the area. It was advertised: "A GREAT FAMILY PROJECT! Build it in a day! Requires only basic tools! All components will be supplied! View the stars, Moon and planets!"

Six scope-building families or individuals responded, and the class was held on Saturday, July 24th. With Mark, Bob and Marty's supervision, all six telescopes were successfully completed in that one day. It was up to the individuals to paint or make any cosmetic improvements on their own.

A year later the builders were asked to report briefly at a club meeting on their experiences with their new scopes. Those who responded were quite happy. At the September 1998 Business Meeting the main topic of discussion was the problem with the Niabi Zoo agreement. Paul related a conversation he had with members of the Naperville Astronomical Society. They reported on their observatory on county grounds and their ongoing battles over various issues. They recommended that PAC NOT build on county property. The Board then presented their Idea of a grant funded portable observatory. The following is taken from BUSINESS MEETING NOTES in the October newsletter:

"Insurance would be cheaper on a mobile observatory and we would not have to provide restrooms. Roy Gustafson has offered to store the observatory on his property in Orion when it is not in public use. Members could use it there. Members felt that we could afford any regular maintenance. It could be taken to schools and churches as well as to other public gatherings, bike paths, parks, parades, etc. If the grant comes in for this idea, it would supersede the permanent facility at Niabi. However it was felt that communication should be kept open Niabi so in the event the Mobile Observatory comes to pass, perhaps we could use Niabi as one of its place of public use. The members voted to accept the motion that we submit the proposal."

So it was that the grant request to the Davenport Riverboat Authority which did not come to pass gave us the idea of a portable observatory. PAC began pursuing other funding sources.

At this point Paul received a telephone call from a member living in Muscatine, Iowa, Gene Evans. Gene knew some of the people who were in charge of the charitable giving for the Roy J. Carver company. He felt PAC should send a grant request to them. Gene even volunteered to hand deliver it. Paul took the riverboat request and reworked it, coming up with this:

Dr. Troy Ross, Administrator
Roy J. Carver Charitable Trust
Muscatine, IA 52761

Dear Dr. Ross,

THE NEED

The Popular Astronomy Club Inc. is seeking capital funds to purchase a 14 foot trailer, an observatory dome to attach to the trailer, a Meade 12-inch LX200 telescope, and the accessories needed to adapt the dome and trailer into a *mobile* observatory.

THE REASON

The mobile observatory will offer educational and recreational astronomical viewing opportunities throughout the eastern Iowa and northwestern Illinois area.

We know there is presently other observatories within the two state area. But they all require the viewing public to travel to them, sometimes over a considerable distance or with a considerable amount of difficulty, such as driving on lonely or unimproved roads at night. We want to be able to offer viewing opportunities from a variety of viewing locations. We intend to take the observatory to those who could not or would not come to us. Schools, in particular, lack the means and opportunity to offer their students hands-on education in astronomy. The Popular Astronomy Club's stated

purpose is public education. A mobile observatory will fill the need for an accessible place for students and other interested viewers to observe the night sky and, with the proper equipment and supervision, to observe the Sun during the day.

Popular astronomy is more than recreation, though it is also that. Amateur astronomers have made significant contributions to the field of astronomy over the years, such as the recent discovery of comet Hale-Bopp. A mobile observatory within the eastern Iowa-northwest Illinois area enhances the possibility that local amateur viewers have the opportunity to continue in this tradition, but more importantly, we have the possibility of inspiring the next generation of astronomers.

THE TARGET POPULATION

A mobile observatory will make it possible for the Popular Astronomy Club to widen its astronomy education, allowing schools, community groups, retirement villages, nursing homes, scouting organizations, churches and other interested public viewers to have their eyes opened to the wonders of the universe. We anticipate that through a variety of programs and educational opportunities, as many as 7,000 to 8,000 viewers a year will benefit from the mobile observatory.

THE UNIQUE ELEMENTS

The mobility of the observatory means that we can take viewing to the public rather than expecting the public to come to us. We are committed to serving both sides of the Mississippi river. Although based in Rock Island, Illinois, we currently have members from many other communities, including Muscatine, Port Byron, Coal Valley, LeClaire, Orion, Iowa City, Davenport, Moline, Bettendorf, Silvis, East Moline, Milan, Eldridge, Cordova, Hampton and Dixon. We intend to make the observatory available to these and many other communities that would otherwise not have access to an astronomical facility. We have many skilled and committed members available and willing to fulfill the goals of this project.

We have enjoyed a fruitful and positive working relationship for many years with the Boy Scouts, the Girl Scouts, various school districts, civic organizations and churches, providing telescope viewing, talks and astronomy classes. The Popular Astronomy Club Inc. has provided these services for more than 60 years. You can see that the club has had a long standing, stable existence. We are proud of our record, however, we are convinced that a mobile observatory will not only be efficient, but allow for a wider audience that can be had when depending on individual members volunteering their own vehicles and telescopes.

THE PROGRAM

Upon completion of the mobile observatory we plan to develop an extended viewing schedule which would include at least one publicized public viewing a month. We would also seek out of various civic, service and religious organizations in various communities who would be interested in requesting observing sessions for their groups. When the observatory is not scheduled for public use our members would be allowed to use the facility for their own observing programs.

THE EVALUATION

The Popular Astronomy club will be keeping records of the groups, individuals, adults, children, etc. that use the facility. These will be used for the purpose of evaluating the mobile observatories operation to help us improve its use. We and would be happy to report these results to you on a regular basis if you desire. We are also prepared to develop a report on its construction, complete with photographs. We will welcome Roy J. Carver Charitable Trust officials to an open house upon the observatories completion, and, of course, to all subsequent viewing opportunities as appropriate. We would either mount a plaque or paint a sign on the trailer giving credit to the Roy J. Carver Charitable Trust for the funds used to make the observatory possible. We will also give recognition in

appropriate documents and correspondence, including press releases advertising viewing events, and so forth. We can also give you credit verbally at public viewings.

THE BUDGET

The following is based upon the research of our Board of Directors. They have contacted the various manufacturers whenever possible, and believe the figures are as accurate as possible.

Trailer and options	\$5,750
Telescope and access	\$5,450
Fiberglass dome	\$2,650
Cabinetry	\$1,800
Solar power kit	\$1,500
Telescope pier fabrication	\$1,300
Insurance (one year)	\$800
Sign painting	\$750
Trailer license (one year)	\$50
TOTAL	\$20,050

If you have any questions please feel free to contact either of us below. Thank you so much for considering this proposal.

Paul R. Castle, President Gene W. Evans, Consultant

In the middle of February, PAC received the following letter from the Roy J, Carver Charitable Trust:

Dear Mr. Castle,

Thank you for your request of \$20,050 to support the creation of a mobile observatory unit to be operated by the Popular Astronomy Club of Rock Island, Illinois. Your request will be considered at the next meeting of the Board of Trustees scheduled for April 16, 1999. Shortly after that date you will be notified in writing of the Board's decision,

Sincerely,
Julie Bauer Cook
Program Officer

In the April 1999 issue of REFLECTIONS, we members were asked to keep their fingers crossed!

ADOPT-A-STAR

At the previous June Business Meeting, Vice President, Mark Zell proposed an interesting method of raising funds for the observatory project. He called it Adopt-a-Star.

The club knew that only the Astronomical Union could actually name astronomical objects. It was aware of companies who fraudulently claimed to be able to do so. However the Adopt-a-Star program would be plainly marketed as only a fund raising project. He proposed it would work like this:

For a \$20.00 donation one could *adopt* a 3rd magnitude star and the adopter will receive a Certificate of Adoption and a planetarium with their star highlighted.

For a \$ 100.00 donation one could adopt a 2nd magnitude star and the adopter will receive a Certificate of Adoption, a planetarium with their star highlighted, and a 16 x 20 *Spotlight Print* from Sky Publishing of their choosing.

For a \$500.00 donation one could adopt a 1st magnitude star and the adopter will receive a star chart with their star highlighted, a Certificate of Adoption and information about their star and its constellation - all matted and framed, a really nice decoration for the den or office.

Samples of the promotions were made up for the club to view. For each \$20.00 star the club would make about \$15.00. For each \$100.00 star the club would clear approximately \$74.00 and for each \$500.00 star the club would gain about \$450.00. The proposal passed. Leaflets were designed to be distributed among the members and also given out to the public at club events. The idea was picked up by the media and a couple of nice articles appeared in the local papers. The first star, a 3rd magnitude one, was soon adopted by a Davenport woman for her brother's Christmas present.

Shortly afterward a letter arrived:

April 19, 1999
Mr. Paul Castle
Popular Astronomy Club

Dear Mr. Castle,

On April 16th, the Board of Trustees of the Carver Charitable Trust met and considered your request of \$20,500 to support the creation of a mobile observatory unit. I am pleased to inform you that your proposal was approved in the amount requested.

The news came too late to get in into the April newsletter so the July 1999 issue of REFLECTIONS had in large headlines

OBSERVATORY FUNDS GRANTED!

This grant, plus the \$1,000.00 already received from the Rauch Family Foundation I, Inc. and the approximately \$3,000.00 in the Observatory Fund brought the total available resources for the project to \$25,050.00.

The check from the Carver Charitable Trust was mailed to PAC on April 30th with best wishes for the success of the effort. The first purchase was a 12-inch LX-200 telescope and related equipment through Camera Comer in Davenport, Iowa. It arrived on June 8th. By July a down payment had been sent to the Wells Cargo Co. for a custom-made trailer, and the club had ordered our 6-foot dome from Technical Innovations. Also purchased was a Thousand Oaks solar filter from Astronomics out of Norman, Oklahoma. Things were really beginning to fall into place.

DR. NELSON HONORED

Earlier in 1999, as they do every year, the officers of the North Central Region of the Astronomical League had sent out letters to all the regional clubs asking for nominations for the NCRAL Member of the Year. Considering all of the things that Dr. Harry Nelson had done to promote astronomy through the years, Paul Castle decided to nominate him. To do this he asked for the help of co-members Cliff and Arlene Newman who had known and worked with him for many years.

A letter of recommendation was sent, and PAC was very pleased to discover at the Regional Convention in May that Harry had indeed been honored with the award. Paul Castle gratefully accepted the plaque for Dr. Nelson. Harry was presented with the honor at a dinner given for him at the home of Cliff and Arlene Newman. Dr. Nelson expressed his appreciation in this letter:

"There are awards which are coveted, meaningful, and treasured. When the recipient is honored by his peers in this way, he is prepared to display the award prominently, and continues to discuss its significance and its qualifications. I am proud to accept the award for Outstanding Contribution to Amateur Astronomy, and have mounted it in most favored place on the east wall of my home library. Thank you for this 'star-studded' award. While others admire this plaque, I have the opportunity to stand back and 'glow.'

BUILDING PACMO

A call went out to the membership for anyone who wanted to help put everything together. Charley and Lois Pippert, parents of Secretary, Cindy Kulhavy (soon to be Cindy Springer), graciously volunteered to let PAC begin the assembly process in the air-conditioned warehouse of their business, The Caprock, in the Milan Industrial Park.

Air-conditioning was important, too! The HD-6S Homedome arrived on July 25th just in time for the summer heat to arrive in earnest. Jay Cunningham, Cindy and Paul were there to help unload the dome in its big packing crate from the delivery truck. With his camera Lester Taylor proceeded to document the process and continued to make a photo record through the entire construction of the mobile observatory. The dome crate was too big to lift off of the truck, so those assisting opened the box while it was still on the truck bed and carried it into the Cap-Rock piece by piece.

Assembly began on July 29th with Paul and Cindy doing the final unpacking and initial fitting of the fiberglass pieces. Marty Cosentine joined the crew the following week and, by August 9th the assembly was completed. In total, it required some 40 hours. It really looked good, and all were pleased with how easily the dome rotated.

On August 11th the trailer arrived at the Wells Cargo dealership in Rock Falls, Illinois.

The ordering procedure of the custom-built trailer had been a long one. The process had begun back in September of 1998 when PAC requested pricing information on Wells Cargo trailers. This company had been recommended as producing quality trailers. A flat roof, 14-foot, single-axle CargoWagon was chosen as the best vehicle for the proposed observatory. Sketches were faxed to Barbara Snyder, the sales representative who worked with PAC throughout the entire process. She would take the sketches to their engineers, who would then make preliminary engineering drawings to be sent back to the club. This process went back and forth several times until both parties were satisfied as to what was desired and what would accomplish the task.

The club had considered doing its own modifications to the trailer but soon found that the Wells Cargo company would make those same modifications for a very modest cost. They had to reroute some floor joists and then cut a 36-inch square hole in the trailer floor for the telescope pier to reach the ground. Then a hatch had to be fabricated to close the hole for trailer transport. The roof directly above the hatch had to be reinforced to hold the weight of the dome, and a 6-foot diameter hole had to be cut in the roof in that reinforcement. PAC was quite happy to leave all this fabrication up to Wells Cargo.

Paul and Jay traveled to Rock Falls on the 16th of August and picked up the trailer. That evening, the PAC Board members were invited over to the Caprock to get their first look at the trailer and the completed dome. Work on the trailer began on the 19th.

Here are a few notes on the assembly process:

August 20	Completed the trailer floor hatch.
August 23	Drew up plans for the observing deck.
August 26	Lumber picked up.
August 27	Ordered storage cabinets.
August 30-31	Stationary floor joists assembled.
September 1-2	Observing floor decking and trim.
September 4	Interior sanded for painting.
September 7	Removable floor joists completed, hole cut in roof.
September 9	Primed interior, built observing deck step.
September 10	Finished inside paint, picked up cabinets.
September 13-21	Installed storage cabinets.
September 14-17	Installed carpeting and trim.
September 20-23	Finished cabinets, worked on safety railings.
September 23	Put dome's weather seal on trailer top.
September 25	Installed dome on top of trailer.

Installing the dome on top of the trailer posed some problems. The dome was not too heavy, only 150 pounds, but it was big and awkward. How could it be lifted up on top of the trailer roof which was some eight feet high? At first some thought the dome would have to be disassembled and re-assembled on the roof. The dome operated so well, however, and many were worried about messing something up in the re-assembly process.

Charley Pippert came up with a viable solution. He had a very long wooden ladder which could be leaned against the trailer forming a ramp on which to slide the dome up and onto the roof. Several club members would have to wrangle it up there!

On the scheduled day, nine members arrived, determined to get the dome up on the roof. Our previous worries were unfounded. It went up very easily.

September 29	Added padding around dome, literature racks and various trim installed.
Sept. 30-Oct. 5	Countertop installed.
November 13	Picked up the telescope pier

The story of the telescope pier is yet another interesting one.

A mock-up of the trailer floor hatch was built out of wood, duplicating the size of the opening and its height from the ground. The pier was to be designed to lower down through that hole so that its tripod-like base rested upon the ground. Yet, the pier needed to have enough height to raise the telescope to the correct viewing level. Unfortunately, if the pier were made in one piece, it would be too long and too heavy to set up. Several designs were tried on paper, and then a cardboard mock-up was built.

Satisfied with a workable design, the next step was to find a metal-working company which could build the pier. After some difficulty finding such a company, club member Al Sheidler came to the rescue. Through his job he had had previous contact with the Bohl Machine & Tool Company of Milan, Illinois. Bohl had a reputation for good work and good pricing. Al took Bohl the pier design to Bohl and asked them if they could make the pier for us. They replied that not only could they make it, but they would start on it right away since it was their slow period of the year. Within a few weeks the fabrication was completed. They even painted it.

The last remaining part of the observatory yet to be done was the electrical work. This could indeed be the most difficult yet. But again, a club member came to the rescue. Dr. Gerry Pearson had recently

retired from the physics laboratory at the University of Iowa. He graciously volunteered to design and help install all the electrical components.

PAC had originally planning to make the Observatory solar powered, but Gerry recommended against that as being impractical. Instead he suggested an alternative of two of AGM Deep Cycle Batteries plus a built-in 3-stage charger. These components became the core of a very efficient system.

November 22	Battery charger and inverter installed.
Nov. 29-Dec. 1	Batteries installed.
Dec.8-Jan. 19	Electrical components and wiring.
February 16	Trailer towed to Sedlak's Studio for exterior graphics.
February 21	Towed back to the Cap-Rock
Feb.22-Feb. 28	Final touches on interior.
March 3	Taken to Consumers for weighing, then out to Roy Gustafson's.
March 4	FIRST LIGHT.

NAMING THE NEW OBSERVATORY



In 1999, 225 letters had been sent to area schools introducing the Popular Astronomy Club and telling them of plans for building a portable astronomical observatory. Schools were asked to disseminate the information because it was the club's intention to provide the students with hands-on education in astronomy.

Those letters were followed up by ones announcing the NAME THE OBSERVATORY CONTEST. They were told that anyone in school grades three through eight would be eligible to submit a name for the observatory. Each child would need to provide, along with their entry, a short reason for their choice. Submissions had to be postmarked by the first of November, 1999. The club would vote on their favorite

name at the December Business Meeting, and the awards would be presented at the January meeting.

The overall winner would receive a 4-1/4-inch reflecting telescope and a year's free membership in PAC. (The telescope was the one built as a prototype for the telescope making class in July of 1999.) The second place winner would also receive a free membership and a nice astronomy book. Third place would get a set of star charts and also a membership.

We received 216 entries representing 19 classes responding from 13 schools in both Illinois and Iowa. The PAC Board narrowed the suggestions down to six. The six were presented to the general membership. Those present must have been of a conservative bent for the name chosen was the Popular Astronomy Club Mobile Observatory or PACMO for short. Since this was also the working name, PAC didn't have to change anything in the publicity releases! The winning name was suggested by Danny Schaub, a member of Mrs. Collins class at Edward White Elementary School in Eldridge, Iowa. The second and third place winners were also from Iowa.

PAC Officers elected in December 1999 for a two-year term:

President:	Paul R. Castle
Vice-President:	Mark Zell
Secretary:	Cindy Springer
Treasurer:	Roy Gustafson

ALCor:

Dr. Robin Hall

A MOBILE OBSERVATORY ON THE MOVE

A preseason showing of the new observatory occurred on April 11th at the C.R. Hanna Elementary School in Orion, IL. PACMO, accompanied by other members and their telescopes, was on display for the school's astronomy night. It was good practice for the open house which occurred four days later.

Tom Stalf, the Director of Niabi Zoo, had been asked if the club could have the observatory present during the Zoo's seasonal opening event. It would be at Niabi during the day, showing people sun spots, and it would also be available in the evening. Tom readily agreed. The showing went so well that the County Forest Preserve Board agreed to let PAC make it a monthly affair. The PACMO would set up there on each 3rd Saturday from sunset til midnight.

The open house theme was "Looking to the Future." To help PAC celebrate, a full-scale replica of a futuristic space shuttle from the popular television show *Star Trek: The Next Generation* was on hand. Cliff Mueller of Taylor Ridge, Illinois, had been asked to bring his prize-winning shuttlecraft. It proved to be a very popular exhibit for both young and old.

180 persons went through the observatory the day of its open house.

On May 2 the PACMO had its second school use at North Scott Jr. High in Eldridge, Iowa. Fifty-seven enthusiastic young people gave PAC a flavor of the public's interest to come. Before the Summer was over PACMO had traveled to two more schools, a golf course in Muscatine, Ben Butterworth Parkway in Moline, three more evenings at Niabi Zoo, and a Moline church. All of these showings, plus our own two PAC meetings at the Gustafson's, contributed to over 900 people visiting the PACMO during the first half of the year 2000 viewing season.

PAC was fortunate to have Roy (Treasurer) and Jan Gustafson volunteer to keep the PACMO on their property near Orion, Illinois, when it wasn't being used elsewhere. The club members were familiar with Roy and Jan's because both the 1999 club picnic and Perseid Watch had been held at their home. Their place was favored with nice skies in spite of being located within a reasonable driving distance from the Quad Cities. A barn provided PACMO storage during the worst winter months.

The Popular Astronomy Club would be entering a new century in 2001 and with it the club was ready to begin a new era of astronomy education. "The purpose of the club," Dr. Carl H. Gamble once said, "was to gain knowledge of the universe." The club looked forward to continuing that tradition.

MEMBERS OF THE YEAR

✧Instituted in 1984✧

- 1984 Robert Tracinski
- 1985 Robert Tracinski
- 1986 Cindy Kulhavy and Don Anderson
- 1987 Cindy Kulhavy and Gene Harding
- 1988 Roberta Wright
- 1989 Roberta Wright
- 1990 Larry Fuller
- 1991 Robert Custer
- 1992 Robert Custer
- 1993 Roberta Wright
- 1994 Cindy Kulhavy
- 1995 Jerry Schroeder
- 1996 Martin Cosentine
- 1997 Mark Zell
- 1998 Robert Custer
- 1999 Roy Gustafson
- 2000 Lester Taylor