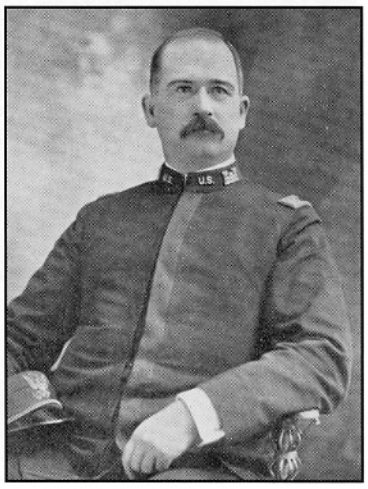
joined the A.S.P. in 1917, and was in his first term as a director in 1921 when he died. His wife, a life member since 1935, had already been a generous donor to Lick Observatory. (A Morrison donation was also instrumental in endowing a planetarium at the California Academy of Sciences.) Her bequest to the A.S.P. recognized "Mr. Morrison's interest in astronomy and...his desire that a knowledge of this subject should be brought within the reach of all persons."

The income of the fund was to be used to provide an annual series of nontechnical lectures, free to the public, to be given in San Francisco or wherever else (originally within California) the Board might decide. In mid-1940 a committee was appointed to arrange for the first series, which began in January 1941 with a talk in San Francisco by Mount Wilson astronomer Walter S. Adams (no relation to Charles) on "What Lies Between the Stars." This talk was repeated in Pasadena and was printed in the April 1941 issue of the *P.A.S.P.* Other lectures in the first series were given by the noted astronomers Edwin P. Hubble and Robert J. Trumpler. These were well received, and the program has continued to provide lectures by astronomers at colleges, amateur astronomy meetings, astronomy conferences, and teacher workshops over the years.

A major boost to the Society's endowment came in 1954 with the receipt of two sizable bequests. The larger was from the estate of Thomas L. Casey, who had been a member of the A.S.P. since 1916. Born in 1857, he graduated from West Point in 1879, and became a Second Lieutenant in the Corps of Engineers; he worked his way up to Colonel, and served on commissions responsible for many river and harbor improvement projects. But he always had strong interests in the sciences, especially astronomy and entomology. He accompanied Simon Newcomb to the Cape of Good Hope in 1882 to observe the transit of Venus, and also calculated orbits for several binary stars. He retired from active military service in 1912, but continued his scientific pursuits until his death in 1925. In his will he left a sizable bequest to the A.S.P., to be transferred to the Society upon the death of his wife. Mrs. Casey died in 1951, and the assets (over $200,000) were transferred in late 1953. This was the largest bequest in the history of the Society and made an enormous difference in its financial situation.



Colonel Thomas Lincoln Casey. Col. Casey's will bestowed the largest single grant to the A.S.P. in the Society's history and eventually made possible the growth of its public outreach services. (Photograph from the October 1925 issue of the Publications of the A.S.P.*)*

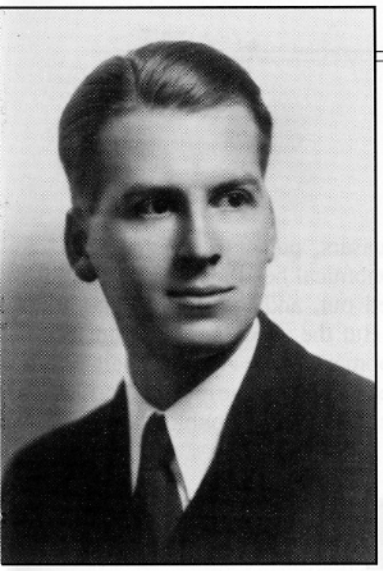
The second bequest came from Louise Ware. Miss Ware had graduated from Vassar College in 1902, and worked for a few years at the Yerkes Observatory before coming in 1906 to the new Mount Wilson Observatory in Pasadena. She worked there as a "computer" (back when astronomical calculations were done by hand or by using adding machines) until her retirement in 1942, measuring the wavelengths of absorption lines in the Sun's spectrum and determining stellar brightness with one of the first microphotometers (very sensitive light-measuring machines) at the Observatory. Upon her death in 1953, she left an amount in excess of $25,000 to the A.S.P., despite the fact that she seems never to have been a member of the Society.

The Ware and Casey bequests gave the Society much-needed capital. When, in the late 1960's and early 1970's, the Board would begin to plan the expansion of the Society's educational programs, the endowment would give them the resources required. As the Society today plans for its second century, the Board is again looking to private and corporate giving as the key to allowing the A.S.P. to continue and expand the educational programs for which the Society has received so much praise.

Chapter 13:

The Passing of an Era

World War II had its impact on the A.S.P. and on American astronomy in general. The education of many astronomy students was interrupted, and professional astronomers left their observatories for work directly related to the war. Some even lost their lives. In 1942 Arthur B. Wyse, a promising young Lick astronomer and a member of the editorial committee of the Society, who had gone to war as a civilian scientist, was killed in the collision of two blimps off New Jersey. His widow requested copies of his *Leaflets* and *P.A.S.P.* articles for their children. Charles Adams, the Society's secretary, arranged for this, donating some of his own copies and making sure that she received everything free of charge.



Arthur B. Wyse. Wyse, a promising young astronomer and member of the A.S.P.'s editorial committee, was killed in a blimp collision during World War II. (A.S.P. archives.)

Robert J. Trumpler. Trumpler's fundamental work on star clusters and the interstellar medium left an indelible mark on 20th century astronomy. He was also a member of the Board of Directors of the A.S.P., and the Society's annual award for an outstanding PhD thesis is named after him. (Photograph courtesy of the Mary Lea Shane Archives of Lick Observatory.)

Summer scientific meetings of the Society ceased until 1946; in 1943 no Bruce Medal was given, due to difficulties in getting nominations from foreign observatories. Membership held fairly steady, however, and began to rise again after the war's end; by the end of 1950 it was up almost 30 percent from what it had been at the beginning of 1946.

In the 1950's the A.S.P. lost several of its long-time and most dedicated leaders. Armin Leuschner, a Berkeley astronomer who had been president of the Society three times, and had received the Bruce Medal in 1936, died at the age of 85 in 1953. Leuschner had joined the A.S.P. as a student at the second meeting in 1889 and was involved in the governance of the Society several times between 1902 and 1943. Two years later, banker and paper company executive James K. Moffitt, a long-time director of the A.S.P., passed away. Moffitt was vice president of the A.S.P. for 15 years and served for many years on the Finance Committee.

The next year, 1956, saw the death of astronomer Robert J. Trumpler, who had left an indelible mark on 20th century astronomy. Trumpler was born in Zürich, Switzerland, in 1886, and developed an interest in astronomy as a boy. His father preferred that he work in business, and he tried banking for a short time, but began to study astronomy formally at the University of Zürich in 1906. In 1910 Trumpler received his Ph.D. at the University of Göttingen, and went to work in Switzerland. In 1915 he came to the United States to work at the Allegheny Observatory, and in 1918 he moved to Lick Observatory, where he remained until transferring to the Berkeley astronomy department in 1938.

Trumpler's best known achievement is his work on the distances and diameters of open clusters of stars, demonstrating the existence of interstellar dust which dims and reddens starlight, making us think the stars are more distant than they really are. He also did some pioneering speculation on the evolution of stars. Trumpler joined the A.S.P. in 1920, and was vice-president in 1931, president in 1932 and 1949, and a director for seven terms between 1931 and 1953. After his death in 1956 his widow made a gift to the Society which, in 1958, led to the establishment of the A.S.P.'s Trumpler Award, to be given to a young astronomer who would deliver a lecture at the Society's annual summer meeting. The first Trumpler Award went to George W. Preston in 1963. The award procedure was later revised so that today the Trumpler Award goes to a recent astronomy Ph.D. who has done an outstanding piece of research for his or her thesis (see Chapter 17). Trumpler's influence also continues to play a role in Society affairs in the person of his Ph.D. student (and son-in-law) Harold Weaver, who has been an important leader and catalyst in the expansion of the A.S.P.

At the same time that the leadership of the Society was changing, the A.S.P. was in the throes of changes caused by a growing professionalization. In 1949 the *Publications* contained 52 percent nontechnical material; as the practice of astronomy changed more and more into astrophysics, with observations using nonvisible radiation (such as radio waves), and with new instruments on Earth (and eventually in space), many of the research papers became quite technical and not easily read by the lay members. Increasingly, the A.S.P. seemed, at least to some, to be more hospitable to the professional scientists. The members of the Board were now nearly all professional astronomers, whose interests were mainly in the research realm; no lay person had served as A.S.P. president since Benfield in 1926.

As a step towards countering this trend, an affiliation of the Western Amateur Astronomers with the A.S.P. took place in 1951. This arrangement, in a way, formalized the interaction between professional and amateur astronomers begun by Holden and Burckhalter back in 1889, and guaranteed a seat for amateurs on the A.S.P. Board.

Local amateur astronomy clubs had grown up in many cities of the United States; in the west the earliest may have been Oakland's Eastbay Astronomical Society, founded in 1923 and still active today. Across the nation, some of these societies had felt the need for a national organization as early as the 1930's, and in 1939 a group of 300 amateurs had met and drafted plans for such a group. Charles A. Federer, editor of the magazine *The Sky* (soon to merge with *The Telescope* and become *Sky and Telescope* in 1941) was a strong supporter of such an organization and helped publicize the idea in his magazine. After a hiatus due to World War II, the Astronomical League became official in

1946 and held its first meeting in 1947, with 32 member clubs and several organized geographical regions.

Due to some personality conflicts and perhaps to their great distance from the majority of the Astronomical League's clubs and activities, some of the western societies felt a need for closer communication among themselves, and the umbrella group known as the Western Amateur Astronomers was founded in 1949. Thus it was that in 1951 the A.S.P. received a proposal from the W.A.A. that they should become affiliated with the Society. After discussion, the A.S.P. Board agreed to this affiliation, and modified its bylaws accordingly in 1952. One A.S.P. Board member would be selected by the W.A.A.; the A.S.P. would help the amateur societies in obtaining speakers for their meetings, and would announce amateur meetings and activities in the *Publications*. In return, the W.A.A. urged its members to join the A.S.P., and asked each member society to buy a bulk supply of *Leaflets* to distribute to its members.

Harry L. Freeman, of the Los Angeles Astronomical Society, was the first W.A.A. representative to the A.S.P. Board; when he died in less than a year, Harold W. Milner of Palo Alto replaced him, and subsequently a number of distinguished amateur astronomers have ably represented the W.A.A. on the A.S.P. Board. Several of the recent A.S.P. summer meetings have been held jointly with the W.A.A. and other amateur astronomy groups, and amateurs continue to contribute useful data to astronomy in such areas as observations of variable stars, sunspots, planetary features, and discoveries of comets and novae. The Society recognized these contributions in 1978 with the creation of its Amateur Achievement Award.

In 1989, as part of the general expansion of the Society's activities on the national level, the A.S.P. Board broadened the amateur representation on the Board by allowing nominees for the amateur position not only from the W.A.A. but also other large amateur groups in North America.

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At the same time that the Society was reaching out to amateurs, its leaders began to expand the Society's work in public education. A prophetic step was the creation of an A.S.P. astronomy film library in 1963. Board member George Perkins (the W.A.A. representative) took charge of this project. Films could be borrowed by schools, colleges, or amateur astronomy clubs, for a rental fee of $3.00. By the end of 1964 eight films were available; two more were added in 1968. An article about the film program in *Sky and Telescope* for January 1965 caused a surge of activity, and Perkins reported to the Board in May 1965 that "Since then we have had a difficult time filling all requests. All films are out constantly."

By 1969, as the films themselves began to age and new discoveries about quasars, pulsars, and distant galaxies grabbed the astronomical headlines, requests for the older films petered out, and the library was eventually discontinued. But the success of the film library inspired the development of the A.S.P.'s mail-order catalog, which has become one of the most important ways in which the Society serves the public today.

Chapter 14:

The 1960's: Changes in the Wind

The 1960's brought new challenges and opportunities to the A.S.P. One of these concerned the *Publications*, which suffered from several problems. A change of printers in 1963 led to delays which were increased by a typesetter's strike, so that the *Publications* appeared at least a month late. The editor, Katherine G. Kron, also complained that authors seemed reluctant to contribute papers, and issues had been held up for lack of suitable material. Time and more active solicitation of papers cured this problem so that by 1968 "...the supply of willing authors and timely subjects [was] greater than the journal's capacity."

That same year, the Board decided to increase the number of pages, and to publish review articles, with

Katherine G. Kron and D. Harold McNamara, the two most recent editors of the Publications of the A.S.P. *(Photo by A. Fraknoi.)*