**Memorial Resolution of the Faculty of the University of Wisconsin-Madison**
**On the Death of Professor Emeritus Robert C. Bless**

Robert Charles Bless, professor emeritus of astronomy, died at home on November 29, 2015 three days short of his 88th birthday, in the company of his loving family. He was born in Gainesville, Florida, on December 3, 1927. He attended the University of Florida (B.Sc.), Cornell University (M.Sc.), and received his PhD degree in Astronomy from the University of Michigan in 1958. He immediately joined the staff of the Astronomy Department of the University of Wisconsin-Madison and retired from it in 1994 to become Professor Emeritus.

As an innovative and accomplished scientist, Bless's contributions to the UW and to astronomy were truly impressive. He specialized in astronomical instrumental design, construction, and calibration, but was also an inspiring teacher and outstanding administrator.

He was a major contributor to the success of the world's first Orbiting Astronomical Observatory designed to study the universe at ultraviolet wavelengths blocked by the Earth's atmosphere. The observatory contained seven telescopes built at the UW. Launched into space in 1968 and operating until 1973, the Orbiting Astronomical Observatory measured the ultraviolet light produced by hundreds of astronomical objects and revolutionized our knowledge of their physical nature. Bless's primary scientific interests concerned the ultraviolet properties of very hot luminous stars with atmospheric temperatures ranging from 20,000 to 50,000 Celsius.

Bless went on to design and serve as the Principal Investigator of the High Speed Photometer, one of the six instruments aboard the Hubble Space Telescope (HST) when it was launched in April, 1990, after long delays partially caused by the *Challenger* shuttle disaster in 1986. The High Speed Photometer was to perform accurate photometry (< 1 % errors) on faint, variable stars. Unfortunately, an error in the polishing of the HST's primary mirror prevented the use of Bless's instrument, but a compensation for the mirror's erroneous figure has allowed the HST to become the most scientifically successful observatory ever created.

Bless established a worldwide reputation from his work on the HST. He was chosen as Chair of the Board of Directors of the Gemini Observatory, an international consortium operating two very large ground-based telescopes in Chile and Hawaii. This Board had the heavy responsibility of deciding the instruments mounted on the telescopes and thereby the nature of their scientific impacts. He served on several important committees within NASA, some requiring his moving to Washington for extensive periods of time. He authored numerous scientific papers and reviewed articles in prestigious journals and books.

He was a dedicated and extremely effective teacher at all levels of university education, as shown by very high student evaluation ratings from freshmen up to graduate students. He authored a popular undergraduate textbook, *Discovering the Cosmos*, that emphasized the contributions of astronomy to the history of Western thinking as well as its fascinating modern discoveries. In addition to teaching astronomy courses he co-taught for many years a course on the history of astronomy and cosmology. He was instrumental in the establishment of Space Place, the public education and outreach program of the Astronomy Department.

His colleagues considered him to be not just smart but (very importantly) wise as well, meaning that he could digest diverse material, determine its broader meanings, and suggest effective

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courses of action if necessary. He served as Chairman of the Astronomy Department for several years, but his leadership role extended until his retirement and even beyond. Upon request, he provided sound advice to subsequent Chairs regarding diverse problems. Perhaps his largest contribution to the department was his counsel and friendship to all of its members, from technicians to senior academics, sometimes acting as mentor or peacemaker and moderator. He was especially important in orchestrating the moving of the department to new quarters when Sterling Hall on campus was extensively renovated in 2002.

He is survived by his wife, Diane; daughters, Jacqueline (Bartlett) and Andrea (Caleb); son, Brandon (Stephanie) and grandchildren, Teolyn, Finch, Luca, and Wilder; sister, Marguerite and her children Alexander, Marguerite, and Lauchlin.

He is sorely missed by his family and those who knew him within the Astronomy Department and the whole astronomical world.

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