

A legacy for Astronomy

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In the modern era of 10-meter class telescopes we should look back and remind ourselves that fifty years ago when the National Astronomy Observatory was being formed, the needs of most astronomers were more modest. The first operational telescopes at what became KPNO and CTIO had only 16-inch apertures, originally for site testing, then later used for photoelectric photometry. While most of us now think only of the Boller & Chivens brand, the first two were apparently designed by Aden Meinel and Bill Baustian and built by the Phemco Corp of Phoenix.



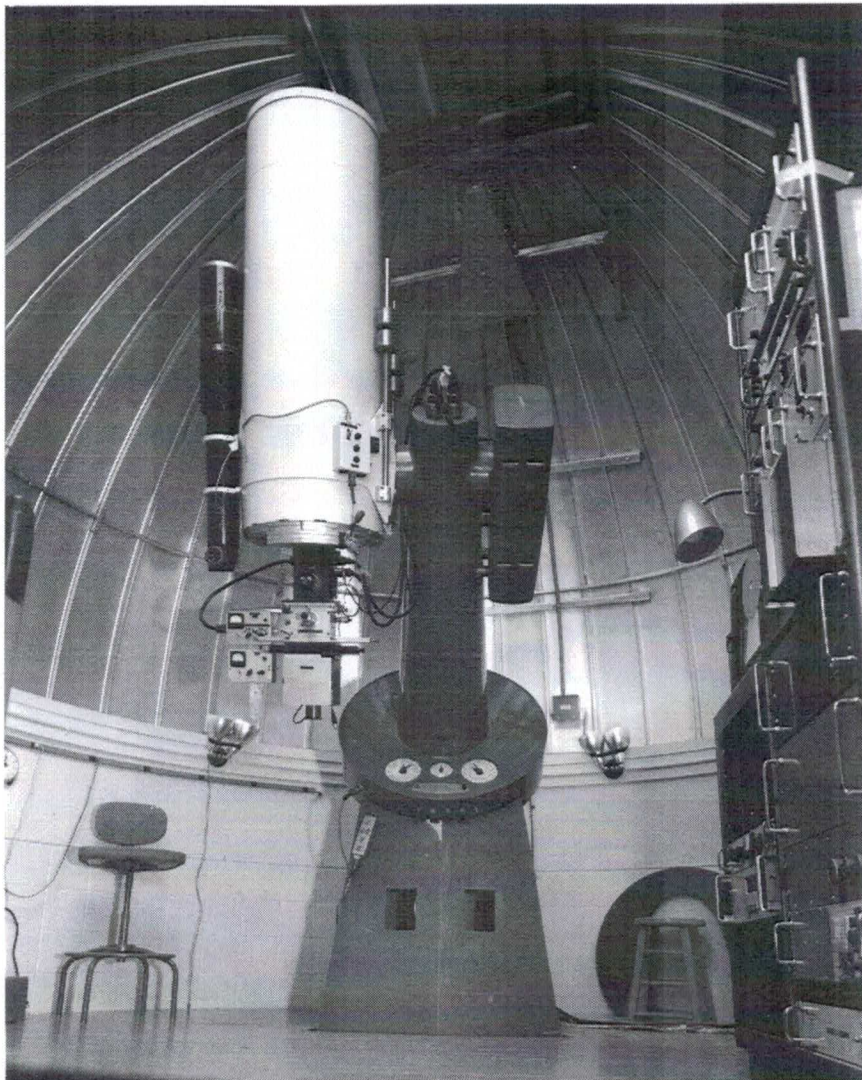
Caption: Aden Meinel and Bill Baustian inspecting the two 16-inch telescopes at the Phemco shop in Phoenix.

These two telescopes were initially used for site testing on Kitt Peak and Hualapai mountain. The one on Kitt Peak was used by Arlo Landolt in 1959, the first visiting scientist at KPNO before the Observatory had even been dedicated!



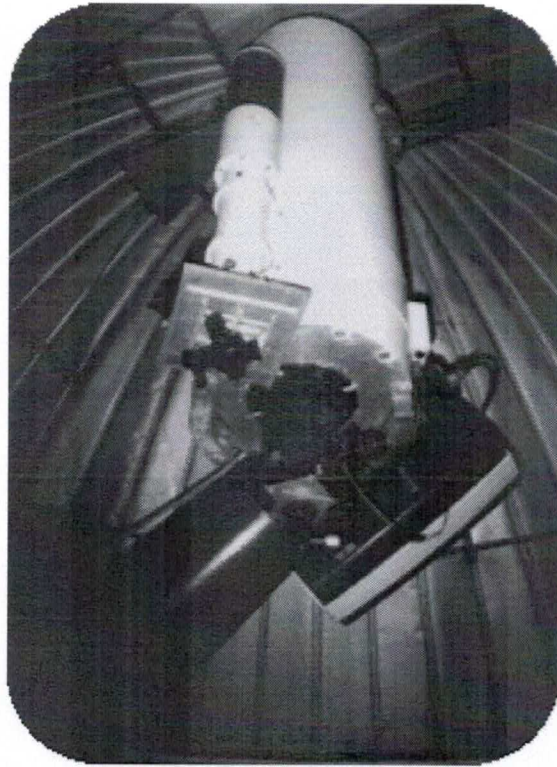
Caption: The 16-inch telescope trailer being towed to the summit of Kitt Peak.

A few years later, as both KPNO and CTIO grew, KPNO received one complete B&C 16-inch and a second mount, while the two Phemco telescopes, by then labeled #1 and #2, were shipped to Chile. Note how the first 16-inch at CTIO had also been one of the first at KPNO! The B&C telescopes at Kitt Peak became the now familiar #3 and #4 0.4-m telescopes. (The first author has fond memories of using all four telescopes: for project work at Kitt Peak and thesis observations at CTIO.) Regular use at Tololo turned out to reveal weaknesses in the performance of the control electronics and drive trains, both of which were upgraded, but B&C mounts eventually replaced the originals.



Caption: The #4 f/18 B&C 16-inch telescopes at Kitt Peak, 1964

Once demand for them diminished, the smaller telescopes were closed. But since new instruments are expensive relative to budgets at smaller astronomy departments, astronomers can be resourceful by finding interesting science for older but smaller apertures! The 0.4-m's gradually were transferred to other interested institutions, where they remain active as (at the very least) teaching tools. The Pontifica Universidad Catolica in Chile received one of the CTIO 0.4-m's, Missouri State the other, and Georgia State University took the #4 KPNO 0.4-m telescope.



Caption: The #4 0.4-m in the dome at Georgia State University.

Most recently, Texas A&M University has taken possession of the #3 0.4-m from Kitt Peak. The design of the #3 was different from the others in that it had an $f/7.6$ cassegrain focus, identical to that of the 84-inch, so that new instruments could be tested prior to going on to the larger telescope. After its retirement from science on Kitt Peak, it spent several years on display in the Kitt Peak Visitor Center but was eventually stored on the ground floor of the 4-m Mayall building.

In early 2008, Darren DePoy, Nicholas Suntzeff and Don Carona received permission to use the telescope as part of the growing astronomy program at TAMU. Will Goble and Mike Hawes of KPNO and Don Carona of TAMU loaded the telescope onto a truck on March 17, 2009. This historic telescope was delivered to the campus of Texas A&M the next day. It now begins a new role in science, education and outreach. After years of faithful service to astronomy on Kitt Peak, it will become a centerpiece of an astronomy program at the Physics Teaching Observatory at Texas A&M University to benefit both undergraduate and graduate students. In addition, it will further enrich public programs by reaching area schools,

youth organizations and local astronomy clubs, and the community in general.