# APOLLO 11

While the Lunar landing of Apollo 11 inspired generations of people in countless ways, a unique experience in the development phase of the Apollo program inspired one man on a journey which would eventually change amateur astronomers' views of the heavens. As an optical designer at Farrand Optical Company, Tele Vue founder Al Nagler was tasked to design an optical system for a simulator which the Apollo astronauts would use to practice landing on the Moon. When he finally stepped into the Lunar Excursion Module (LEM) trainer to see how his optical system performed, the view out of the craft's iconic triangular window of the simulated Moon below and stars above was breath-taking. Little did he realize at the time, but that was the moment of inspiration that ultimately resulted in the "Nagler" eyepiece. (See "The Eyepiece That Changed Observing," Astronomy, Dec. 2005.)

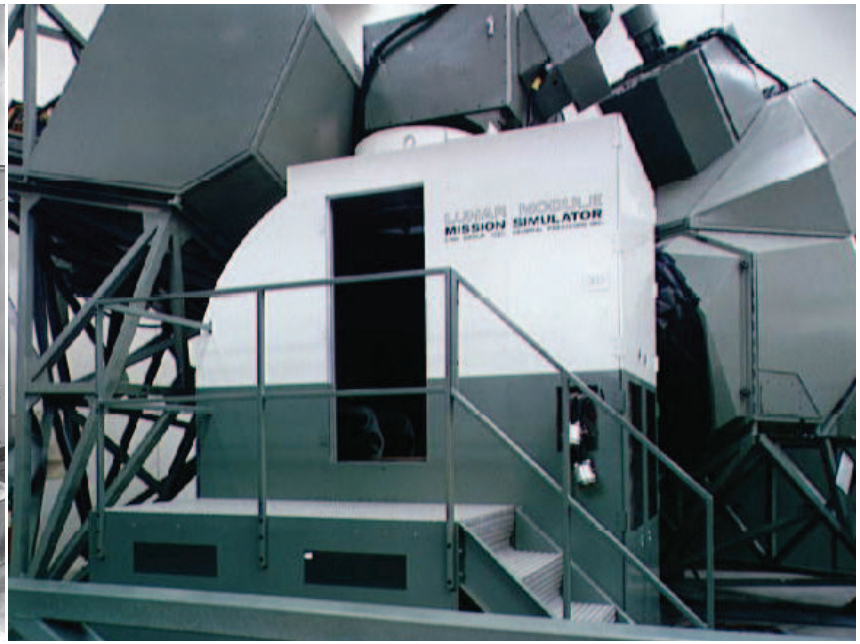

Apollo 11 eyepiece (far right) comes with 2" accessory adapter (left).

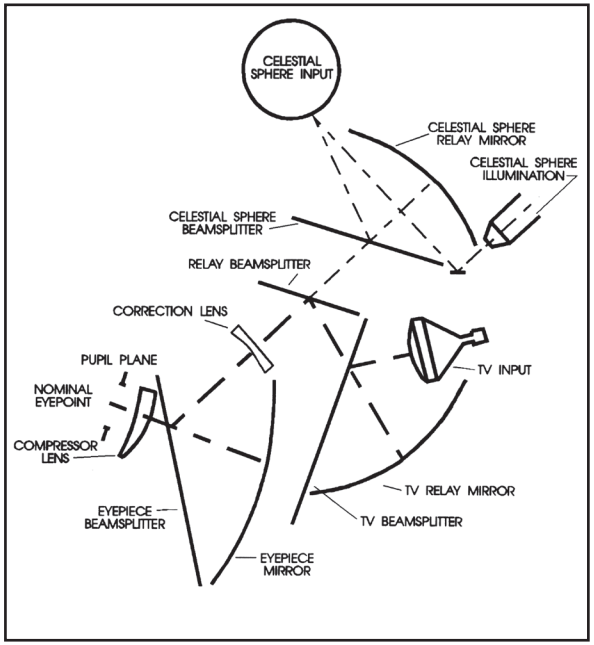
In recognition of the 50th anniversary of the Apollo 11 Moon landing, Tele Vue is proud to celebrate our founder's contribution to the greater effort that made the mission possible and ultimately successful. The special, limited edition commemorative Tele Vue Apollo 11mm eyepiece pays tribute to the simulator program that was invaluable to astronaut training and to the direct influence it had on the eyepieces we enjoy today.

Tele Vue Apollo 11 Specifications

| | |
|---|---|
| Development Team: | Paul Dellechiaie, Al Nagler, David Nagler |
| F.L.: | 11mm |
| A.F.o.V.: | 85° |
| Eye Relief: | 18mm |
| F.S. dia. (effective): | 16.2mm |
| Coatings: | Glass matched multi-coatings on all surfaces |
| Barrel dia.: | 1.25" with 2" thread-on adapter |
| Filter Thd.: | 1.25" and 2" |
| Length: | 4.8" |
| Width: | 2.13" |
| Weight (2"/1.25"): | 21.9 oz. (1.37 lbs.) / 18.6-oz. (1.16 lbs.) |
| Total Production: | 300 |

# APOLLO 11 NEAF Launch!




A Farrand technician (left) tests the Infinity Display system Al Nagler designed for the Lunar Module simulator (center). During the test, the triangular lens opening, shown, fit against one of the module's windows. In the schematic of the Infinity Display (right), the small triangular "compressor lens" (bottom left) is that window. That lens provided a 110° field of view, had eye relief of 1 foot (30.5 cm) from the window, and included an exit pupil 1 foot in diameter. That way the astronaut could have his whole head near the window, with both eyes open, and move around. (Caption from "*T*he Life and Times of Al Nagler", biography published in *Astronomy* magazine April 2013. Full article available at: http://bit.ly/TVLIFETIMES).