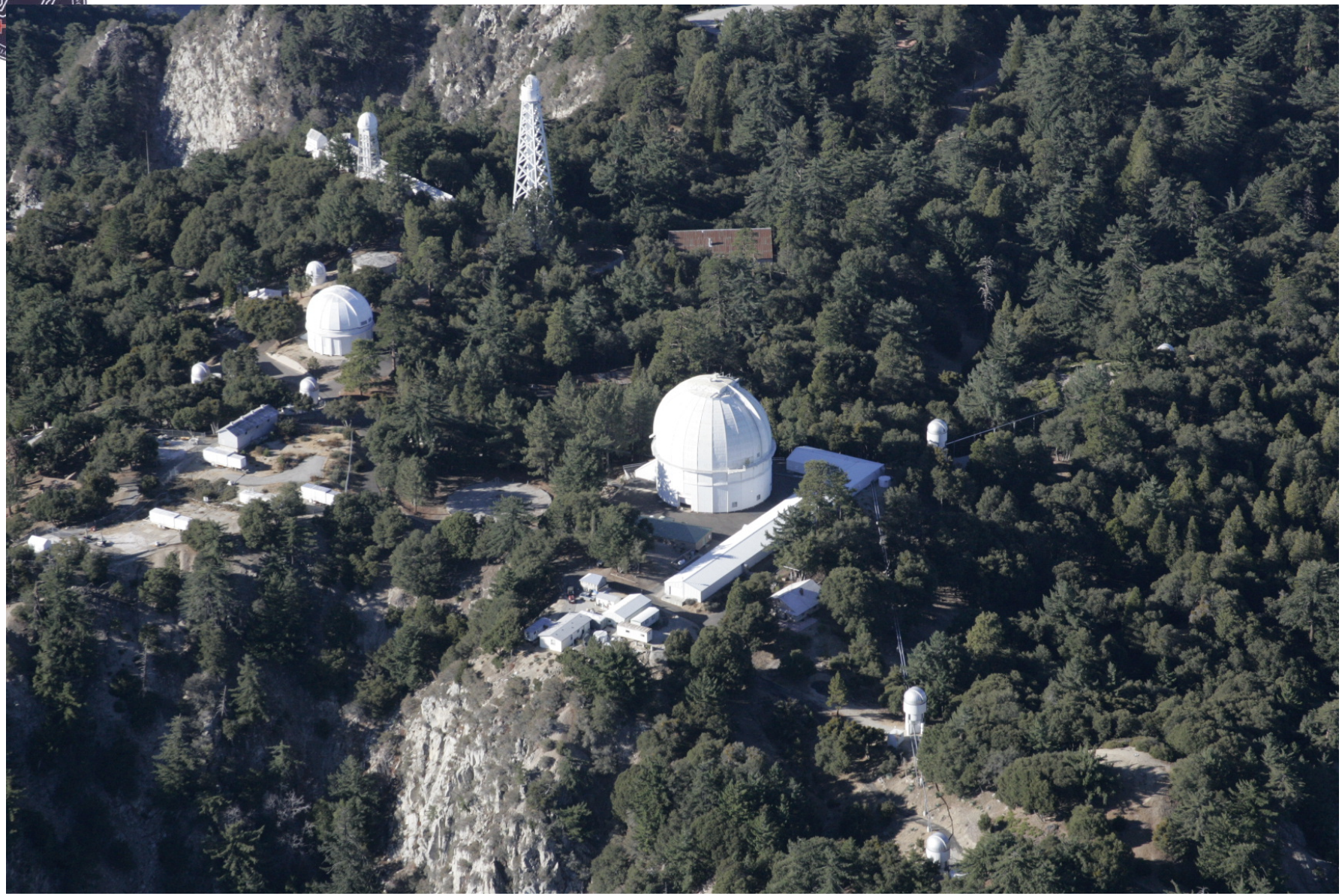

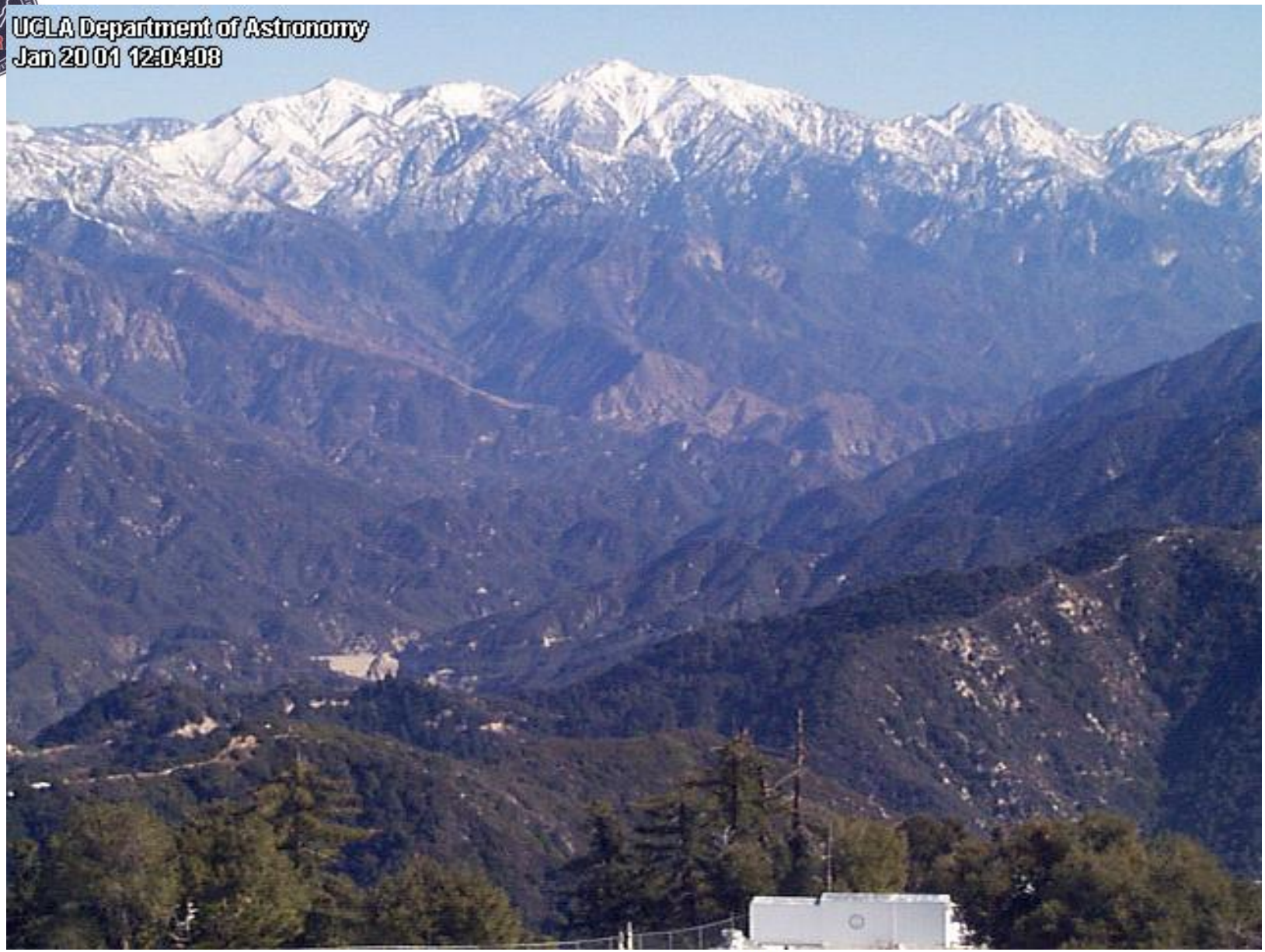
UCLA Department of Astronomy
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Bobcat


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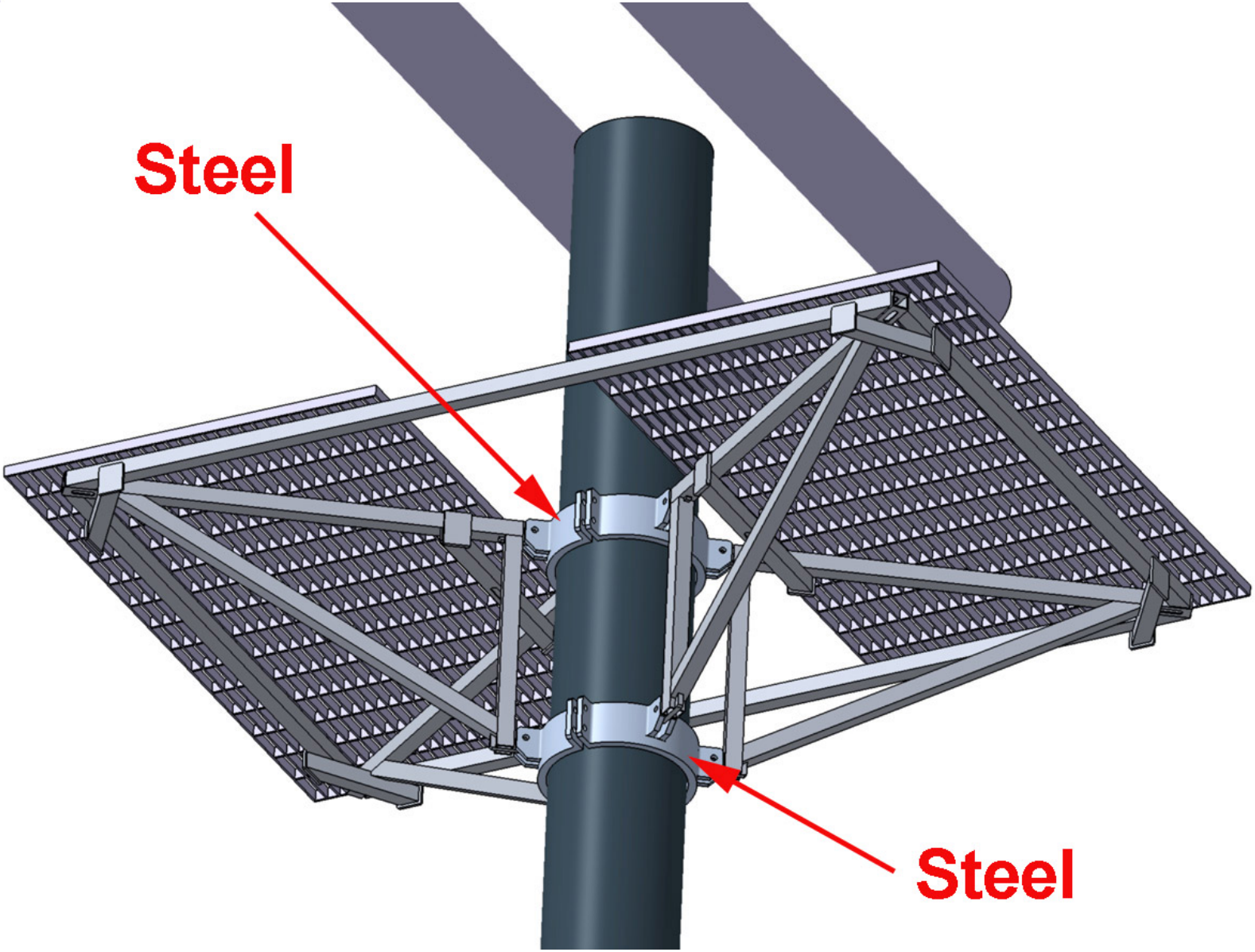
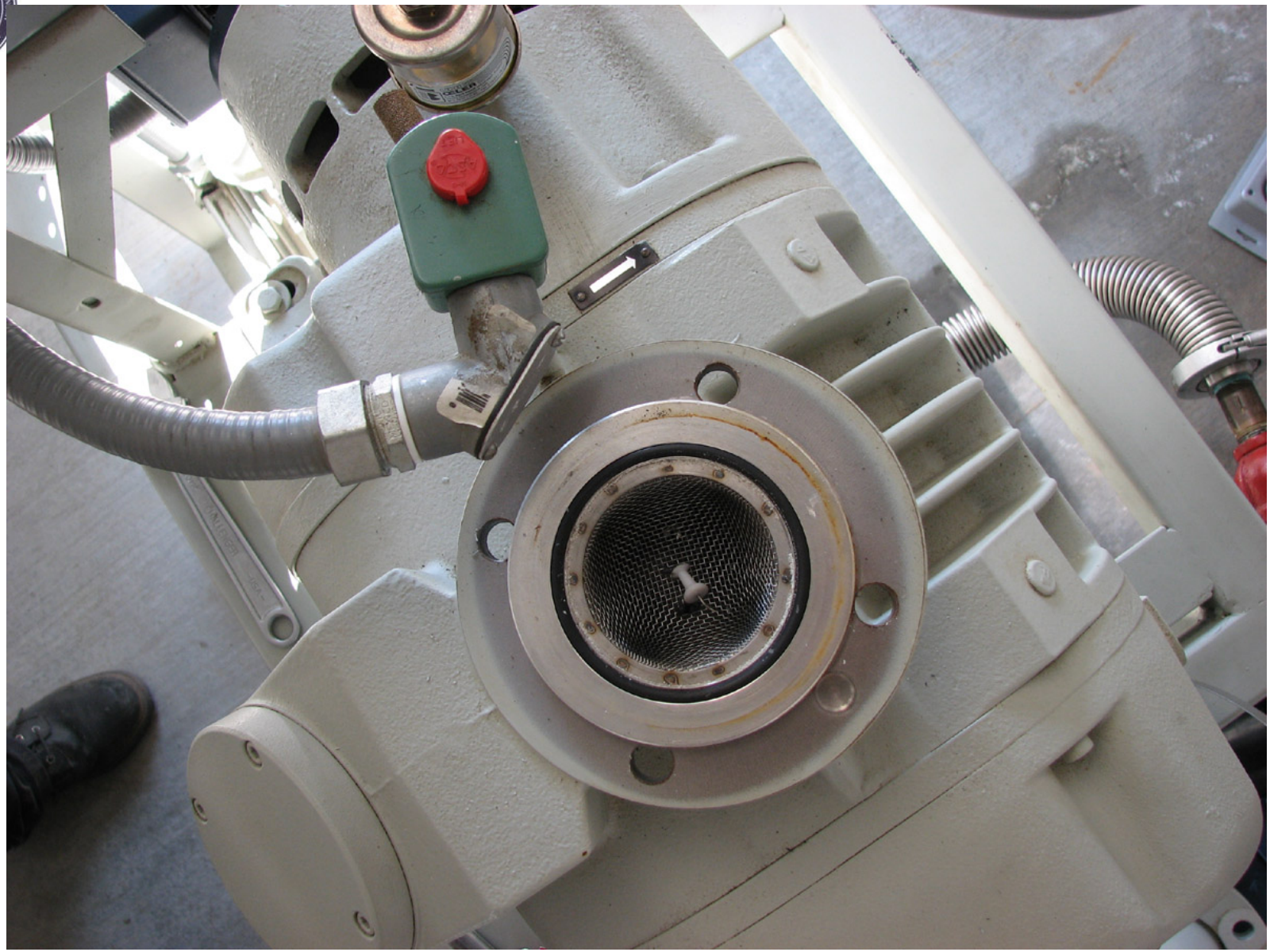
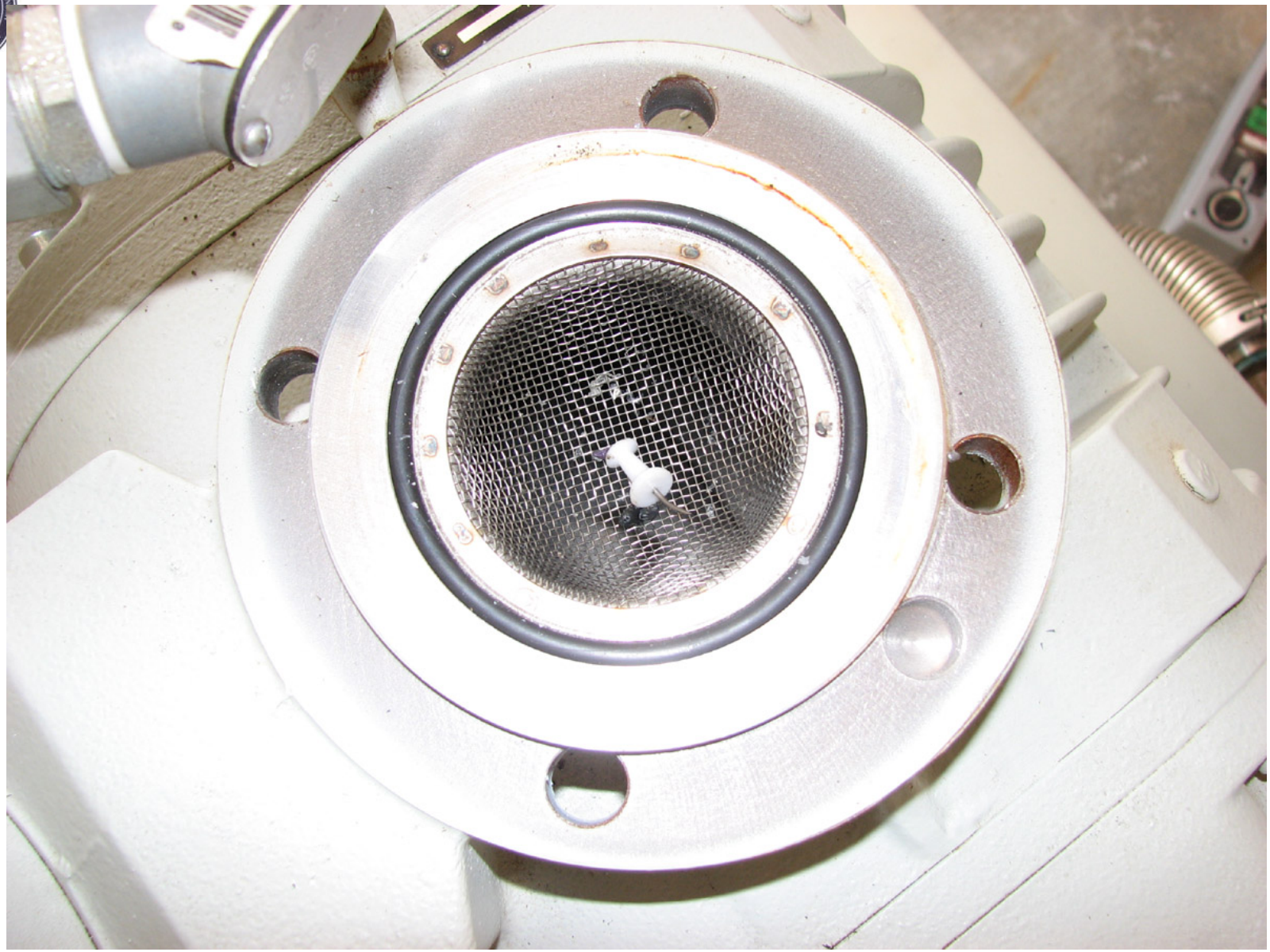
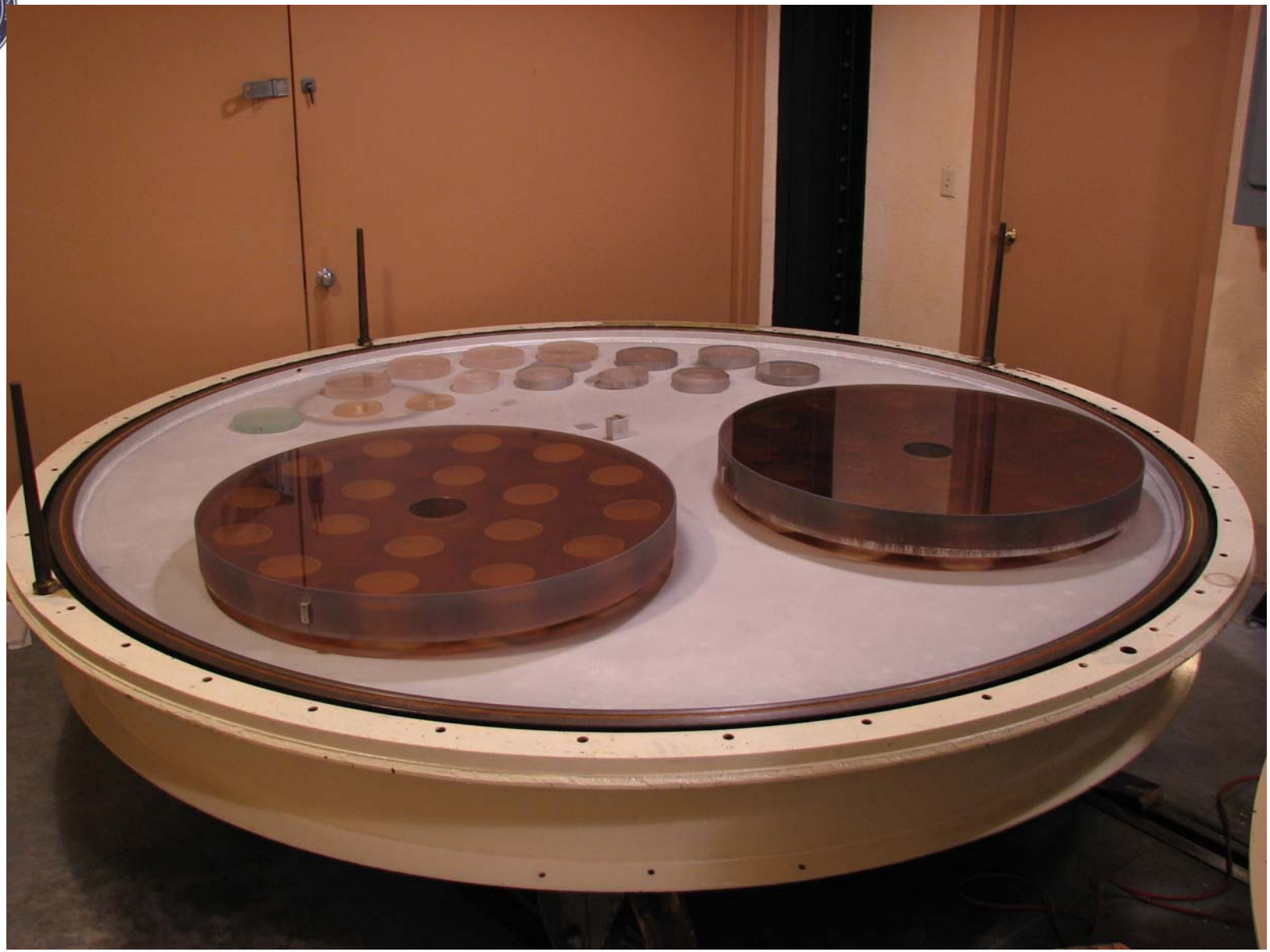
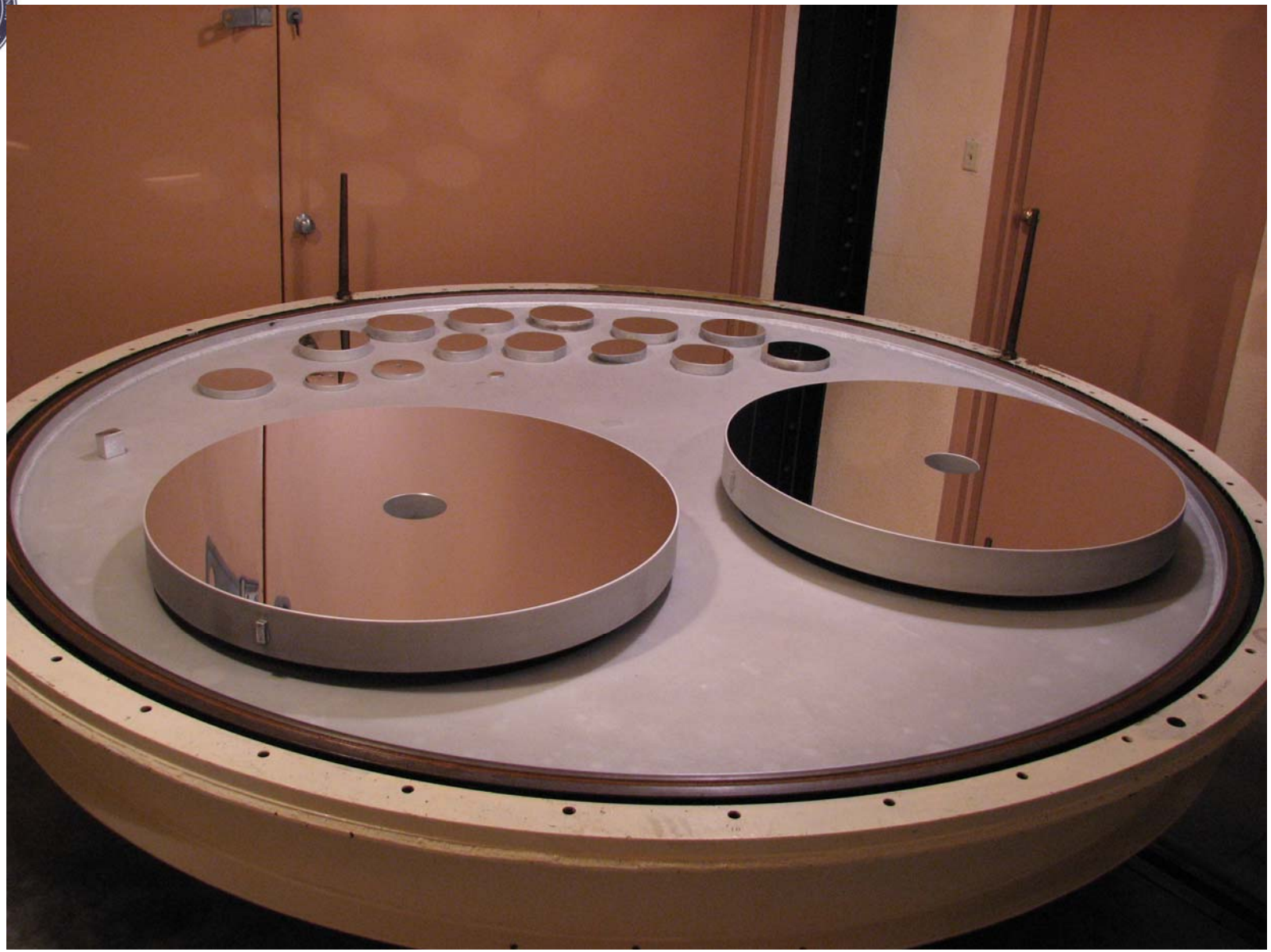
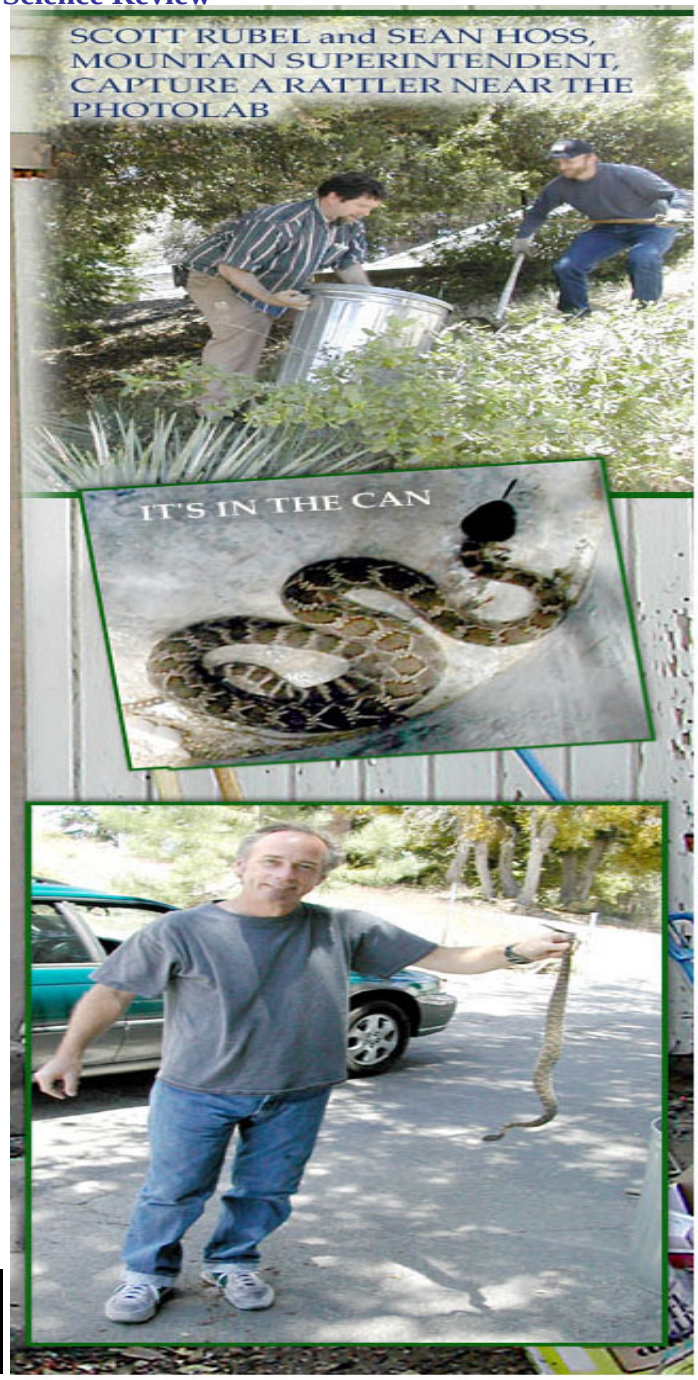

Steel
Steel



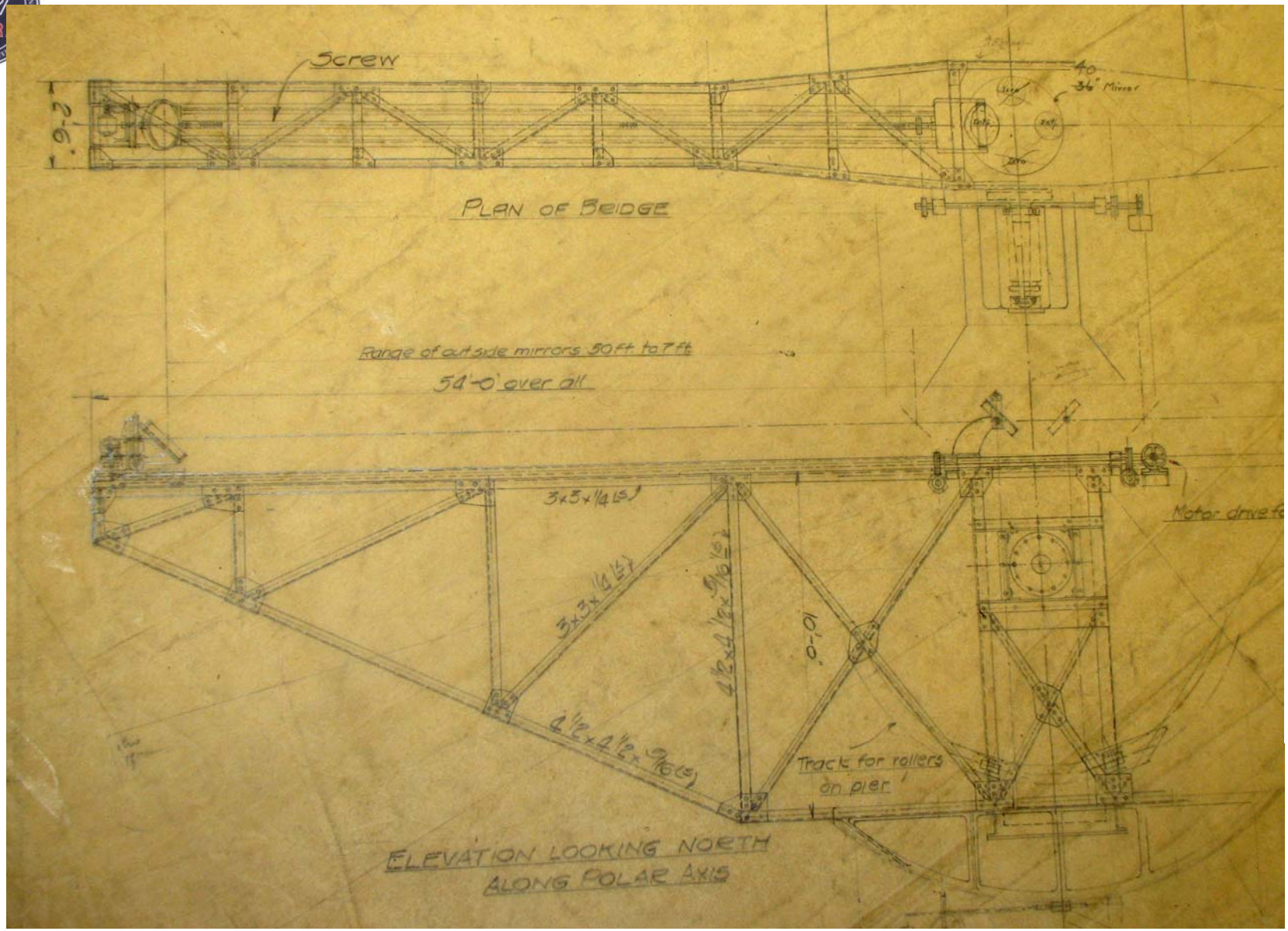








CARNEGIE OBSERVATORIES, C.W. SCOTT RUBEL photolab_work_060402


Screw
PLAN OF BRIDGE
Range of outside mirrors 50 ft to 7 ft
54'-0" over all
3x3x1/4 (L's)
3x3x (L's)
4 1/2x4 1/2x 9/16 (L's)
10'-0"
4 1/2x4 1/2x 9/16 (L's)
Track for rollers on pier
ELEVATION LOOKING NORTH ALONG POLAR AXIS

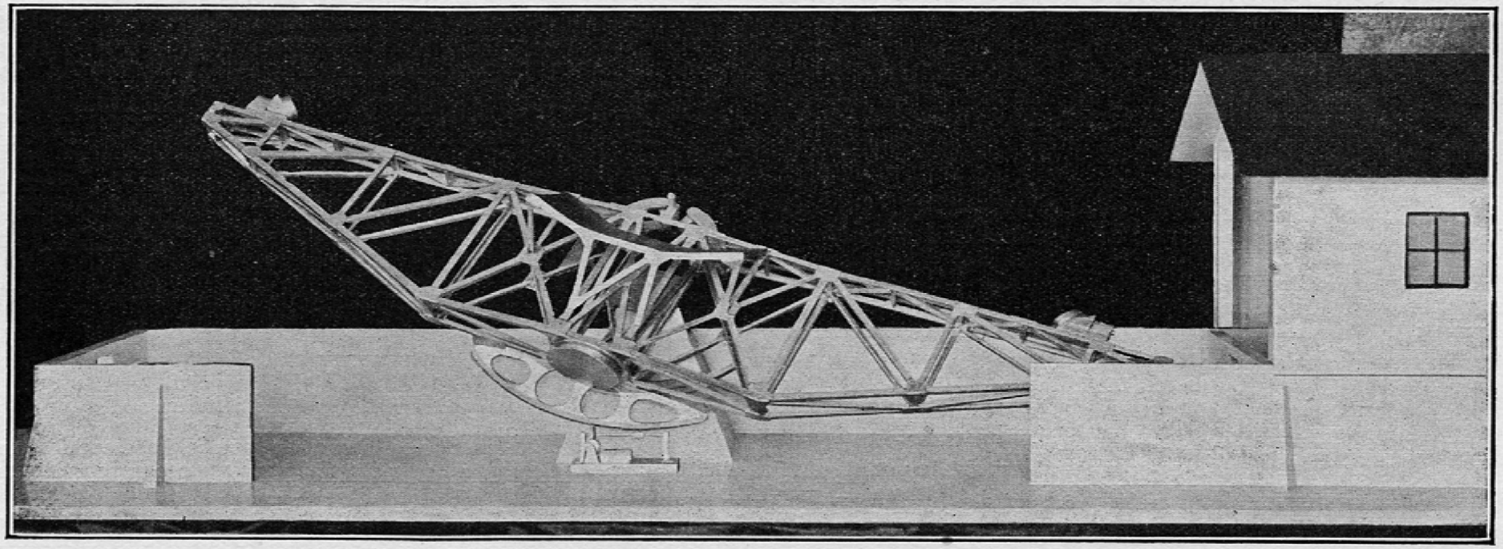


FIG. 1.—50-foot interferometer telescope for the Mount Wilson Observatory.
Model seen from the north (part of wall removed to show 36-inch mirror cell and driving mechanism).

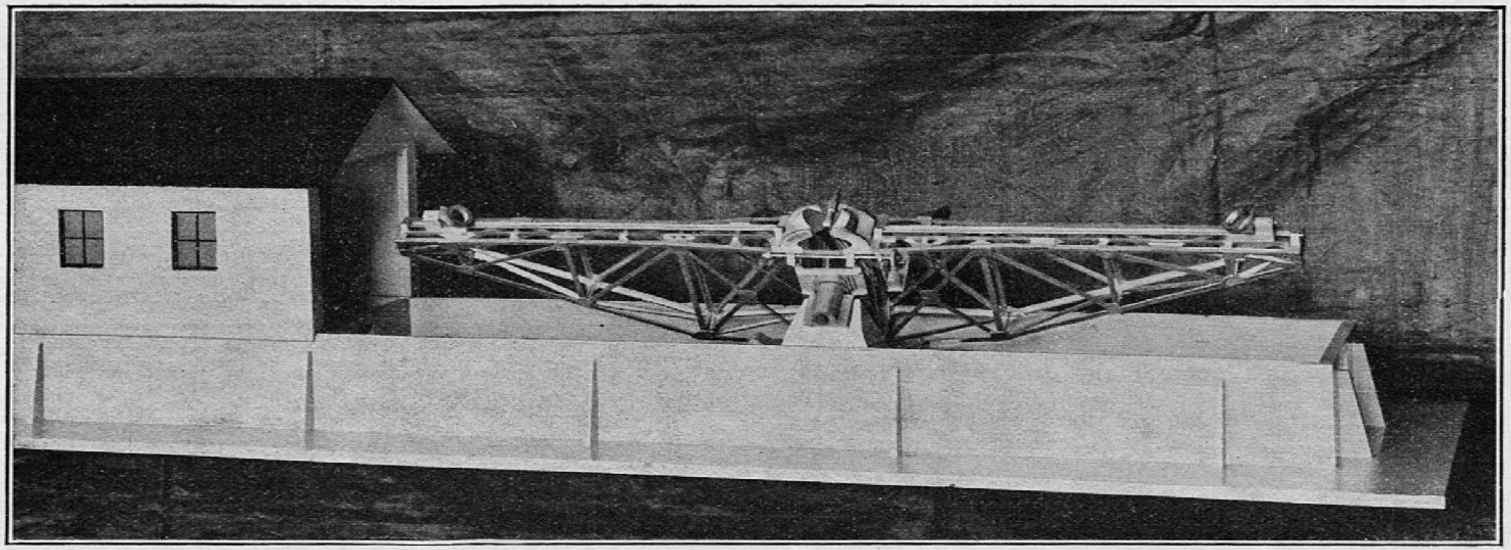
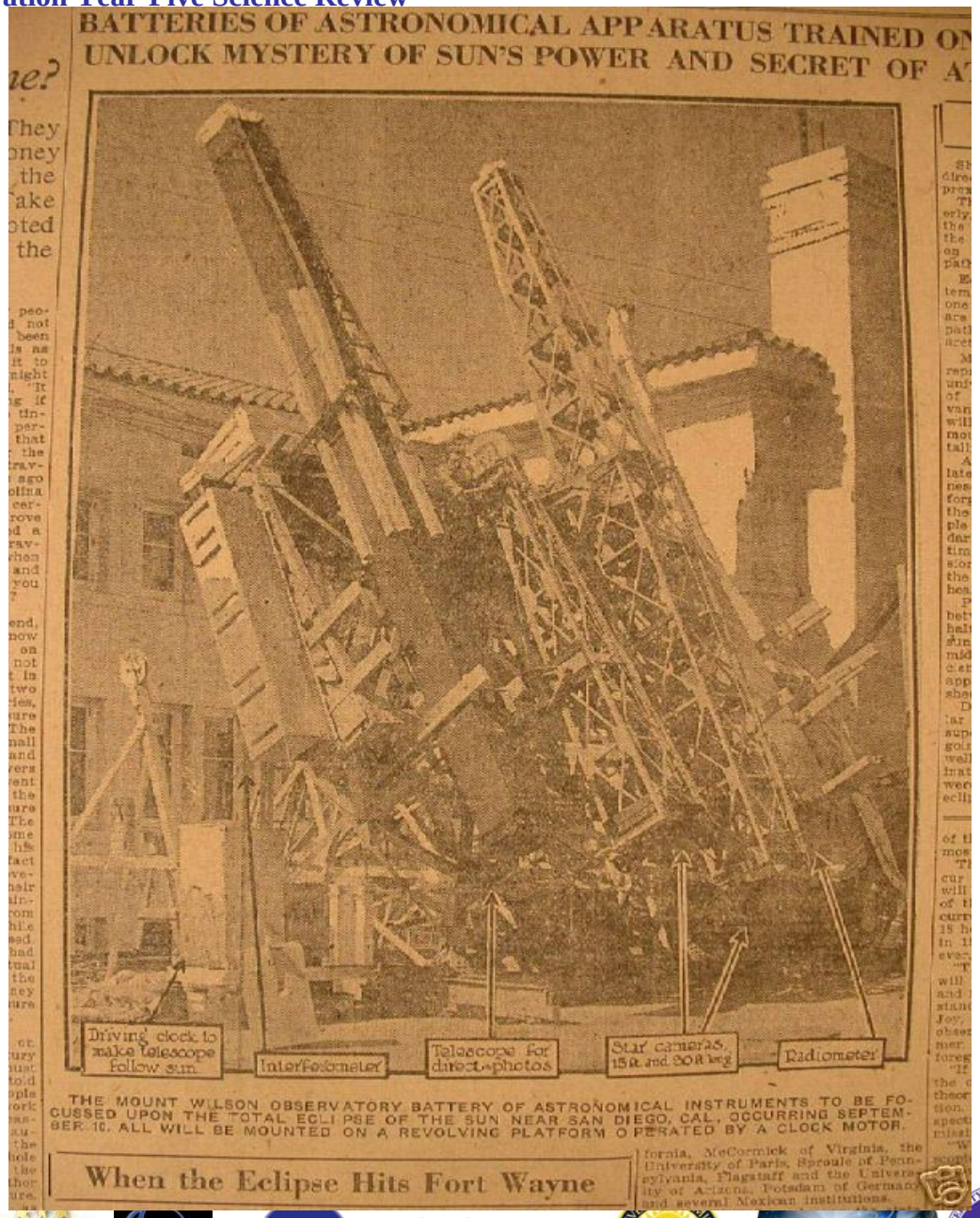


FIG. 2.—50-foot interferometer telescope for the Mount Wilson Observatory.
Model seen from the south, showing movable house that covers the instrument when not in use.

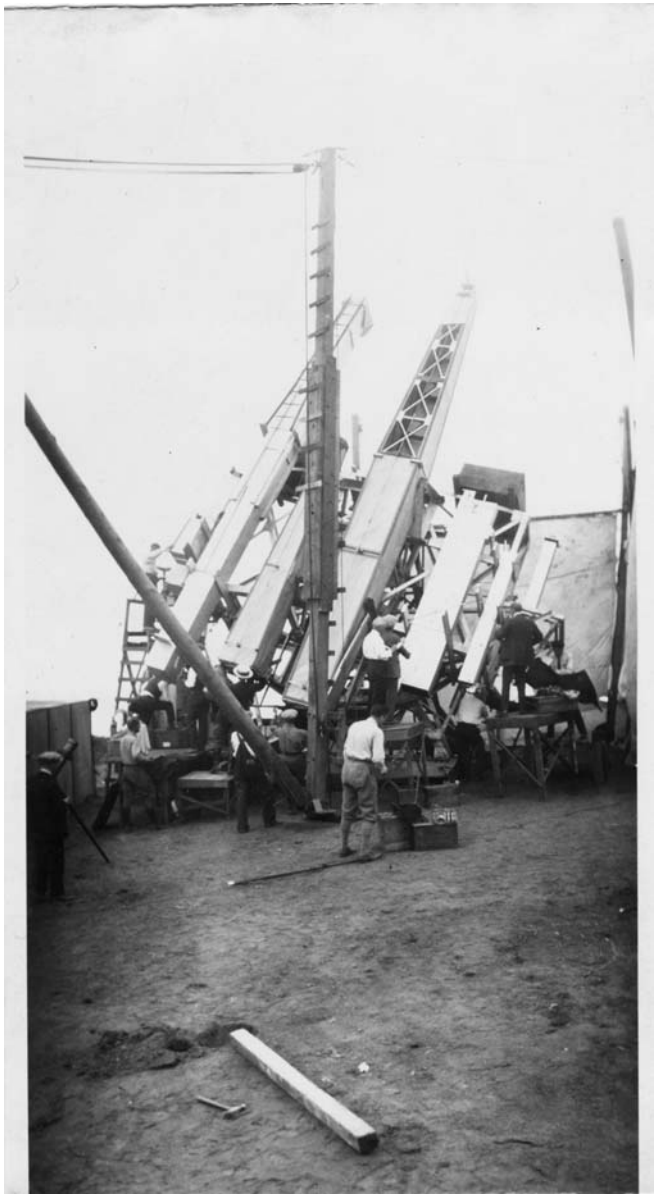


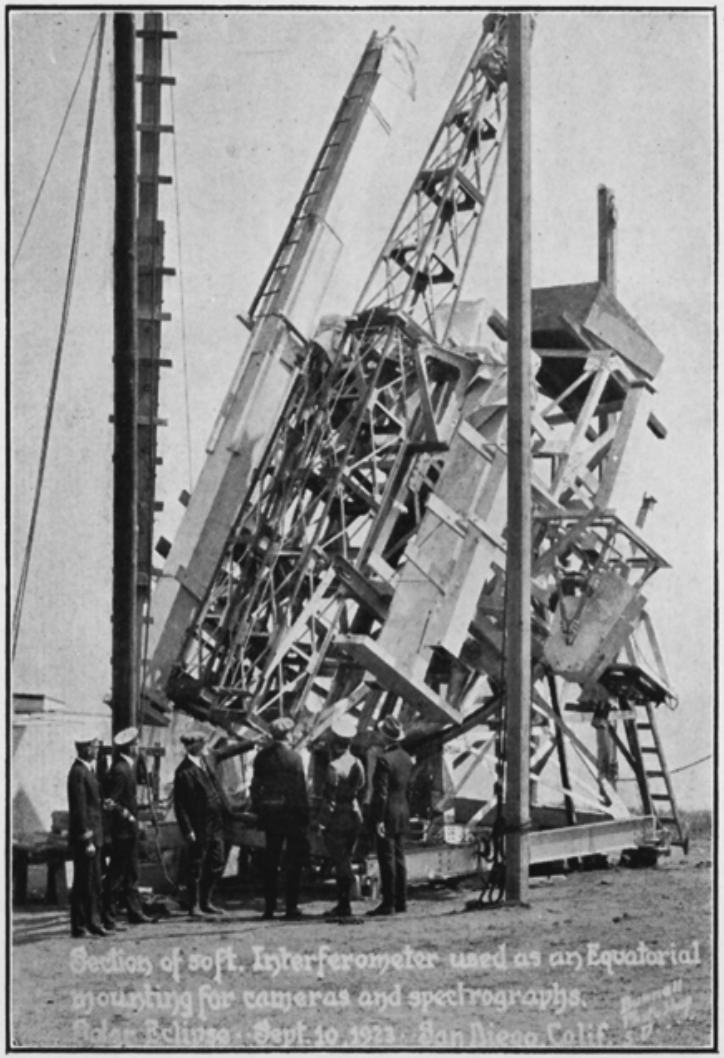
BATTERIES OF ASTRONOMICAL APPARATUS TRAINED ON
UNLOCK MYSTERY OF SUN'S POWER AND SECRET OF A

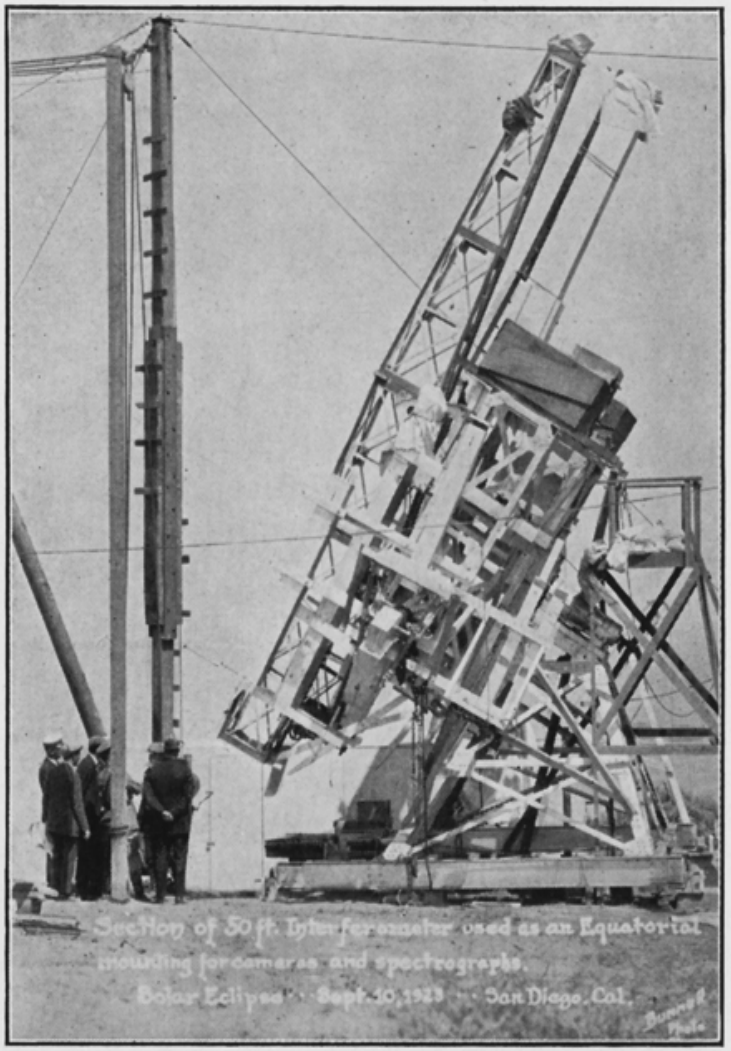
Driving clock to make telescope follow sun.
Interferometer
Telescope for direct photos
Star cameras, 15 ft. and 20 ft. long
Radiometer

THE MOUNT WILSON OBSERVATORY BATTERY OF ASTRONOMICAL INSTRUMENTS TO BE FOCUSSED UPON THE TOTAL ECLIPSE OF THE SUN NEAR SAN DIEGO, CAL., OCCURRING SEPTEMBER 10. ALL WILL BE MOUNTED ON A REVOLVING PLATFORM OPERATED BY A CLOCK MOTOR.

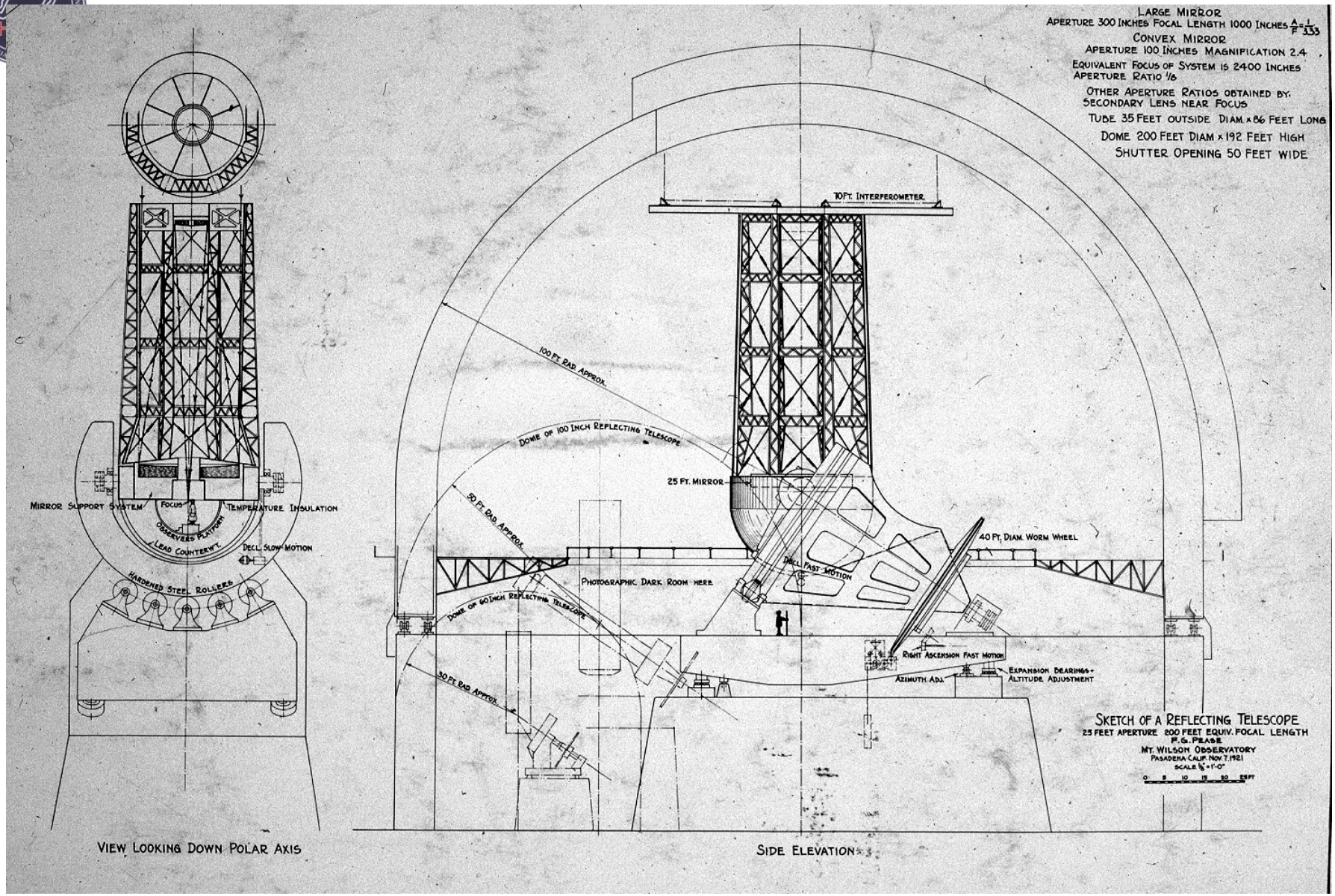
When the Eclipse Hits Fort Wayne

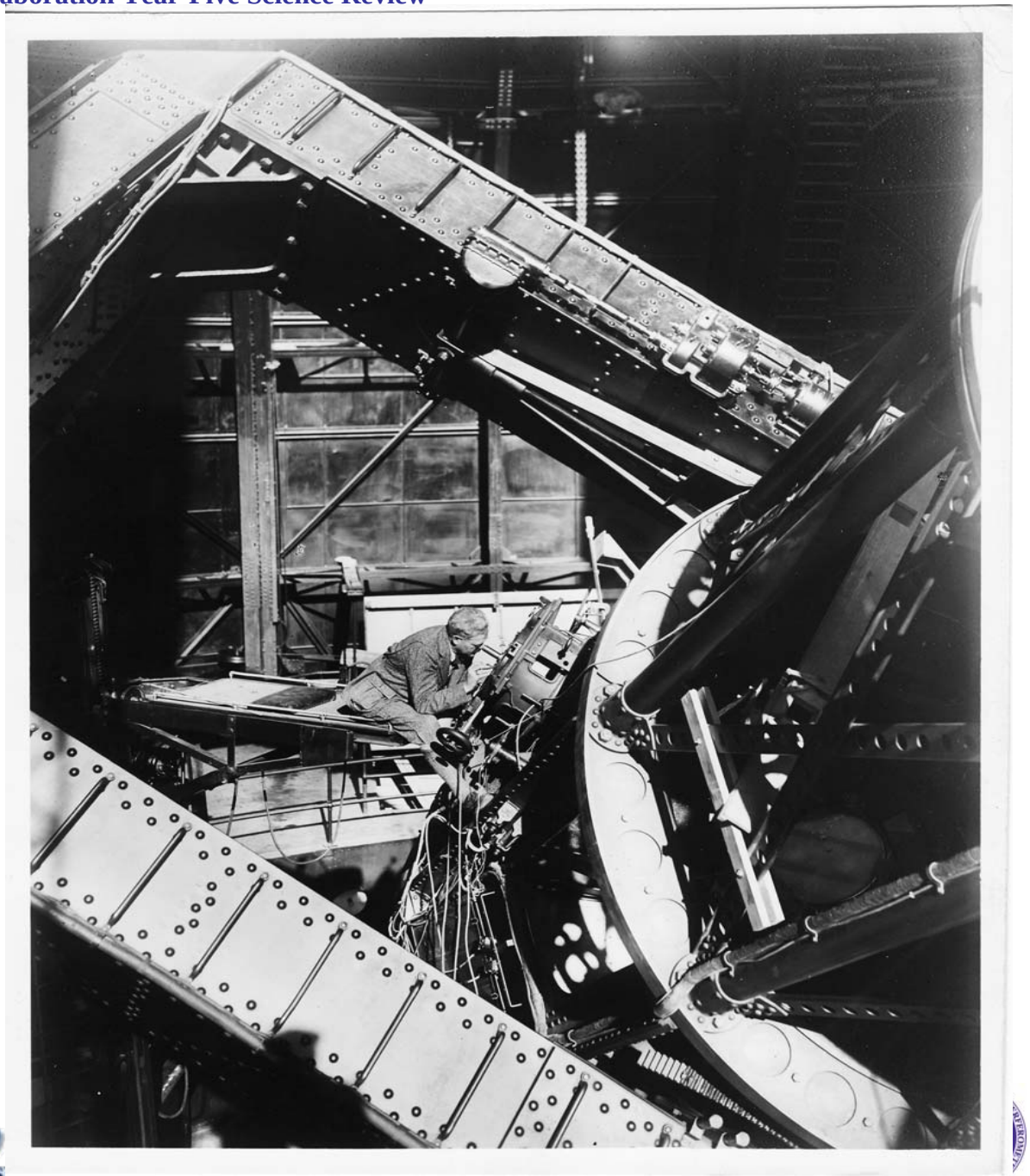






ECLIPSE INSTRUMENTS OF THE MT. WILSON OBSERVATORY ON POINT LOMA, CALIFORNIA


LARGE MIRROR
APERTURE 300 INCHES FOCAL LENGTH 1000 INCHES A=1/F=333
CONVEX MIRROR
APERTURE 100 INCHES MAGNIFICATION 2.4
EQUIVALENT FOCUS OF SYSTEM IS 2400 INCHES
APERTURE RATIO 1/6
OTHER APERTURE RATIOS OBTAINED BY SECONDARY LENS NEAR FOCUS
TUBE 35 FEET OUTSIDE DIAM. x 86 FEET LONG
DOME 200 FEET DIAM x 192 FEET HIGH
SHUTTER OPENING 50 FEET WIDE
10FT. INTERFEROMETER
100 FT. RAD. APPROX.
DOME OF 100 INCH REFLECTING TELESCOPE
25 FT. MIRROR
50 FT. RAD. APPROX.
40 FT. DIAM. WORM WHEEL
DECL. FAST MOTION
PHOTOGRAPHIC DARK ROOM HERE
DOME OF 60 INCH REFLECTING TELESCOPE
30 FT. RAD. APPROX.
RIGHT ASCENSION FAST MOTION
AZIMUTH ADJ.
EXPANSION BEARINGS + ALTITUDE ADJUSTMENT
MIRROR SUPPORT SYSTEM
FOCUS
TEMPERATURE INSULATION
OBSERVERS PLATFORM
LEAD COUNTERWT.
DECL. SLOW MOTION
HARDENED STEEL ROLLERS
VIEW LOOKING DOWN POLAR AXIS
SIDE ELEVATION
SKETCH OF A REFLECTING TELESCOPE
25 FEET APERTURE 200 FEET EQUIV. FOCAL LENGTH
F. G. PEASE
MT. WILSON OBSERVATORY
PASADENA CALIF. NOV. 7, 1921
SCALE 1/8"=1'-0"



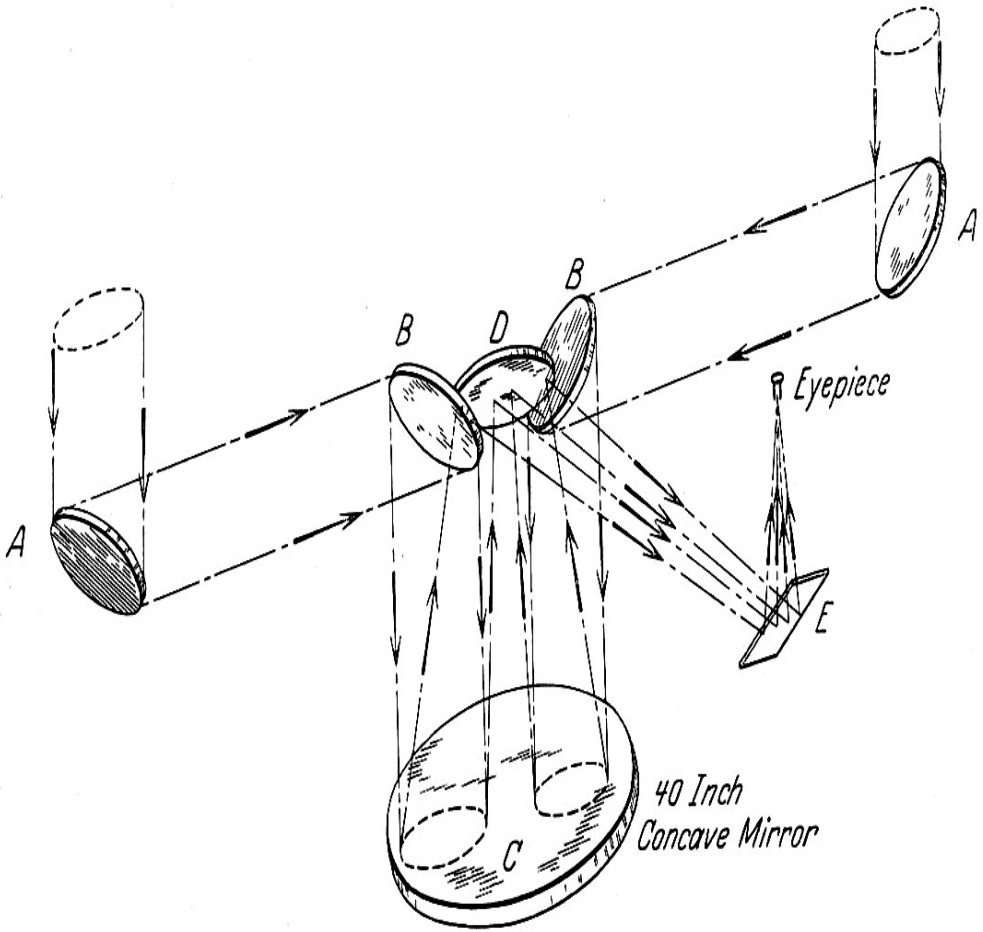


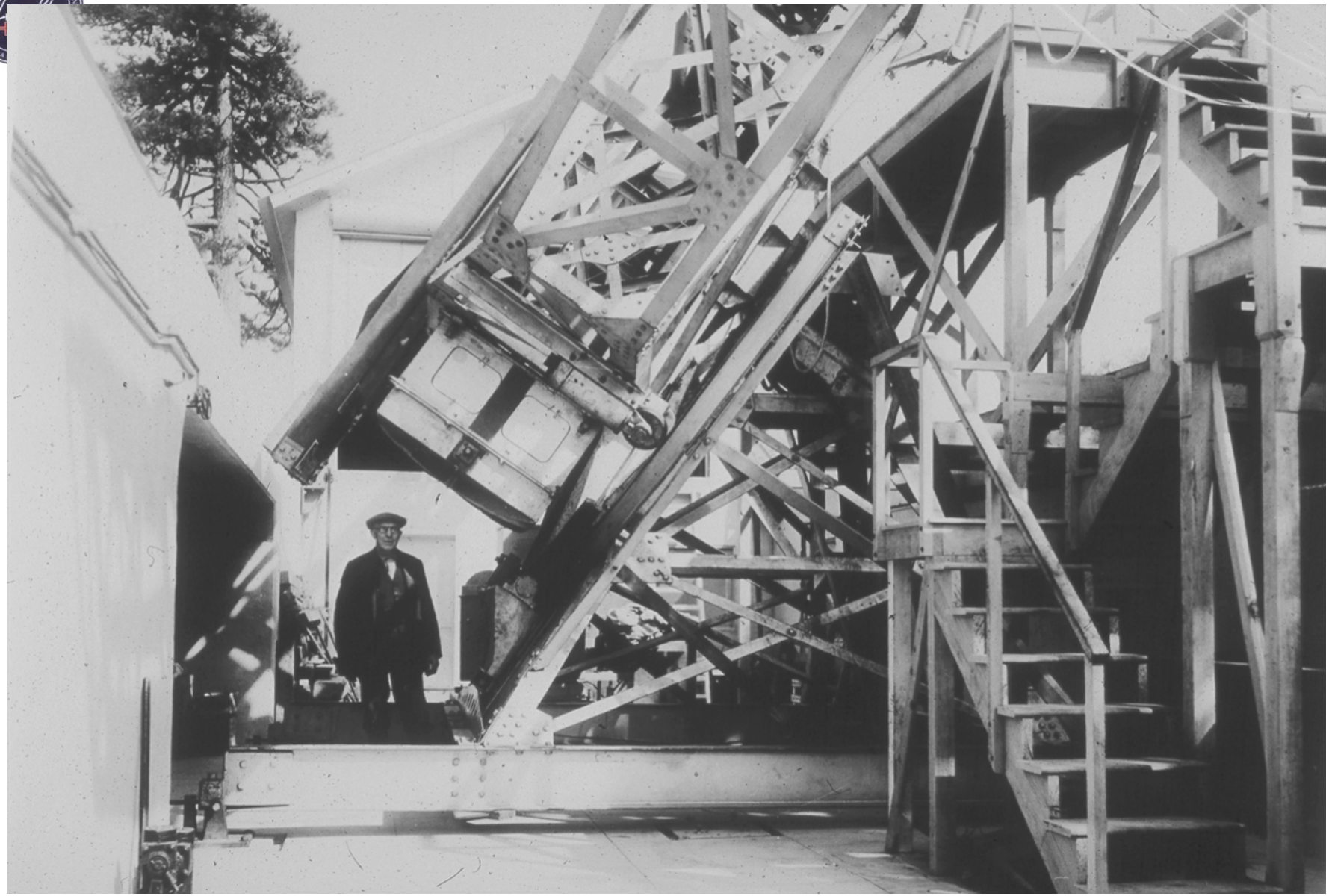
Abb. 8. Diagram of light path in 50 foot interferometer.

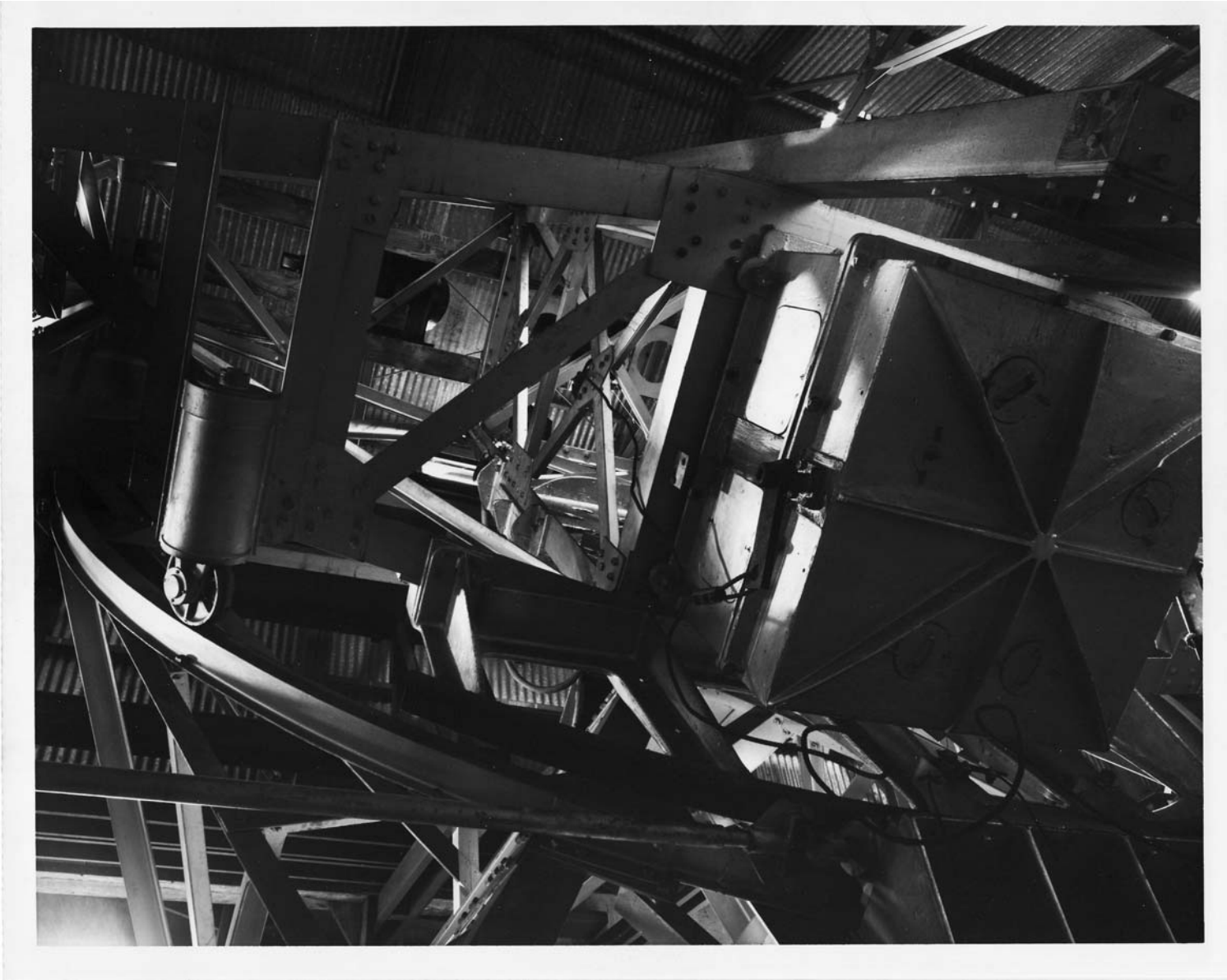
DIAM. 40 3/8" THICK 4 15/32 NO. 5̇0̇7

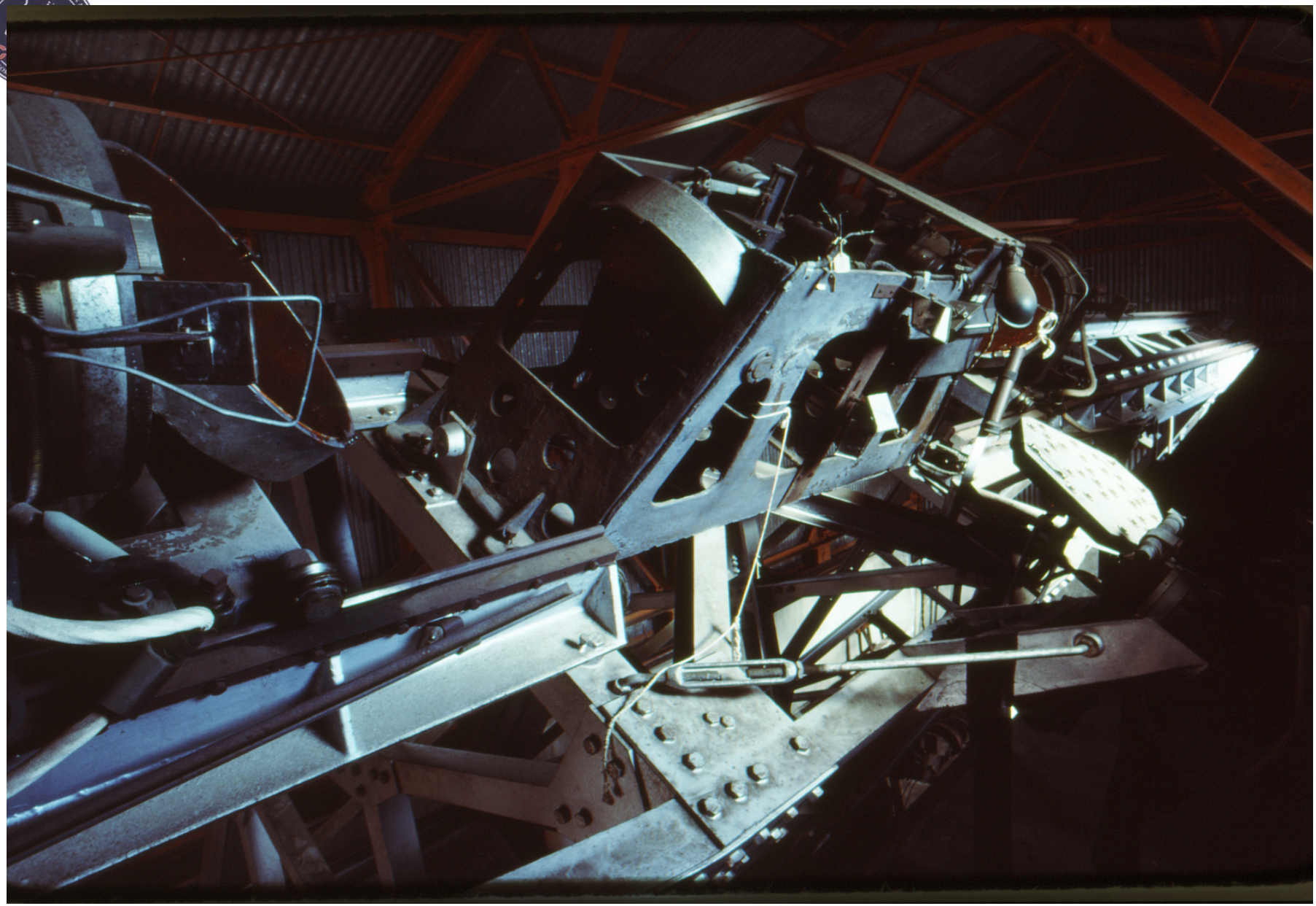
RAD. FOCUS 18'-2 5/8" central 6"2" diam. un-corrected

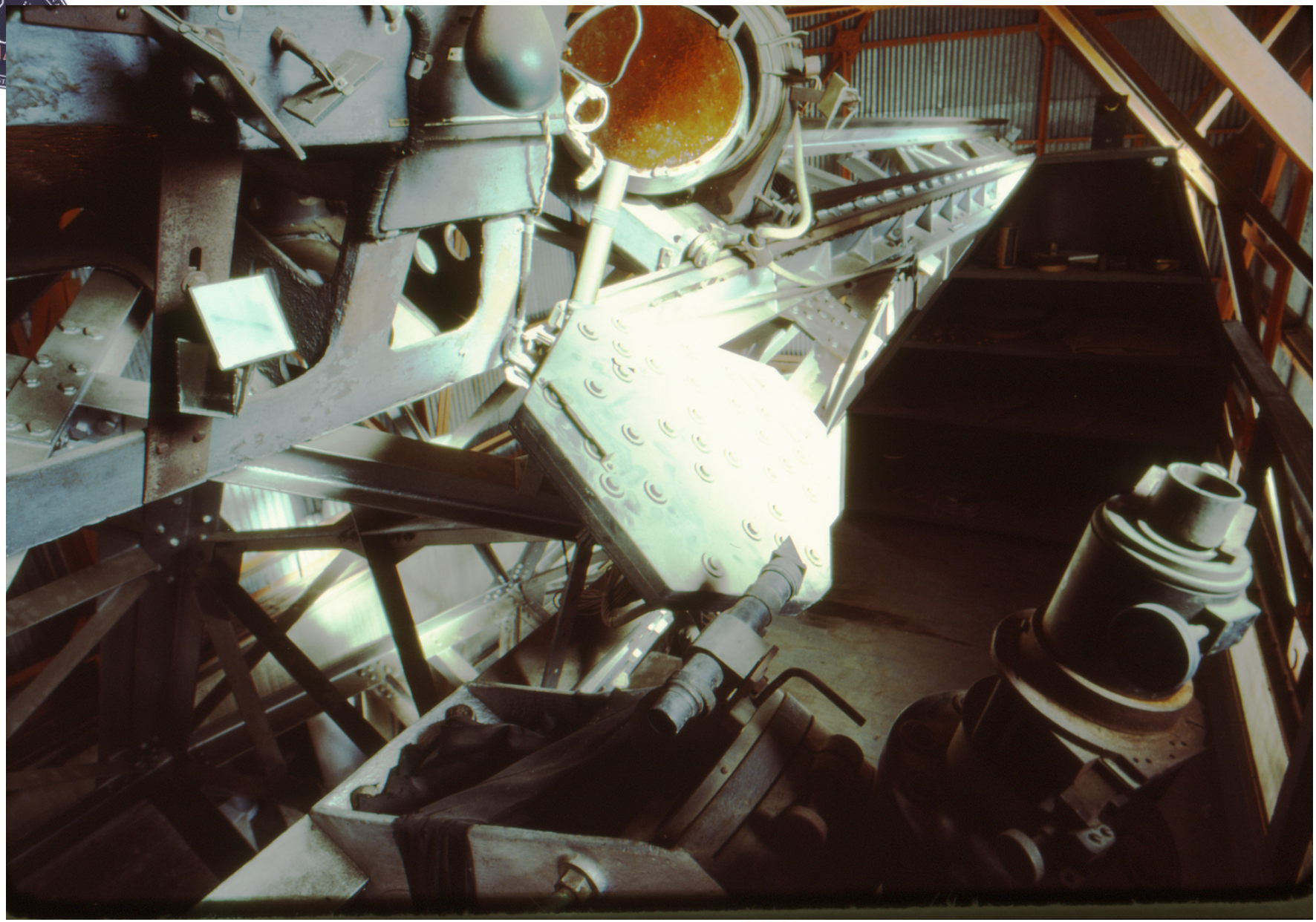
50 ft Interferometer Finished 4/6/28

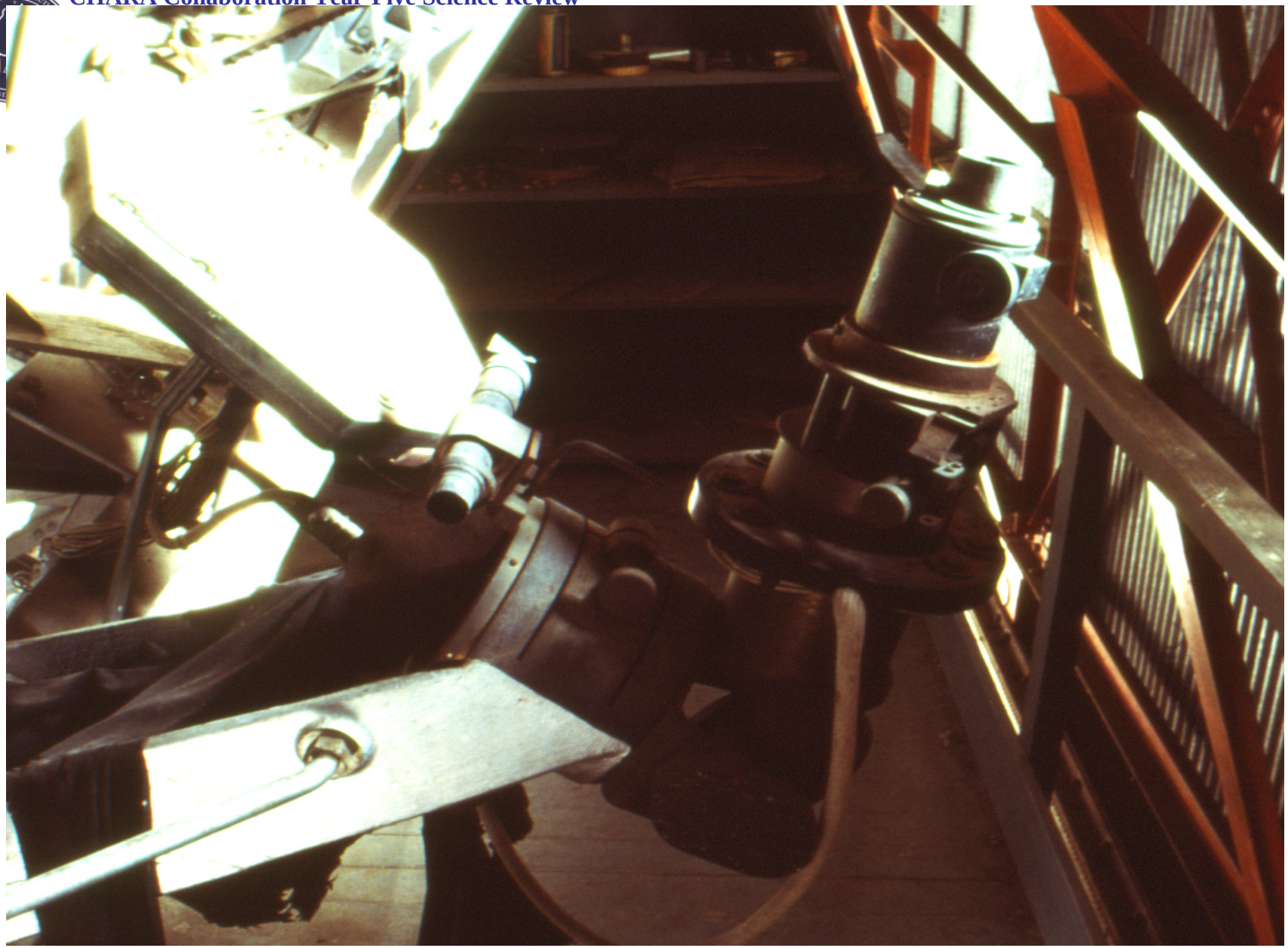
Bolton 174 hrs. Kinney 555 hrs Ash approx 530 hrs.

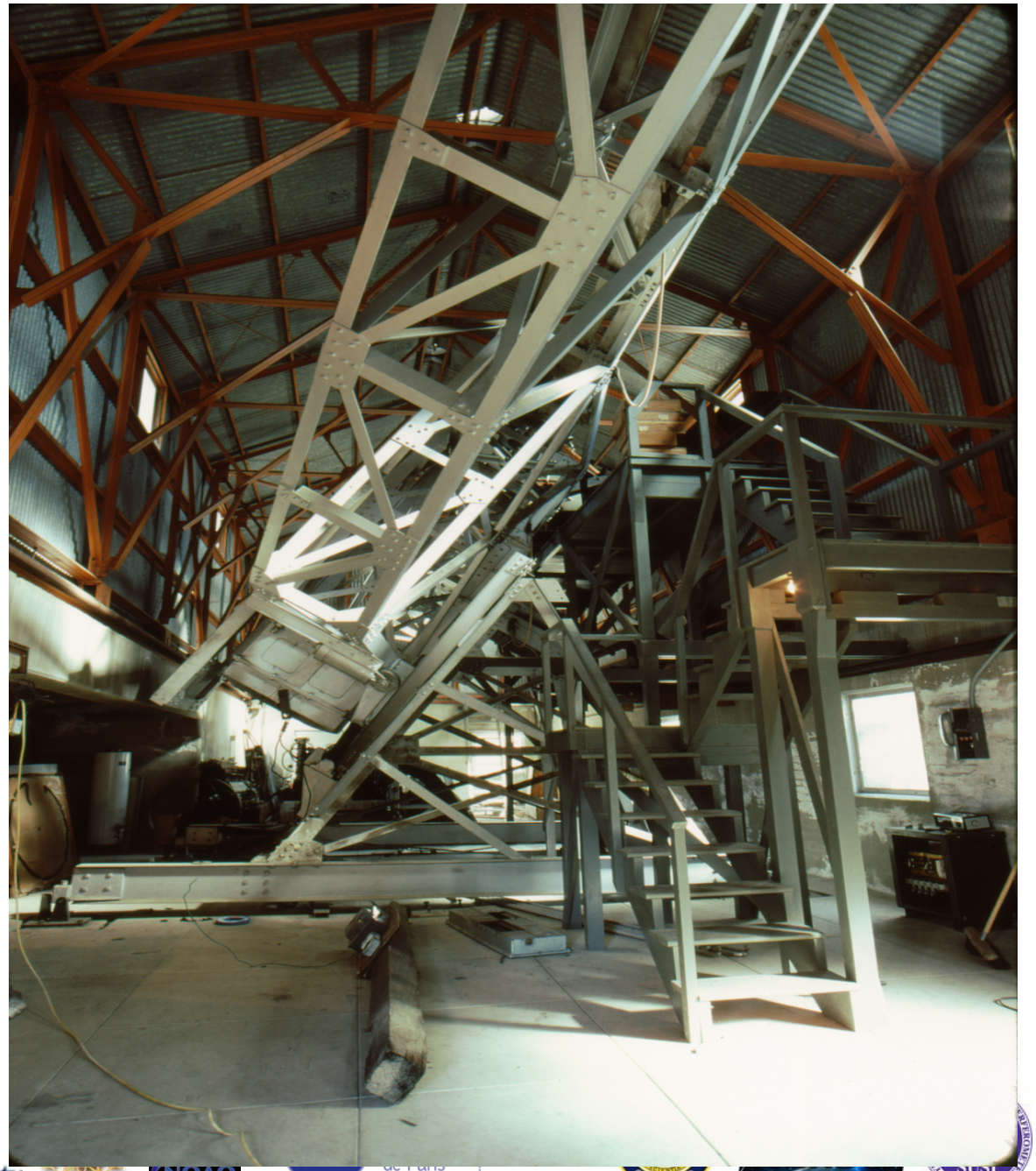












SCIENCE NEWS-LETTER

The Weekly Summary of Current Science

A SCIENCE SERVICE PUBLICATION

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LOOKING FOR BIGGER STARS

Francis Pease and The New Fifty-Foot Interferometer

(See page 206)

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