

Interoffice

NATIONAL RADIO ASTRONOMY OBSERVATORY  
TUCSON, ARIZONA

May 23, 1978

To: 25-m Telescope Working Group

*25 Meter Millimeter Wave Telescope  
Memo #108*

From: M. A. Gordon

Subject: Site selection on Mauna Kea

During the last week of April, Bob Leighton, Buck Peery, Bobby Ulich and I went to Mauna Kea to select specific locations for the 25-m and 11-m telescopes. The trip was successful, and steel markers have been placed on the sites selected.

Figure 1 shows the proposed locations for the 2 telescopes. Details given by the map are only approximate, because of the coarseness of the contour intervals and the modest accuracy of the indicated locations of the road and the optical telescopes. The separation between the radio telescopes will be approximately 225 m. The baseline is about  $60^\circ$  off East-West. The altitude of the 25-m telescope site is approximately 13400 ft above MSL; that of the 11-m, 13380 ft.

Using a panoramic series of photographs, Bobby Ulich has calculated the horizon blockage seen from the 25-m site. Figure 2 shows no blockage to the south or to the north. In terms of air mass, even the East-West blockage is not significant, and time takes care of this anyway.

The next step is to obtain an accurate plat of this region of the summit. Buck tells me that this can be done for approximately \$3 K. I think we should do this as quickly as possible.

c: D. S. Heeschen  
D. E. Hogg  
J. T. Jefferies  
R. B. Leighton

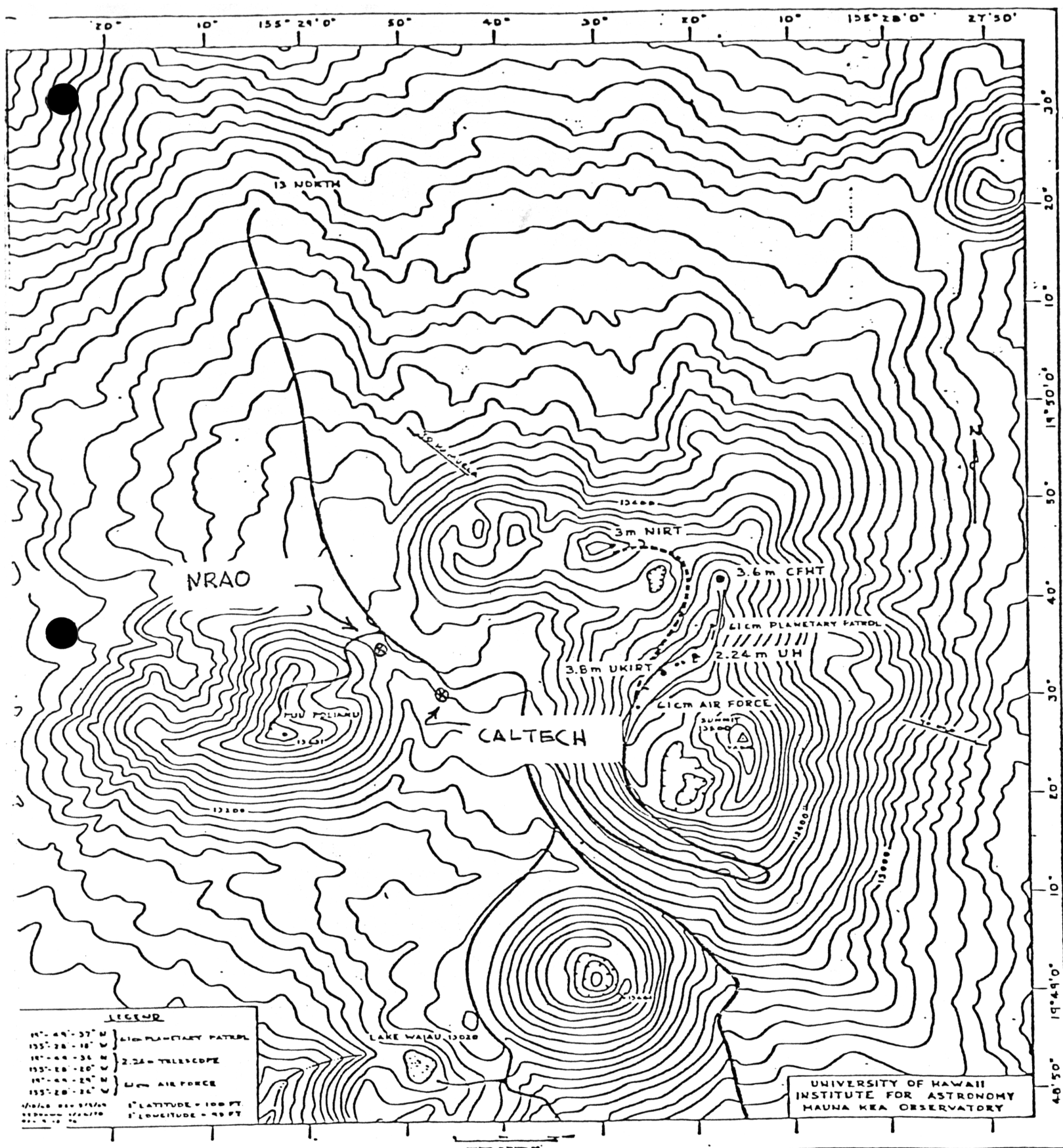


FIGURE 1

# MAUNA KEA HORIZON - 25-M SITE

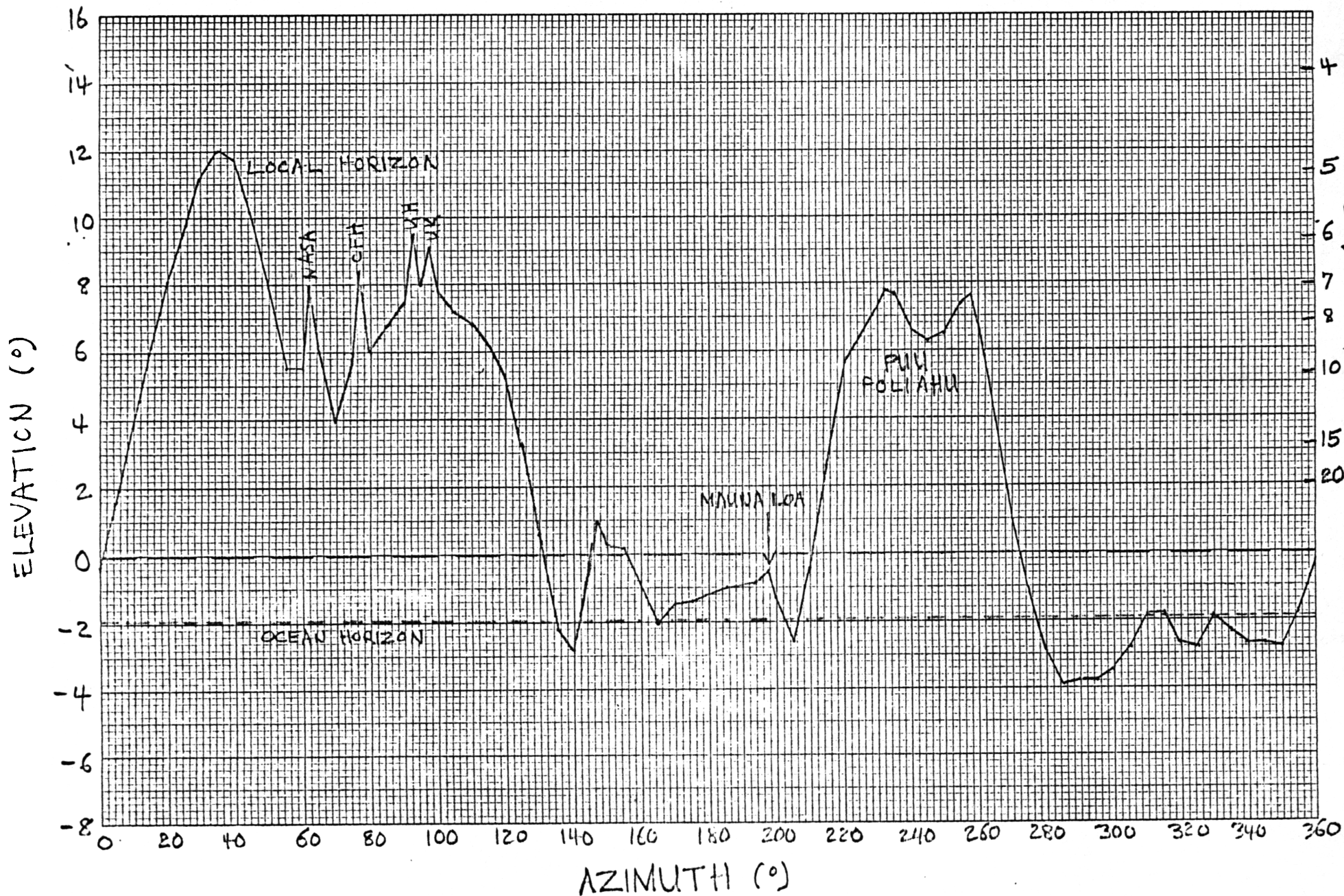


FIGURE 2

R.L. WILSON

9/11/66