



## MULTIPLE MIRROR TELESCOPE OBSERVATORY

Smithsonian Astrophysical Observatory and Steward Observatory, University of Arizona

Reply to: MMT Observatory  
University of Arizona  
Tucson, Arizona 85721  
(602) 621-1558

MMTO Tech Memo 84-24  
From: C. Janes  
Subject: Instrument Cabling Plan  
Date: December 31, 1984

This document is to advise you of changes planned to the existing derotator instrument cabling to accommodate the new top box and other requirements. Exceptions or additions to this plan should be reported immediately; many of these changes are scheduled to take place in February 1985.

1. The group of six 75 ohm coax cables now terminated at the derotator flange with four BNC's and two MHV's will be terminated entirely with BNC's at both ends. The BNC's at the control room end will be terminated on a 19" panel mounted on the wall behind the observer's console. See figure 1 and 2. Two of these cables are used for the IR photometer.

2. Six of the 75 ohm cables and six of the 50 ohm cables that lead from BNC's on the derotator flange to the instrument lab will be removed. The two remaining 75 ohm cables and the two remaining 50 ohm cables will be terminated on a single panel on the derotator flange and at the other end on a panel on the wall of the instrument lab. These cables are not used.

3. IDC-1, IDC-2, IDC-3, IDDC-5 and IDDC-6, all Belden 9876 (eleven individually shielded twisted pairs), and IDDC-9, a power cable, will be removed to make way for top box cabling. IDC-1 is currently used for prism wheel control. The new prism wheel will be controlled through new cabling. IDC-2 is used for I-vidicon control; a new smaller cable will be pulled for this use. IDC-3 is used for flapper control on the IR photometer; this cable will be replaced with a multiconductor cable terminated on a panel behind the observer's console (see figure 1 and 3). IDDC-5, 6, and 9 are not used.

4. The cable for the hand-held terminal will be replaced (to remove splices) and terminated on the derotator flange with a 9-pin D connector.

5. A cable will be pulled and terminated at the flange for control of the I-CCD to replace the one currently passing through the Nasmyth focus.

6. Three cables, two 50 conductor 24 AWG and one 12 conductor power cable, will be run for exclusive use by the top box.

7. The spectrograph data cable will be run through the derotator.

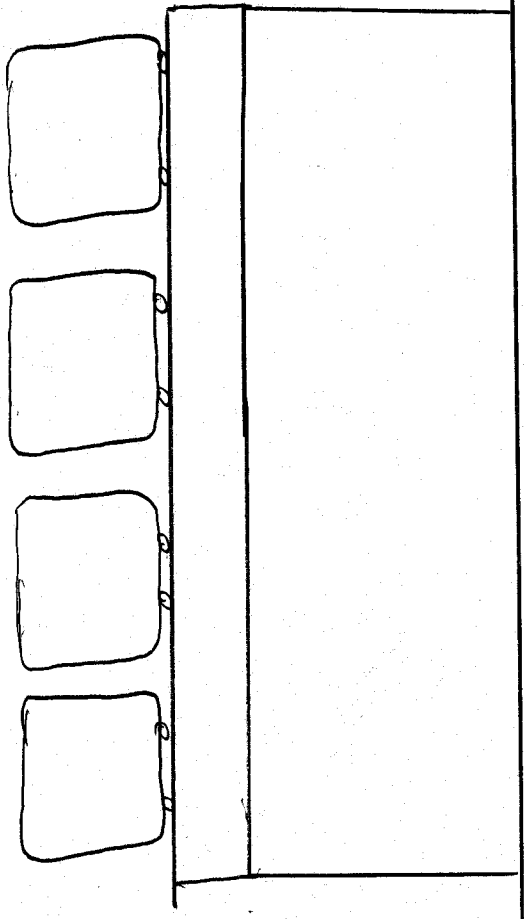
8. New cables will not use "G" connectors.

9. Note that cables IDDC-1, IDDC-2, IDDC-3, IDDC-7, IDDC-8, IDDC-10, and the six 75 ohm cables dedicated to the spectrograph control are not affected by this change.

LOCATION OF TERMINATION  
PANELS ON WALL OF CONTROL  
ROOM

(Figure 2)  
(Figure 3)  
(Figure 4)

3NC'S TO DEROTATER
IR PANEL
PI PANEL



observer's console, control room

figure 1

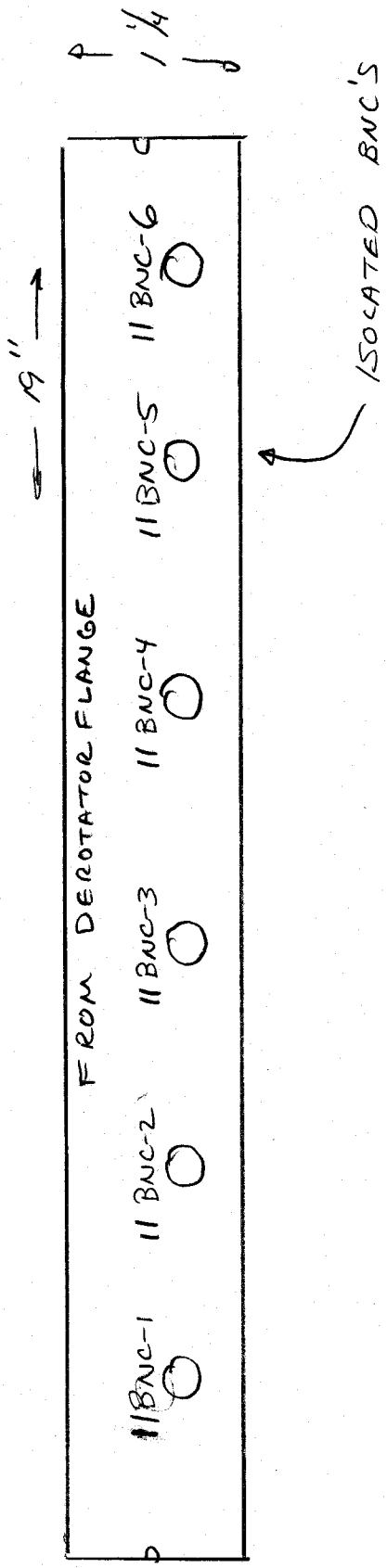


figure 2

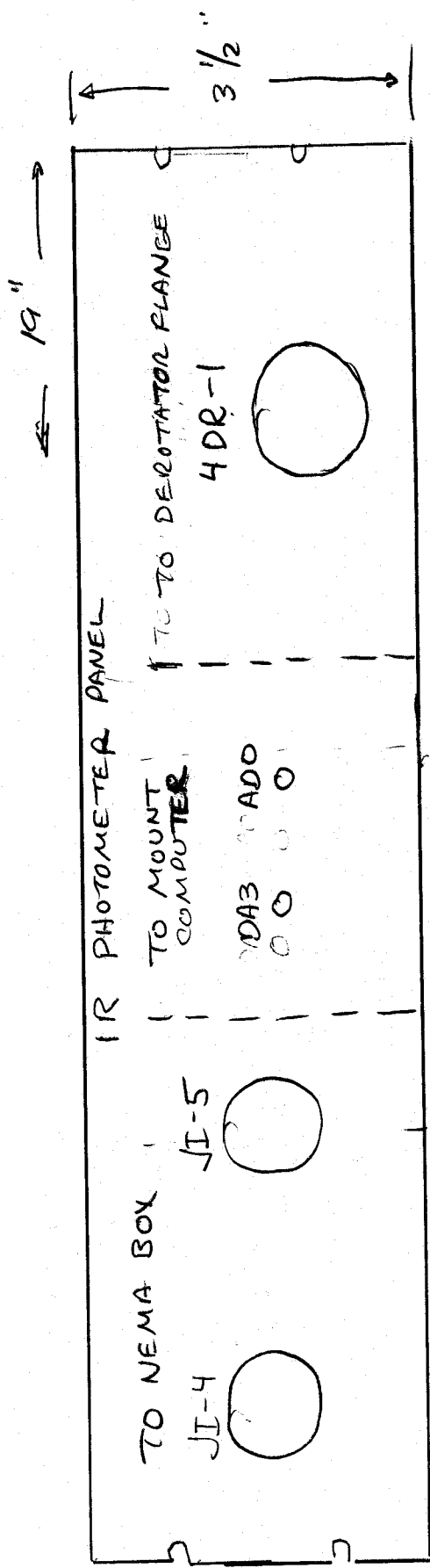


Figure 3

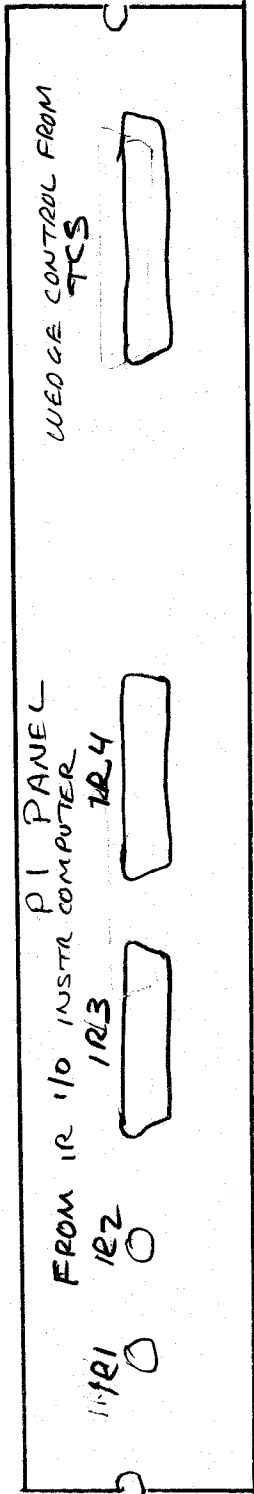


Figure 4