Interoffice

National Radio Astronomy Observatory
Green Bank, West Virginia

ADDITIONAL BASELINE TO INTERFEROMETER MEMO No. 161

To: Monterville Project Group

Feb. 1, 1982

From: Richard Fleming

Subject: Design Review of 14.2 Meter Antenna

A design review meeting was held in Green Bank on January 26, 1982 with TIW Systems. Mr. Lou Becker, President and Jack Adamson, Project Manager, made their design presentation to the design review group made up of Telescope Operations- Fred Crews and Len Howell; Engineering- Buck Peery, Sidney Smith and John Ralston; Electronics- Richard Lacasse and Ron Weimer; Administrative/ Contracts- Rick Fisher, Bob Moore and Richard Fleming.

Mr. Becker and Adamson made presentations using viewgraphs and engineering drawings (70), concerning the entire telescope design with special emphasis on feed legs and apex structure, cable wrap design, azimuth bearing design and structure analysis. TIW presented a current schedule (see attached) and everything still fits our schedule with one possible delay of 1-3 weeks on the azimuth bearing. This is viewed by NRAO and TIW to be no problem at this time.

During the meeting NRAO and TIW compiled a list of items needed to complete this phase of the design. Each agreed to furnish the following as soon as possible:

NRAO To Furnish

Written approval of feed leg and apex structure.

Written approval of cable wrap design.

Information of teflon material that could be used in cable wrap design.

Detailed map to the site for material deliveries.

NRAO tach. dimensions.

Will NRAO Encoder interfere with TIW design drawings.

TIW To Furnish

Technical memo on:
1) Feed deflection relative to best fit paraboloid focal point. Max = 0.6"
2) Reflector phase center horizontal shift.
3) Elevation transducer shaft motion.

Data sheets on limit switches.

Template and all mounting bolts for foundations.

Drive motor cooling blower H.P.

Information on servo system for Radio Astronomy applications, budgetary price and delivery (less encoders).

Supply Unistrut pieces every 24" on top of both struts of each feed leg.

Stow Pin Actuator H.P.

TIW left two sets of drawings for NRAO to review and either approve or recommend minor changes. After NRAO approval TIW will start fabrication.

In summary, the antenna is well designed and the project well managed and on schedule. The monthly progress reports received from TIW will become a part of the numbered memo series.

RLF/jsw

ASI 198, 199

Schedule

1/26/82