

NATIONAL RADIO ASTRONOMY OBSERVATORY

12-Meter Telescope Meeting No. 18

October 6, 1981

1. Present: CV: H. Hvatum, J. W. Findlay, Lee King, M. Balister, W-Y. Wong
 GB: M. Haynes, R. Moore, J. Ralston, D. Madron, A. Steinemann,
 T. Hamed
 Tuc: M. A. Gordon, P. Rhodes, D. Webb
 Soc: W. G. Horne

2. Memos (HH)

#75 - Specifications - OK
 #76 - OK
 #77 - OK
 #78 - RFP for BUS
 WGH —> Refusals from 3 companies so far.
 #79 - No comment
 #80 - OK

Electronics interface - JWF will schedule a meeting after J. Payne returns.

Inductosyns - One costs about \$5000 for Labor + Materials + etc. This is a quote from Tucson. Drawings have to be completely redone. Mountings also to be redone. T. Hamed is busy on electronics for Payne.

Hamed will take >1 month for redesign and redoing drawings.

Peery Perhaps 2 inductosyns on optical systems are needed in addition.

Rhodes We have only one spare for the present encoders (Baldwin).

Hvatum Total cost is about \$30K for a set of inductosyns; this is at present in OOE plan.

Hvatum Let us make a cost and schedule plan. Will MAG, R. Weimer, T. Hamed and R. Moore do this?

R. Moore Do a cost also for the task to be done in Green Bank.

Steinemann Green Bank may be able to do the job and save manpower costs.

#81 - Shipping Green Bank will continue to take care of this.

3. Surface, Reference Jig and Template (JWF)

HH and JWF plan to visit ESSCO on Friday, Nov. 13. First panels may be fabricated by then.

The quote for the RJ has been received (about \$6000) and a purchase order will soon be sent.

ESSCO have provided final dimensions for panel support points and panel edges. These will be circulated as a memo but JWF has already given them to WGH, Lee King and W-Y. Wong.

Work on the design of the template continues (WYW) and a designer-draftsman is helping with the details.

JWF has explored the data system, and will shortly ask electronics to provide:

- (a) An Apple computer, with CRT, printer and disk.
- (b) An ADIOS (See ED Report #212)
- (c) A 16-channel multiplexer suitable to interface with the ADIOS.

He plans to set up the whole system in Green Bank and to program it himself.

4. Shipping of panels

HH and JWF will explore the shipping methods when they visit ESSCO.

HH will speak to Marymor if a contract change is needed.

5. Back-up Structure

W. G. Horne is checking the drawings -- they look OK.

6. The Telescope Optics

J. M. Payne has asked JWF to look at the possible gain loss due to sub-reflector support and dish deflections. (JMP is on leave for 10 days.)

A first look suggests there may be a problem. However, there is as yet no good deflection analysis and WGH will ask Lee King to do this fairly soon.

It will then be possible to estimate the possible gain loss -- if this is serious, we shall have to take steps to compute it and correct it. JWF has discussed the problem with von Hoerner, Lee King, Napier and R. Fisher, and there are no great difficulties in the computations.