Interoffice

NATIONAL RADIO ASTRONOMY OBSERVATORY

TUCSON, ARIZONA

November 26, 1980

To: Mike Balister, John Findlay, Tony Hamed, Bill Horne, Rick Howard, Hein Hvatum, Lee King, John Payne, Buck Perry, Paul Rhodes, Dale Webb, Sandy Weinreb

From: Mark Gordon

Subject: Resurface the 36-ft Telescope?

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One possibility for improving the NRAO facilities for millimeter-wave astronomy is refurbishing the 36-ft telescope. Is this <u>technically</u> feasible? Before Mort can decide whether or not to do this, he needs to know whether it can be done, its cost, the lead time, and the down time.

To discuss this possibility, I've scheduled a meeting in the Ivy Road conference room at 1330 EST on Tuesday, December 9th. Hein has offered to arrange for telephone connections to the VLA (Bill Horne), to Tucson (Paul Rhodes), and elsewhere for those on the road (Rick Howard). I've attached some background material from my files, you may want to circulate some of your material also. Here's a tentative agenda:

- 1. What do we know about the performance of the 36-ft?
 - a) Pointing
 - b) Surface accuracy
- 2. Shall or can we measure its characteristics more accurately?
- 3. What options are available?
 - a) Refiguring the existing surface
 - b) A Leighton or psuedo-Leighton surface
 - c) An Essco reflector
 - d) An NRAO design
 - e) Other possibilities
- 4. Costs in time, money, and electronics efforts.
- 5. Will the dome last another 10 years?
- 6. Other topics.

Attachments

c: M. S. Roberts