

National Radio Astronomy Observatory
Tucson, Arizona

May 30, 1989

MEMORANDUM

To: Addressee

From: John Payne

Subject: Pointing

I have talked to Lee King about the strange behavior of the focal point of the telescope. He can think of no reason (other than slippage) for the hysteresis effect. The X dependence on elevation angle he feels may be due to unequal tension in the support cables.

I would suggest the following:

- 1) Antonio modifies the quadrant detector and re-installs it on the telescope before summer shutdown.
- 2) We arrange for Lee to visit us at the start of shutdown and we set up and repeat the quadrant detector measurements.
- 3) Lee then supervises the cable tensioning and tack welding of the feed legs and we see what difference it makes.

Lee says he would be happy to help us out. If Darrel and Phil agree, I'll make the arrangements.

✓ Darrel Emerson
Phil Jewell
Antonio Perfetto
Lee King
Bob Freund