National Radio Astronomy Observatory Tucson, Arizona February 23, 1989

MEMORANDUM

To: D. T. Emerson and J. M. Payne

From: P. R. Jewell DRJ

Subject: Pointing Projects

Given the evident poor pointing and the continued complaints from observers, we need to review our program to improve 12 m pointing. We should assess our progress on projects initiated last year and identify the new projects we want to start this year. Perhaps we should take a step back and reassess our whole plan of attack, both in terms of individual projects and in the allocation of resources to this program.

As a brief reminder, I have listed below the pointing projects we started last year and the ones proposed for this year. Most of these projects have been described in more detail previously.

- I. Pointing Projects Started in 1988 (or before)
 - 1. Optical telescope
 - 2. Feed leg insulation and air circulation
 - 3. Improved data analysis and display
 - 4. Laser quadrant detector
 - 5. Weather Station
 - 6. Temperature Sensors

II. New Projects Proposed for 1989

- 1. Enhanced optical telescope and data acquisition
- 2. Inclinometers for the elevation yoke
- 3. Independent system for measuring encoder zero offsets
- 4. New Sterling Mount with X and Y translation, servoed to quadrant detector
- 5. Additional systems to measure structural shifts (?)