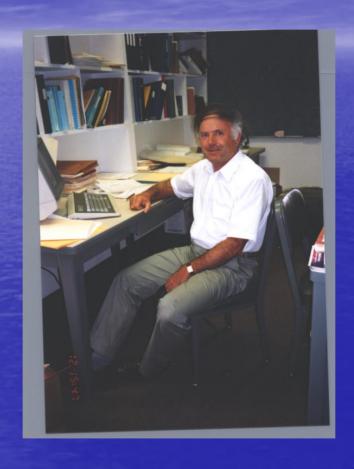
A Tribute to the Career of John Payne at NRAO





J. P. Goes Sailing to Bermuda, May 1971

The good ship Delight

- Steel hull schooner, built ~1968-1971 by Cap'n Dave Heeschen
- Design ca 1890

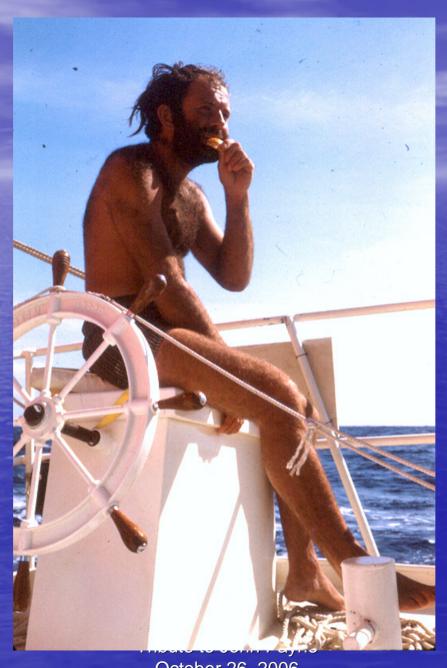
Crew

- JP
- Sebastian von Hoerner
- R. Brown





Tribute to John Payne October 26, 2006











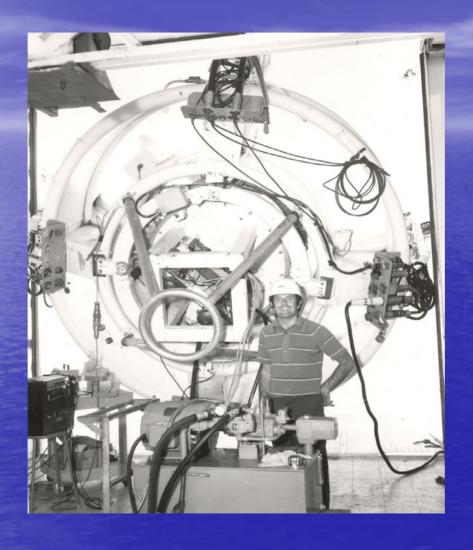
Nutating Subreflector for the 140-Foot Telescope (installed Oct 1974)

Requirements:

- Move from one rest position to another in 40 msec
- Maintain subreflector positioning when at rest to within 0.001 inch.

Characteristics:

- Weight: 300 pounds
- Hydraulic linear actuators: 70 hp, 3000 psi
- Force on subreflector: 2.5 tons (torque 7000 ft-lbs)
- Acceleration at subreflector edge: 28 Gs
- Compensated forces using electrohydraulic servos



NATIONAL RADIO ASTRONOMY OBSERVATORY Green Bank, West Virginia

Electronics Division Internal Report No. 137 NUTATING SUBREFLECTOR FOR 36-FOOT TELESCOPE

John M. Payne

FEBRUARY 1974

NUMBER OF COPIES: 150

Keys to Managing Creative People

- 1. Assure that the 'ownership' of a creative idea/initiative is clear to all. Ensure that the 'owner' visibly leads any development effort.
- Never keep a creative person in isolation. Form a team of 2 (no more than 3) creative people that 'owner' leads.
- 3. Don't dilute the creative team with others (e.g. managers and mortals)
- 4. Arrange early confrontations with reality via proof-ofconcepts and prototypes → allocate sufficient resources for tools, toys and support staff
- 5. In the post-prototype stage, add a (thick-skinned) 'perfectionist' to the team; transition the creative people to other problems needing creative solutions



