



Ground Antenna Systems

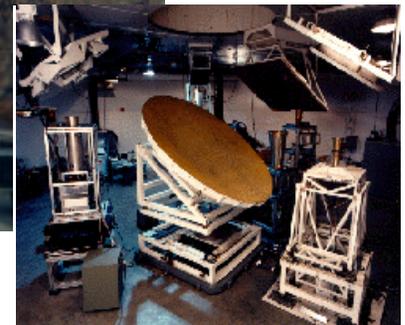


• Overall Objective

- Increase the performance/cost ratio of DSN antennas and associated strategic subsystems through technology demos at DSN stations, especially DSS-13.

• Goals and Products

- Develop and demonstrate strategic front-end technologies: RF optics, cryogenic Low Noise Amplifiers, High Efficiency Transmitters and state-of-the-art electronics & instrument controls
- Compensate for efficiency roll-off on 34 & 70m antennas due to gravity deformation by use of array feed and deformable surface compensating technologies
- Remote and Autonomous operation of DSS-13 and long term compatibility of with DSN



The 34-m Research and Development Beam Waveguide Antenna (DSS 13) at Goldstone, CA

