

Goldstone Celebrates 50 Years of Exploring Space!

On Tuesday, January 13, NASA celebrated 50 years of tracking spacecraft from the Deep Space Network's Goldstone antenna facility located at Fort Irwin, California. A number of activities were planned for the celebration, including speakers from NASA, JPL (Jet Propulsion Laboratory at the California Institute of Technology) and Goldstone. The introduction was made by Dr. William Weber, Director of the Interplanetary Network at JPL, Dr. Barry Geldzahler, DSN Program Executive for NASA, and Lt. General (Retired) Eugene Tattini, Deputy Director for JPL.

The DSN network, as a whole, is comprised of three deep-space communication complexes placed approximately 120 degrees apart around the world: Goldstone in the Mojave Desert; Madrid, Spain; and Canberra, Australia. These three sites ensure that, as the Earth rotates, an antenna is always within sight of a given spacecraft at any time of the day or night.

Many milestones have been seen in fifty years of space exploration, both in robotic and manned spacecraft. The Goldstone Deep Space Communications Complex has brought home the critical data, images, and science from the first planetary encounters, the first human landing on the moon, and missions that reach the farthest points in our solar system.

The first deep space antenna to be constructed at Goldstone was the Pioneer Station, or DSS-11. The 26-meter, polar mounted antenna was completed in December, 1958 - in time to support the Pioneer 3 mission - and it became the proto-type antenna for the Deep Space Network. Pioneer went on to track a variety of NASA missions, including all Pioneer spacecraft. In 1981, DSS-11 was officially "mothballed" and in 1985, was designated as a historical landmark.

The original Echo antenna was constructed as a 26-meter, Azimuth/Elevation design and was first used in support of Project Echo and provided our first radar observations of Venus. The Echo antenna was moved to a new location in 1962 and renamed Venus. A new 26-meter, HA (hour angle)/Dec (declination) antenna was built to replace the antenna and, in 1978, the new antenna was expanded to 34 meters and set on concrete blocks to accommodate it's new height. In 1996, the antenna was decommissioned and became our very own GAVRT antenna (DSS-12). In 2006, the Echo antenna was dedicated to our very own Dr. Michael Klein and renamed as the Dr. Michael J. Klein Radio Observatory.



From the Desert to the Stars...



Fifty Years of Space Exploration!

