

March 2004 — Northrop Grumman's AstroMast and Hinge Mechanism Successfully Deployed on Defense Meteorological Satellite Program Spacecraft

CARPINTERIA, Calif. – March 2004 – Two of Northrop Grumman Corporation's (NYSE:NOC) space mechanisms successfully deployed key instruments aboard the Defense Meteorological Satellite Program (DMSP) spacecraft, launched in early October 2003 from Vandenberg Air Force Base in California.

Following a release command by ground controllers, a six-meter-long (19-foot) AstroMast deployable boom, built by Northrop Grumman's Astro Aerospace unit, successfully deployed the Special Sensor Magnetometer (SSM). The boom provides support for the SSM while separating it from the spacecraft body. It has precise pointing and low magnetic susceptibility, which allow the SSM to provide accurate magnetic measurements around the spacecraft.

Astro also designed and built the hinge and release mechanism that deployed the Special Sensor Microwave Imager and Sounder (SSM/I) instrument reflector. When released, the reflector deployed and locked into position to an accuracy of better than two one-hundredths of a degree to permit the SSM/I to achieve its required pointing accuracy.

Astro Aerospace, based in Carpinteria, is a business unit of Northrop Grumman Space Technology, a leader in the development of space, defense and electronics systems. For more than 40 years, Astro Aerospace has pioneered the technology of space deployable structures including furlable antennas and reflectors, truss masts, telescopic booms, storable tubular extendible members, solar arrays and deep truss structures. It has a 100 percent success rate on hundreds of flight-specific deployable units.

##