



# Flight Support Det Becomes VXS-1

**O**n 13 December 2004, the Naval Research Laboratory's (NRL) Flight Support Detachment became the Navy's newest squadron. Scientific Development Squadron One (VXS-1) will continue its mission as the Naval Research Laboratory's aviation component, but now operates as its own command. The new command was recognized in an establishment ceremony held on 18 February.

Located at NAS Patuxent River, Md., VXS-1 is manned by approximately 13 officers, 66 enlisted, and 12 civilians. The squadron is currently responsible for the maintenance and security of four uniquely configured P-3 Orion turboprop research aircraft. It conducts numerous single-aircraft deployments around the world in support of a wide range of scientific research projects.

The Flight Support Detachment has provided flight support for diverse research programs such as the Bow



Echo and Mesoscale Convective Vortices Experiment (BAMEX); Cooperative Engagement Capability; Global Netcentric Surveillance and Targeting; and Airborne Geophysical Sensor Suite.

The detachment supported the Antarctic Sea Ice Campaign 2004, flying missions in and around the Palmer Peninsula on the Antarctic continent. The goals of this campaign included evaluation of spatial variability to

fully assess how accurately sea ice parameters can be derived; a study of new ice emissivity, heat, and salinity fluxes over coastal waters; and a determination of precise locations of ice edges. The project produced amazing results. Several other projects have been scheduled for 2005, including operations in Alaska, Florida, and the Middle East.

VXS-1's flight safety record spans more than 40 years and includes over 62,000 mishap-free flight hours. The command has continued to improve both capabilities and diversity among its aircraft platforms. Aircraft 153442 has undergone extensive modifications with Lockheed Martin to install a rotodome antenna and a full airborne electronic warfare radar system. The aircraft is currently supporting the Navy's Theater Air Defense programs and providing a test bed for advanced electronic warfare radar research. Additionally, all aircraft completed extensive bomb-

bay design improvements that will allow them to carry more diverse scientific payloads. The Electra doppler radar and a laser were installed on aircraft 154587 during an extensive modification for the BAMEX project, and this aircraft will be used in upcoming atmospheric research projects. Upgrades and modifications such as these will ensure that the Naval Research Laboratory will have the finest airborne research capabilities well into this century. ✈️

Lt. John A. Rubino is VXS-1's Public Affairs Officer. Special thanks to Cdr. George Salitsky for his assistance with this article.

**Continuing the mission it held as the Naval Research Laboratory's Flight Support Detachment, below, Scientific Development Squadron 1 operates P-3 Orions that are uniquely configured to conduct aerial research projects. Facing page, top, this VXS-1 P-3 flew as a test platform in the Bow Echo and Mesoscale Convective Vortices Experiment. Right, an 18 February ceremony marked the establishment of VXS-1.**

