

U.S. Navy Antarctic Development Squadron Six activities, 1984–1985

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During the 1984-1985 austral summer, Antarctic Development Six (VXE-6) marked its 30th year of providing air support for the U.S. Antarctic Research Program. VXE-6 flight operations in Antarctica during the 1985 season were an unqualified success, with all logistics tasking completed on or ahead of schedule.

The season began on 15 August 1984 when three ski-equipped Hercules (LC-130's) departed their home station in California for Christchurch, New Zealand. The purpose of the winter fly-in was to transport personnel and material to McMurdo Station, Antarctica and to construct the ice runway required for U.S. Air Force C-141 aircraft operations. Despite several delays due to weather conditions at McMurdo Station and three maintenance-related aircraft aborts, VXE-6 completed a record eight flights between 22 and 28 August.

The austral summer support season commenced with the deployment of UH-1N aircrew and maintenance personnel, the first of which arrived in McMurdo Station on 3 October. Preparation began immediately to prepare the UH-1N helicopters left at McMurdo Station for the summer flying season. The first of the six LC-130's left Naval Air Station Point Mugu, California, on 11 October. Upon arrival at Christchurch, the squadron was unexpectedly tasked to fly four round-trip support flights to McMurdo Station. Unusually adverse weather at McMurdo Station had put the U.S. Air Force C-141 flights nearly 8 days behind schedule.

On 20 October, VXE-6 helicopters opened the season with the first science support flights. The same day, five of the six LC-130's arrived at McMurdo Station. Within 2 weeks, the

squadron had opened New Zealand's Vanda Station, Byrd surface camp, and South Pole Station.

For the LC-130's, the season was characterized by a large increase in open-field work, the bulk of which was conducted for the combined glaciological programs at the Siple Coast. Other open-field projects included: (1) geological studies at the Jones Mountains, Ellsworth Mountains, and Mount Smart; (2) search for meteorites at Allan Hills; (3) volcanic research at Mount Takahe; (4) geologic/geochemical, stratigraphic, and sedimentological study of the English Coast on the Bellingshausen Sea; (5) ice-core retrieval and climatic research at the Dominion Range, Transantarctic Mountains; (6) Federal Republic of Germany/United States/New Zealand North Victoria Land Cooperative Program; (7) Antarctic Treaty Symposium at the Lennox-King Glacier; (8) stratigraphic evolution and tectonic setting research, Ross Sequence, Transantarctic Mountains and Nimrod and Starshot Glaciers. During an attempt to relocate the field camp at the Starshot Glacier, one LC-130, XD-02, was trapped in a crevasse and was severely damaged. All crew and passengers were rescued without injury. A recovery crew was detached to the scene, and the aircraft was repaired and flown from the site within 2 weeks.

VXE-6 provided the sole search and rescue capability for the U.S. Antarctic Research Program. During the 1984-1985 season, VXE-6 evacuated four patients to Christchurch for medical treatment.

McMurdo Station began winter operations 20 February 1985. During the season LC-130 and UH-1N aircraft flew 4,517.8 hours, transported 4,075,465 pounds of cargo, and 4,162 passengers, exclusive of the winter fly-in.

On 15 February the squadron departed Christchurch for Naval Air Station Point Mugu, California. While taxiing during an enroute stop at Naval Air Station Barbers Point, Hawaii, one LC-130, XD-01, experienced a catastrophic turbine failure and fire. No injuries occurred, but the aircraft was extensively damaged and did not return to point Mugu until mid-May 1985. All other aircraft returned safely to Point Mugu by 22 February. Upon return to California the squadron had a brief standdown period and then began the summer training schedule in preparation for the 1985-1986 austral summer.

Ship operations

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Two U.S. Coast Guard icebreakers operated in the Antarctic this season in support of the U.S. Antarctic Program. The U.S. Coast Guard icebreaker (USCGC) *Polar Star* from Seattle, Washington, resupplied and refueled Palmer Station, performed the channel break-in to McMurdo Station, assisted in the escort of the resupply ships *USNS Maumee* (a tanker) and *M/V Green Wave* (a

cargo ship) into and out of Winter Quarters Bay, and conducted three science cruises, one in McMurdo Sound, one in the Ross Sea, and one off the Oates Coast. The U.S. Coast Guard icebreaker *Glacier* from Long Beach, California, delivered the initial supply and wintering crew relief to Palmer Station and conducted an extensive science support program from the South Orkney Islands along the western Antarctic Peninsula to the Bellingshausen and Amundsen Seas. A detachment of two HH-52A helicopters from the Coast Guard Aviation Training Center, Mobile, Alabama, was assigned to each icebreaker (table). AVDET 104 operated from *Glacier*, and AVDET 105 operated from *Polar Star*. The tank ship *USNS Maumee*, an old antarctic

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