Squadron SIX R4D aircraft flying from Byrd Station. One of these missions was complicated when the aircraft sheared a tail wheel on landing (Bulletin, Vol. II, No. 4, page 21).

The traverse will terminate on the Eights Coast, where the party will be picked up by aircraft for return to Byrd Station.

McMURDO - POLE

The McMurdo-Pole party began its 1400-mile trek on 10 December. Delayed nearly a month because of repairs that had to be made to two of the three vehicles being used, the party followed a safe route through the heavily crevassed areas of the Skelton Glacier which had been marked a few weeks earlier by a helicopter-supported three-man party. On the Skelton Glacier, Dr. Crary remeasured a number of glaciological movement stakes he had set out on a 1958 traverse, and continued other studies initiated on this earlier trip.

At the Plateau Depot (7750 feet above sea level), VX-6 aircraft had stored 4000 gallons of fuel, two tons of food, and one and a half tons of explosives for use by the party. The party arrived at this point on 24 December and two days later began the southbound journey.

From the Plateau Depot, the party will travel south on the polar plateau following a route about 200 miles west of the Britannia and Queen Alexandra ranges to a fuel cache. This depot, 137 miles from the head of the Beardmore Glacier, will enable the party to resupply with 72 barrels of fuel dropped by Air Force Globemasters in October. The party will then travel south along Amundsen's route to the Pole.

The party consists of the following personnel:

Albert P. Crary, exploration geophysicist and traverse leader, National Science Foundation
Edwin S. Robinson, exploration geophysicist, University of Wisconsin
Mario B. Giovinetto, glaciologist, Ohio State University
Jack C. Zahn, glaciologist, Ohio State University
Sveneld A. Evteev, glaciologist, exchange scientist from Soviet Union
Ardo X. Meyer, geomagnetician, U.S. Coast and Geodetic Survey
Jack B. Long, traverse engineer, University of Wisconsin
Ralph E. Ash, traverse engineer, University of Wisconsin

SCIENTIFIC INVESTIGATIONS

The McMurdo-Pole Traverse plans to make 12 major stations and 150 to 200 minor ones during its journey. Investigations will include the following:

Ice depth will be measured at all major stations by standard, seismic reflection methods. At three or more major stations, ice thickness determinations will also be made by seismic refraction methods. This type of seismic program will also give the velocity of the seismic wave in the rock material under the ice, which in turn gives an indication of the type of rock under the ice.

Annual snow accumulation will be studied in shallow pits and trenches at all major stations. Annual layers will be identified by studying density, temperature, grain size, and crystal size.

Snow, firn, and ice will be investigated for density, crystal size, and crystal orientation from ice cores at depths down to about 100 feet.

The surface character of the snow, including sastrugi heights, size, frequency, and orientation, will be logged.

Gravitational values, and information on the angles and intensity of the earth's magnetic field, will be determined.

At all major stations, ice temperatures will be observed by thermohms to depths of 100 feet or more in the drill holes. Changes in temperature below 50 feet give valuable information on the past history of the ice and past climatic variations.

Surface meteorological measurements will be made three times daily.

Mountain ranges and ice-free nunataks visible from the traverse route will be located to furnish additional ground control for mapping projects.

The program of the Ellsworth Highland party is similar to that being conducted by the Crary group.

AIRLIFTED TRAVERSES

A three-man airlifted traverse party from the University of Wisconsin, scheduled to conduct studies at seven stations between the Kohler Range and the Hudson Mountains, has been delayed because of the lack of fuel and JATO. This survey will make landings on a reconnaissance basis in areas difficult to reach on the surface or not yet covered by oversnow traverses. Seismic,