Great Distances Traveled

On these traverses, he covered a total of almost 3100 miles, an expanse of ice wider than the United States. Crary also led a 320-mile traverse in April 1958, which integrated his longer trips with traverses from Byrd and Ellsworth stations to give a continent-wide scientific picture of unprecedented scope. In all, U.S. traverses organized by Crary totalled 7500 miles, spanning Antarctica from the Weddell Sea to the Ross Ice Shelf and into the Victoria Land Plateau.

Crary's first major trek, from 24 October 1957 to 13 February 1958, covered 1450 miles of the Ross Ice Shelf. On the second journey, which began 15 October 1958, and lasted 108 days, Crary's party travelled 1629 miles.

Group Records Varied Findings

During the latter trip, the group climbed Skelton Glacier to a height of 7500 feet, placing markers which will lay the groundwork for the first accurate measurements of mass ice flow down the glacier. They worked their way up the glacier to the Victoria Land Plateau, and proceeded inland 400 miles on the plateau, finding ice 8000 to 9000 feet thick. Average annual temperature on the plateau was determined to be −55°F, almost as low as the −58°F average at the South Pole. This was found by measuring temperatures in bore holes drilled to depths of about 50 feet. At this level, temperatures are known to be about the same as the annual average at the surface.

Among their other findings was an ocean-bottom depth beneath the Ross Ice Shelf of about 4400 feet below sea level, at 79°06′S, 165°30′E. It was measured by seismic sounding.

Primary purposes of the most recent traverse were to determine the snow and ice characteristics and thickness on a line extending directly into the main Antarctic highlands and to study the Skelton Glacier and the transition from low-lying ice shelf to high plateau.

More than a dozen specific types of scientific observations were made by the party, which also included Charles R. Wilson, Washington, D.C., and Stephen L. Den Hartog, Concord, Mass., glaciologists; Lyle D. McGinnis, Kaukauna, Wis., seismologist; and Frank C. Layman, Pittsburgh, Pa., mechanic. Trevor Hatherton, chief scientist of the New Zealand Antarctic program, accompanied the party most of the way.

Methods and Equipment Used

They travelled in three Sno-Cats. The first of these tractor-type vehicles carried an electronic crevasse detector, navigation equipment, and radio. Another housed seismic, gravity, and magnetic equipment, while a third carried mess facilities. Three 2½-ton sleds were used to haul fuel and spares. The party was resupplied by ski-equipped aircraft from Navy Task Force 43, under the command of Admiral George Dufek, which provided extensive logistic support for IGY scientific activities.

Elevations of the surface along the traverse route were obtained by altimetry and transit levelling. Thickness of ice was determined by seismic reflection methods. Characteristics of rock under the ice were established by seismic refraction methods.

Primarily to obtain data on annual snow accumulation, observations were made to depths of 10 meters from shallow snow pits and bore holes. Snow hardness, grain size and shape, densities, and temperatures were noted.

Surface meteorological data were collected on temperature, pressure, wind speeds, wind direction, cloud cover, and cloud types.

Standard "station" stops were spaced at intervals of about 30 miles for snow-pit studies, seismic reflections, gravity and magnetic observations, and temperatures in 10-meter bore holes. Minor stations were made about every 5 miles for gravity and magnetic studies.

During the passage up the Skelton Glacier, the intervals were shortened to 5 and 2 miles for standard and minor stations respectively. In addition, three major stations were made at the foot and top of the Skelton Glacier and at the western end of the plateau line. There, seismic refractions were added, the drill holes were made to depths of 20 meters, and snow samples were taken for oxygen-isotope studies.

Britain's Department of Scientific and Industrial Research

Some years ago Great Britain decided to try financing its Department of Scientific and Industrial Research on a 5-year basis. The experiment, which was designed to meet the needs of long-term planning of research, has proved successful, and the government is continuing the system for another 5 years.

An outline of the second 5-year plan was presented in the House of Commons recently by Harmar Nicholls, parliamentary secretary to the Ministry of Works, speaking on behalf of the Lord President of the Council for Scientific and Industrial Research, Lord Hailsham, who is the minister responsible for the DSIR. As before, the financial provisions of the program are subject to the necessary funds being voted annually by Parliament and may be reviewed in the event of a marked change in the economic situation or of major changes in cost. Some of the chief features of the new plan follow.

The Plan

Expenditure on research by the DSIR will be nearly doubled in the next 5 years. For the period 1959–64, approximately £61 million will be made available to the department, compared with £36 million for the first period, which ends on 31 March 1959.

Expansion will continue steadily throughout the period, and for the year 1963–64 expenditure is expected to reach about £14 million. This figure does not include certain special items, the largest of which is the British contribution to the European Organization for Nuclear Research (CERN), which will continue to be financed outside the 5-year plan.

The largest expansion will take place in the field of scientific grants to the universities. Post graduate awards to students will be increased by about 10 percent each year until in 1963–64, it is hoped, some 3800 students will be receiving DSIR grants for research training. In the same year it is expected that DSIR support for special research in the research departments of universities will be operating on a scale of about £1¾ million per annum.

DSIR Laboratories

In support of additional research carried out in the department's own laboratories, expansion of staff at the rate of about 6 percent per annum—or approximately 30 percent over the 5 years—is included in the plan.

Grants to the research associations will also be increased to over £2 million per annum by the end of the period. At present there are 49 organizations in the DSIR scheme. The Council for Scientific and Industrial Research will continue its policy of encouraging industry to bear an increasing proportion of the total cost. It may be expected, therefore, that the actual expansion of the research association movement will be proportionately greater than the increase in government grants.

It has also been decided to devote much more attention and more money to insure that the results of scientific research are known and applied.

It is also proposed that the Ministry of Works increase its rate of expenditure on behalf of DSIR so as to provide buildings and equipment for the increased staff of DSIR laboratories.

U.N. Space Group

The first meeting of the United Nations Committee on the Peaceful Uses of Outer Space has tentatively been scheduled for the second half of April, according to the *New York Times*. The committee, which consists of 18 government representatives, was established by