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## SCARreport

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Report on a formal meeting of the SCAR Working Group on Glaciology, Reykjavik, Iceland, 25-31 August 1985



ARGENTINA - AUSTRALIA - BELGIUM - BRAZIL - CHILE - CHINA FRANCE - GERMEN DEM. REP - GERMANY (FED. REP) - INDIA JAPAN - NEW ZEALAND - NORWAY - POLAND - SOUTH AFRICA USSR - UNITED KINGDOM - USA

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Report on formal meeting of SCAR Working Group on Glaciology, Reykjavik, Iceland, 25-31 August 1985

A formal meeting of the SCAR Working Group on Glaciology was held in Reykjavik, Iceland, during the International Glaciological Society's Symposium on Glacier Mapping and Surveying. The WG met all day on 25 August. Working parties convened for special purposes during evenings of the following week.

Those present were P. Skvarca, Argentina; V. Morgan (for W. Budd), Australia; C. Marangunic, Chile; H. Kohnen, FRG; K. Kusunoki, Japan; O. Orheim, Norway; D. Drewry (for G. Robin), UK; C. Swithinbank, UK; V. Kotlyakpov, USSR; C. Bull, USA (Secretary). Apologies for absence were received from C. Lorius, France, T. Chinn, New Zealand. Official Observer: J. Simões, Brazil.

The Secretary explained that he had written to all WG members to announce this meeting, but had received no responses from those not named above. Other countries interested in glaciological research in Antarctica had been invited to send observers.

#### Chairman

C. Bull was appointed Chairman of the WG meeting. Following the introduction of the Official Observer from Brazil, the reports of the previous formal meeting (Hamburg, FRG, August 1983, SCAR Bulletin 77, May 1984) and the last informal meeting (Bremerhaven, FRG, September 1984, SCAR Bulletin 80, May 1985) were accepted. The draft agenda submitted by the Secretary was adopted, but was taken out of order to accommodate the schedules of some members.

#### National Reports

Written reports were submitted by the representatives of Argentina, Brazil, Chile, France, Japan, New Zealand, Norway, UK, USSR, and USA, and attending members made oral presentations. The Secretary outlined the reports from France and New Zealand. Copies of the National Reports from Australia and FRG will be sent to the Secretary for distribution to all members.

#### International Projects

Glaciology of Antarctic Peninsula. C. Swithinbank reported that in the decade since the establishment of this project slow but steady progress had been made towards the fulfillment of the plan with its extensive 'paleoclimatic' drilling in the Peninsula. The US drilling at Siple Station and the Argentine/French drilling on James Ross Island were valuable contributions. The forthcoming work on Dolleman Island will add to the information. The UK remains the lead country in this research. Further recent work is referred to in the UK National Report. Swithinbank emphasized the importance of international cooperation and encouraged other nations to participate fully in the glaciological work in the area.

Filchner-Ronne Ice Shelf. H. Kohnen reported on the workship held in June 1985 in Bremerhaven, FRG, with participants from FRG, Norway, UK and USA. One day was devoted to reports of recent glaciological work in the area, and another to planning sessions for work to be undertaken in the future, particularly through national programs.

UK plans include hot-water drilling to 200-400 m in the thinner parts of the Ronne Ice Shelf in the 1985-86 or 1986-87 seasons, and continued ice dynamics studies, including those on the flowline from the Rutford Ice Stream to the ice front. The US has no plans for fieldwork in the area but will contribute through future satellite work.

Norway's focus will be on oceanographic work along the ice front, initially in 1987-88.

FRG's work will include 'classical' glaciological measurements on a grid basis; ice-coring to 200 meters and hot-water drilling to 400 m, particularly in areas showing an intermediate radar reflecting layer; continued routine survey work of the ice front, including photogrammetrical work from the Dornier aircraft (in conjunction with ground control); remeasurements of

#### REC-1985-GLAC-1.

There is a strong scientific need to complete the radio echo soundings on a 50- to 100-km square grid of the Antarctic Ice Sheet. Many nations are carrying out radio echo soundings in selected areas. The Scott Polar Research Institute has recently drawn up a map of existing radio echo sounding tracks. The Working Group recommends that each SCAR nation indicate the areas they intend to cover with radio echo sounding during the next five years and that the Working Group continue to monitor the position.

Four Recommendations from the last formal meeting were consolidated into a single Recommendation, as follows:

#### REC-1985-GLAC-2.

The Working Group recommends that national committees of SCAR stress to their space agencies and other appropriate bodies, the need to give maximum support for the acquisition and reduction of satellite altimeter data over ice sheets, and the development of other satellite techniques that will provide new information on Antarctic glaciological parameters, such as those providing data on temperature, accumulation rates and surface roughness. The Working Group stresses the need to extend coverage to as

high a latitude as possible.

The following new Recommendation was adopted:

#### REC-1985-GLAC-3.

Recognizing the important contributions to Antarctic glaciology, resulting from Antarctic meteorite studies, the Working Group recommends that, whenever possible, a glaciology program be undertaken in significant meteorite collecting areas, to exploit their potential for improving our understanding of ice sheet processes.

### Composition of Working Group: election of Secretary

The WG reconsidered whether there was a need for more than one officer in the group and reaffirmed that there was not. The single officer could be called Secretary and Chairman. Japan's new representative on the WG will be S. Mae. K. Kusuoki was thanked by the WG for his valuable contributions over the years. C. Bull, having been Secretary since 1977, declined to continue in that position. He was thanked for his work in that capacity and as Chairman of the several meetings of the WG. O. Orheim was unanimously elected Secretary.

Colin Bull



#### **SCAR REPORTS**

This is an irregular series of publications, started in 1986 to complement SCAR Bulletin.

SCAR Bulletin carries reports of SCAR meetings and SCAR Executive Committee meetings, short summaries of SCAR Working Group meetings, notes, reviews, and articles and material from Antarctic Treaty Committee meetings, considered to be of interest to a wide readership. The Bulletin is published as part of Polar Record, the journal of the Scott Polar Research Institute, Cambridge, and is reprinted separately for distribution to SCAR National Committees and scientists directly concerned with SCAR. It is translated into Spanish by the Instituto Antartico Argentino.

The SCAR Report series has been established for the purpose of providing SCAR National Committees and others directly involved in the work of SCAR with the full texts of reports of SCAR Working Group meetings, which had become too extensive to be published in the Bulletin, and with more comprehensive material from Antarctic Treaty meetings.

As with the *Bulletin* reprints, this series is distributed mainly through SCAR National Committees and is not available on direct subscription.