

INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS

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No. 28

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# SCAR

SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH

# BULLETIN

ARGENTINA AUSTRALIA BELGIUM  
CHILE FRANCE JAPAN NEW ZEALAND  
NORWAY SOUTH AFRICA UNITED KINGDOM  
UNION OF SOVIET SOCIALIST REPUBLICS  
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## SCAR BULLETIN

No. 28, January 1968

### MEETING OF THE SCAR EXECUTIVE COMMITTEE, CAMBRIDGE

24 TO 26 JULY 1967

*Present:* L. M. Gould (President), R. N. Panzarini (Vice-President), G. de Q. Robin (Secretary), in attendance G. E. Hemmen (Assistant Secretary).

#### **1. Liaison between SCAR Working Groups and relevant associations and committees of ICSU unions**

Following the decisions taken to improve the direct liaison between SCAR Working Groups and relevant associations and committees of ICSU unions, a summary of the links established at working group level and the links between SCAR and ICSU unions and committees was noted. (Annex A.)

#### **2. SCAR representation on the Committee on Water Research (COWAR)**

Noting that at IX SCAR it had been agreed that the question of SCAR representation on COWAR would be reconsidered when Professor H. Hoinkes retired as President of IASH, it was reported that he was about to retire and a new President of IASH would be appointed. It was felt that it might be advisable for SCAR to invite Professor Hoinkes to continue to serve as SCAR representative. However, it was agreed that the Secretary of SCAR should seek the views of the Working Group on Glaciology at the group's meeting in September.

#### **3. Groups of specialists**

The Executive received a summary of progress with the formation of the fifteen groups of specialists proposed at IX SCAR. (Annex B.)

It was noted that action in connexion with ten of the groups was in hand, all of which are being set up under permanent working groups of SCAR, but that further action was required in the case of:

(1) *Communications*: Action now in the hands of the Logistics Working Group.

(2) *Technical problems affecting communications*: Eight names had been proposed for membership of this group and it was agreed that P. G. Law be informed of these eight names and be invited to serve as convenor of the group.

The executive did not consider that this group would need to meet on a regular basis but would exist to offer solutions to technical problems which might be referred to it by other groups within the SCAR framework.

(3) Four names had been proposed for membership of the group of specialists on the use of space vehicles in Antarctic research.

It was agreed to invite G. R. Laclavère to serve as convenor of such a group the first task of which should be to examine ways in which the group could advance Antarctic research.

#### **4. *Annals of the IGY***

It was reported that the glaciology volume (Vol XLI) and the Antarctic volume (Vol XLIV) of the *Annals of the IGY* had now been published. The Executive recorded its thanks to L. M. Forbes for his work in editing the Antarctic volume.

#### **5. 1968 Meetings**

Following correspondence with the Japanese National Committee, Dartmouth College and CRREL, the Executive confirmed the dates and locations of SCAR Meetings during 1968. (A summary of international Antarctic meetings scheduled for 1968 is attached—Annex C.)

#### **6. International Antarctic Meteorological Research Centre (IAMRC)**

It was reported that a pamphlet describing facilities at IAMRC was in the course of preparation and was expected shortly. The Executive felt that the publication of such a pamphlet would be of great value in informing young research meteorologists of the facilities available at the Centre, and it was hoped that it would encourage more scientists from outside Australia to work there.

#### **7. Antarctic Treaty**

(a) It was reported that the Fourth Antarctic Treaty Consultative Meeting had adopted amended forms of the SCAR recommendations (IX SCAR 37) and (IX SCAR 38) concerning items for inclusion in Annexes A and B of the Agreed Measures for the Conservation of Flora and Fauna and the participating governments has been asked to effect the necessary legislation.

(b) It was reported that the Fourth Antarctic Treaty Consultative Meeting had considered the SCAR resolutions regarding pelagic sealing (IX SCAR 39) and the Recommendations on this matter (IV-21 and IV-22) were noted.

It was further noted that, because of the shortage of time between the SCAR meetings and the Antarctic Treaty Consultative meetings in Santiago, Chile, in 1966, certain difficulties had been experienced in preparing the SCAR proposals for submission to the representatives of the Treaty governments.

It was further noted that pelagic sealing presented a serious problem requiring positive action, and that firm proposals on this matter would not be available from SCAR until the next Symposium on Antarctic Biology in July 1968. Resolutions resulting from this symposium and the meeting of the Working Group on Biology that will follow it, could not be confirmed immediately because there would be no full SCAR meeting at that time and, under the procedure adopted by SCAR for confirming resolutions of Working Groups not meeting at the time of full SCAR meetings, it was unlikely that SCAR would

be in a position to submit its proposals to the Antarctic Treaty governments until after October 1968.

It was therefore resolved:

(i) to request National Committees to urge their governments to ensure at least a six months interval between the next SCAR and Antarctic Treaty Consultative meetings, and that the Fifth Antarctic Treaty Consultative Meeting be postponed until May 1969 at the earliest, and that thereafter SCAR and Antarctic Treaty Consultative meetings be held in alternate years.

(ii) to request National Committees to suggest to their governments that it would be beneficial if a procedure could be established whereby the Secretary of SCAR be authorized to convey SCAR documents formally to the Treaty governments, for instance to the Ministry of Foreign Affairs of the country in which the next Antarctic Treaty Consultative Meeting is to be held. It was suggested that the government of the country in which the Secretary of SCAR is domiciled at the time might advise him from time to time to whom he should address such official communications. It was suggested that National Committees might invite their governments to consider discussing such a procedure at the Fifth Antarctic Treaty Consultative Meeting.

(c) The Executive, in consultation with the Secretary of the Working Group on Biology, having considered document IX/SCAR/40 concerning the exchange of information on the status of species and the taking of animals under permit, and the Treaty Powers Recommendations (IV-18 IV-19 and IV-23) on this subject, agreed that some action was necessary to stimulate the examination and consideration of the data that were becoming available. It was considered that the SCAR Working Group on Biology should assess: (i) the effects on individual species, (ii) threats to local populations.

It was agreed that National Committees be requested to propose to their governments that the Treaty governments be asked to provide all the data gathered under the agreed exchange of information and to provide this to SCAR in tabulated form in such a way that SCAR could consider the scientific implications. It was believed that the two institutions most suitably equipped for processing the information were Monks Wood Experimental Station (UK) and the Smithsonian Institution (USA). It was suggested that in view of the fact that both the Secretary of SCAR and the Secretary of the Working Group on Biology were currently domiciled in the UK it might be most convenient if the UK Government were to be invited to provide the information to SCAR in a suitable form.

At the same time each participating government might be invited to examine the information within its own country.

(d) The Executive was aware that SCAR had a responsibility for tendering scientific advice to the Antarctic Treaty Consultative Meetings, and that in some instances the governments would require this advice in a certain form acceptable to governments which might not necessarily be the form in which scientists meeting under SCAR would readily be able to compile it. The Executive agreed that, in principle, SCAR should continue to produce its scientific statements in the manner most applicable to SCAR. It might often be necessary

for governments to rearrange the form of presentation of this information for their special purposes. In certain instances, however, such as amendments to the annexes to the Agreed Measures for the Conservation of Fauna and Flora, a standard form might be used by SCAR if such form was notified to SCAR and was compatible with SCAR procedures.

### 8. Antarctic Oceanography Symposium

(a) It was reported that the editing of the *Proceedings of the Antarctic Oceanography Symposium* was progressing and negotiations were in hand for the volume to be printed in Cambridge and to be published by SCAR. Publication was expected around the end of 1967.

(b) The Executive approved a draft response to ICSU to an invitation for SCAR to comment on items of the agenda for the 5th session of the Inter-governmental Oceanographic Commission, and to consider whether SCAR wished to be represented at this session. It was noted that a number of the items on the agenda of the session would be of interest to SCAR, and that in all cases the implications of these items were of wide geographical interest. It was confirmed that, in principle, SCAR considered that in matters concerned with marine science, SCAR was the correct ICSU body to put forward the scientific viewpoint at inter-governmental meetings. SCAR would therefore convey its views to SCOR and, whilst interested in the outcome, did not itself wish to be represented at the IOC sessions.

### 9. Finance

(a) With reference to the report of the Finance Committee of the IX Meeting of SCAR (IX/SCAR/41), it was reported that the USSR had informed the Secretary of SCAR that they would be paying their 1967 dues in full. The Executive was pleased to note this and hoped that some action would be taken by the USSR to clear their outstanding contribution from earlier years.

(b) The Secretary reported the current financial position of SCAR and the Executive was pleased to note that there was, at the present time, a substantial balance in hand. It was understood that much of the expenditure during 1967 that had been expected at the IX Meeting of SCAR was not likely to arise during the current financial year, largely due to the fact that groups of specialists had been encouraged to prepare the way for their meetings by correspondence rather than actually calling meetings in the first instance, but that expenditure during 1968 was likely to be heavy and could absorb most of the credit balance.

(c) The Executive expressed its gratitude to ICSU for the grant of \$7000 for supporting meetings of groups of specialists, for supporting attendance of representatives of ICSU bodies at SCAR meetings, and for supporting fellowships at IAMRC.

(d) The executive indicated to the Secretary guidelines for budgeting expenditure during 1968.

### 10. Antarctic geology

The Executive discussed with the Secretary of the Working Group on Geology the scope of the meetings of the Working Groups on Geology and Solid Earth Geophysics planned for June 1968 in Tokyo.

The Executive agreed with the view, which had been expressed in correspondence by the majority of members of the Working Group on Geology, that there was a need for a second symposium on Antarctic Geology within the next few years, but that 1968 was too early for a full symposium. It was agreed, however, that the proposal from IX SCAR to hold joint meetings of the Working Groups on Geology and Solid Earth Geophysics at X SCAR was desirable and requested these groups to discuss together at X SCAR the possibilities and benefits of them merging closer together and to develop plans for a geology symposium, perhaps in 1970, to which Solid Earth Geophysics would contribute substantially.

It was agreed that the tasks before the Working Groups on Geology and Solid Earth Geophysics warranted fuller discussion than would be possible during the course of the actual SCAR meeting, and it was therefore agreed that the geologists should meet the preceding week and possibly be joined by the geophysicists for the last two days. Their discussion would cover such topics as:

- (i) reviewing work done since 1963.
- (ii) the role of solid earth geophysics in the field of Antarctic geology
- (iii) important matters outstanding since 1963.
- (iv) problems urgently requiring investigation.

R. J. Adie was requested to take immediate action on the organization of such a meeting to be held in Tokyo from 3-8 June 1968, which would not involve the presentation of formal scientific papers.

### 11. Upper atmosphere physics

The Chairman of the SCAR Working Group on Upper Atmosphere Physics presented a report of the meeting of the group that had been held in London on 24 July 1967. He reported that the group had held valuable preliminary discussions, but had not felt it practicable to attempt to complete its discussions, and that a further meeting would be convened in Switzerland at the time of the IUGG General Assembly at which most of the permanent members of the group were expected to be present.

Professor Nagata requested the SCAR Executive urgently to request National Committees to review the membership of the Working Group on Upper Atmosphere Physics, particularly since it had taken over many of the responsibilities of the now disbanded Working Group on Geomagnetism, and re-nominate national members in time for the September meeting.

### 12. Logistics

The Secretary of the SCAR Working Group on Logistics, F. E. Bastin, presented to the SCAR Executive a report on the meeting of the Logistics

Working Group, 24–26 July 1967 (Annex D.) The Executive was gratified to learn of the interest the Logistics Working Group had taken in the problem of radio communications in the Antarctic, a matter which they also discussed with A. H. Sheffield, the Chairman of the now disbanded SCAR Working Group on Communications.

The Executive agreed that, provided the preparatory collection of information progresses satisfactorily and that adequate replies are received from all nations operating in the Antarctic, SCAR should be prepared to support financially, to a limited degree, the proposed telecommunications meeting in March 1968, if so required.

The Executive also agreed that SCAR should provide financial assistance to the Logistics Working Group to enable it to undertake specific tasks of a documentary nature. The Secretary of the Logistics Working Group was instructed to inform the Secretary of SCAR of such requirements as they arose.

### 13. Antarctic biology

The Secretary of the Working Group on Biology, M. W. Holdgate, reported that he had conducted correspondence with the members of his working group and with the symposium planning group concerning the subject of a proposed second symposium on Antarctic biology which might be held in Cambridge in mid-July 1968. He reported that there was broad agreement that the theme should be "The organism and the community in the polar environment", but that, whilst the symposium should be concerned basically with Antarctic biology, it was desirable to consider the bi-polar factors, and for this, Arctic scientists with experience of the type of problems likely to be discussed should be included. It was noted that the symposium would be largely concerned with examining future requirements in Antarctic biological studies and would provide an opportunity for discussion at length and for producing a final draft of SCAR's recommendation concerning pelagic sealing.

### 14. UN Conference on Standardization of Geographical Names

The Executive agreed that it would be desirable for B. P. Lambert to act as observer for SCAR at the UN Conference on Standardisation of Geographical names, Geneva, 4–22 September, 1967.

### 15. ICSU Abstracting Board

A report was received from the SCAR observer at the meeting of the ICSU Abstracting Board, London, 10–12 July 1967, H. G. R. King (Annex E.)

Thanks were expressed to Mr King for this report, and it was agreed that a summary of the report be published in the *SCAR Bulletin*.

### 16. Officers

It was noted that the offices of Vice-President and Secretary would become due for re-election at the X Meeting of SCAR.



The Executive expressed its appreciation to the Director of the Scott Polar Research Institute for the facilities that had been made available for the meetings of the SCAR Executive and the Logistics Working Group.

## ANNEX A

### SCAR links with other ICSU Unions and Committees

| Association or Committee  | Name of SCAR representative                   | SCAR Working Group                      | Present position   |
|---|---|---|--|
| International Association of Geodesy (IAG) of International Union of Geodesy and Geophysics (IUGG)      | B. P. Lambert<br>(Secretary of Working Group) | Geodesy and Cartography                 | Confirmed, represents IAG on SCAR  |
| International Association of Meteorology and Atmospheric Physics (IAMAP) of IUGG                        | M. J. Rubin<br>(Chairman of Working Group)    | Meteorology                             | Confirmed, representative on both sides  |
| International Association of Geomagnetism and Aeronomy (IAGA) of IUGG                                   | T. Nagata<br>(Chairman of Working Group)      | Upper atmosphere                        | Still awaiting confirmation from Nagata that Alldredge of IAGA agrees  |
| International Association of Physical Oceanography (IAPO) of IUGG                                       | G. E. R. Deacon                               | Oceanography                            | Confirmed, acts as IAPO representative on SCAR Working Group on Oceanography   |
| International Association of Scientific Hydrology (IASH) of IUGG  | H. Hoinkes                                    | Glaciology                              | Confirmed, acts as representative of IASH on SCAR  |
| International Association of Volcanology (IAV) of IUGG  |   | Geology                                 | Secretaries in correspondence, but no representatives yet nominated  |
| International Association of Seismology and Physics of the Earth's Interior (IASPEI) of IUGG            | K. E. Bullen                                  | Solid earth geophysics                  | Bullen acts as IUGG representative and it is assumed that he effects liaison with IASPEI   |
| Committee on Atmospheric Sciences (CAS) of IUGG   | M. J. Rubin                                   | Meteorology/<br>Upper atmosphere        | Not yet confirmed (SCAR Secretary letter 12/5, asking Rubin to contact Secretary-General of CAS who has been invited to nominate a representative) |
| World Magnetic Survey (WMS) of IUGG   | T. Nagata                                     | Upper atmosphere/Solid earth geophysics | Acts as representative of SCAR to WMS  |
| Upper Mantle Project (UMP) of IUGG  |   | Solid earth geophysics                  |  |
| International Ursigram and World Days Service (IUWDS) of Union Radio-Scientifique Internationale (URSI) | A. H. Shapley                                 |   | Representative of IUWDS to SCAR  |
| <i>ICSU Committees</i>  |   |   |  |
| Comité International de Geophysique (CIG)   | G. de Q. Robin                                | —                                       | Represents SCAR on CIG   |
| Inter-Union Commission on Solar and Terrestrial Physics (IUCSTP)  | —   | —                                       | Wrote to Minnis 5. xi. 66 (Acting Secretary IUCSTP) re need to establish a more direct liaison working group level—no reply so far.)               |
| Committee on Space Research (COSPAR)  | A. H. Shapley                                 | —                                       | SCAR/COSPAR liaison  |
| Committee on Water Research (COWAR)   | H. Hoinkes                                    | —                                       | Represents SCAR on COWAR   |

## ANNEX A (cont.)

| Association or Committee   | Name of SCAR representative | SCBR Working Group | Present position             |
|--|-----------------------------|--------------------|------------------------------|
| Scientific Committee on Oceanic Research (SCOR)                      | L. Capurro                  | —                  | SCOR/SCAR liaison            |
| Special Committee for the International Biological Programme (SCIBP) | M. W. Holdgate              | —                  | SCAR representative on SCIBP |
| <i>Delegates to SCAR</i>   |                             |                    |                              |
| Union Radio Scientifique Internationale (URTI)                       | F. J. Hewitt                | —                  | URSI delegate to SCAR        |
| World Meteorological Organisation (WMO)                              | K. Langlo                   | —                  | WMO delegate to SCAR         |
| International Union of Biological Sciences (IUBS)                    | R. Carrick                  | —                  | IUBS delegate to SCAR        |
| International Union of Geological Sciences (IUGS)                    | R. W. Willett               | —                  | IUGS delegate to SCAR        |
| International Union of Physiological Sciences (IUPS)                 | L. C. G. E. Pugh            | —                  | IUPS delegate to SCAR        |
| International Geographical Union (IGU)                               | V. Schytt                   | —                  | IGU delegate to SCAR         |
| International Union of Geodesy and Geophysics (IUGG)                 | V. Troitskaya               | —                  | IUGG delegate to SCAR        |

## ANNEX B

## SCAR Groups of Specialists

## Position in July 1967

| Specialist Group                             | Related Working Group |   | Convenor                              |
|--|-----------------------|---|---------------------------------------|
| Human adaptability                           | Biology               | In operation before IX SCAR   | O. G. Edholm                          |
| Bird banding                                 | Biology               | In operation before IX SCAR   | W. J. L. Sladen                       |
| Quaternary studies                           | Biology               | Formed but not met  | E. M. Van Zinderen Bakker, <i>Sen</i> |
| Seal stocks                                  | Biology               | Nominations about to be considered  |                                       |
| Deep core studies                            | Glaciology            | Membership to be confirmed at September meeting                                 | C. C. Langway                         |
| Ice shelf studies                            | Glaciology            | As above  | D. C. Neethling                       |
| Antarctic Convergence                        | SCOR<br>Oceanography  | Action in abeyance until October meeting of SCOR Executive                      | —                                     |
| Pack ice zone (proposal drafting group)      | Oceanography          | Active by correspondence  | G. de Q. Robin                        |
| Bottom water (proposal drafting group)       | Oceanography          | Active by correspondence  | H. Mosby                              |
| Benthos (proposal drafting group)            | Oceanography          | Correspondence started  | R. K. Dell                            |
| Mechanical problems effecting communications | SCAR                  | Nominations received to be considered by Executive and convenor to be appointed | —                                     |
| Use of space vehicles                        | SCAR                  | Nominations to be considered by Executive and decisions on future action        | —                                     |
| Communications (schedules, procedures, etc)  | Logistics             | Formation of group frustrated, Executive to decide further action required      | —                                     |

## ANNEX C

## Meetings, 1968

*Japan*

June 1968

3 to 8 June

Treaty Powers meeting of experts on Antarctic logistics

3 to 8 June

Discussion on future requirements of Antarctic geology

10 to 15 June

X Meeting of SCAR

SCAR Working Group on Geology

SCAR Working Group on Solid earth geophysics

SCAR Working Group on Logistics

Mid-July 1968

*Cambridge, England*

SCAR-IUBS-SCIBP Symposium on the Organism and the Community in the Polar Environment

Second Symposium on Antarctic Biology

SCAR Working Group on Biology

September 1968

*Hanover, New Hampshire, USA*

3 to 7 September

SCAR/ICSU International Symposium on Antarctic Glaciological Exploration

1968

*Paris*

Fifth Antarctic Treaty Consultative Meeting

It might also prove desirable to call meetings of the SCAR Working Group on Oceanography and/or the groups nominated to prepare proposals for groups of specialists on: formation of Antarctic bottom water and interdisciplinary studies of sea ice before the next general meeting of SCOR (17-20 June 1968).

## ANNEX D

## SCAR Working Group on Logistics (SCARLOG)

*Cambridge, 24 to 26 July 1967*

*Present:* Argentina: E. J. Pierrou; Belgium: F. E. Bastin (Secretary); Chile: A. Parodi; France: P.-E. Victor (Chairman); R. Bost; Japan: K. Kusunoki; UK: V. Fuchs, A. H. Sheffield, B. B. Roberts\*; USA: H. M. Dater; WMO: G. K. Weiss; IUWDS: R. B. Docker, F. E. Cook; Working Group on Geology: R. J. Adie; Working Group on Biology: M. W. Holdgate.

*Antarctic telecommunications*

Taking into consideration IX SCAR 23, the importance of Antarctic communications and the problems involved calling for co-ordination and efficient solutions, the meeting took this subject as its first agenda item.

All present felt that some kind of organizational meeting was necessary as no body representative of all nations existed. It was agreed that any such meeting held by SCAR should concern itself with information and advice.

The WMO representative emphasized the need for proper handling of Antarctic meteorological communications, and suggested that WMO circuits

\* Observer.

could carry other Antarctic scientific traffic. It was agreed that an essential first step would be the collection of up-to-date information; the Chairman and Secretary of SCARLOG, in consultation with A. H. Sheffield, Chairman of the former Working Group on Communications, will organize the circulation of a questionnaire about radio installations at each station, radio frequencies used, etc.

It was agreed that each nation should be asked to designate a representative who would collect information needed for completion of the questionnaire. SCARLOG wishes to emphasize that this inquiry can only be satisfactory if all the representatives reply quickly to the questionnaires distributed by the Secretary. Delays and lack of replies have been the major weakness of previous arrangements.

*Recommendation 1. The Working Group on Logistics:*

Taking into consideration that rapid and accurate telecommunications are fundamental to the success of many scientific programmes;

taking into consideration the possibility of a government-sponsored meeting on Antarctic telecommunications in 1968;

recognizing the urgent need for continuing co-ordination in this subject; and

believing that SCAR, by a study of present and future requirements may be able to offer suggestions that will result in improvements;

recommends to the SCAR Executive Committee:

1. that SCAR sponsor an exploratory meeting on Antarctic telecommunications to be held in March 1968, to

(1) study present and future requirements for the exchange of scientific data, administrative and emergency traffic,

(2) review the existing networks, procedures, installations and methods of co-ordination in the light of present and future requirements,

(3) suggest any desirable changes,

(4) investigate with WMO the co-ordination of meteorological and scientific traffic, and

(5) consider arrangements for the continuance of the activities defined in (1) to (4).

2. That the meeting should be kept as small as possible, but should include the following:

(1) operators with Antarctic experience,

(2) telecommunications engineers,

(3) scientific users of telecommunications,

(4) a representative of WMO.

*SCARLOG programme of work*

It was agreed that SCARLOG should be a centre for logistic and operational information, particularly information on new materials, techniques and future developments. This information should be made available to all Antarctic users.

It was agreed that SCARLOG should, in the first place, study subjects in the following order: safety measures, telecommunications, air transportation, surface transportation (oversnow), buildings, new materials. New topics will be dealt with later according to their importance.

The Working Group decided to make the following recommendation to SCAR:

#### *Recommendation 2*

That the following purposes and objectives be established for the SCAR Working Group on Logistics:

1. The SCAR Logistics Working Group will encourage technical investigation and research on logistics problems that may be expected to arise from present or future scientific programmes.

2. To this end, scientific programmes recommended by SCAR will be continuously reviewed for logistic implications.

3. SCAR working groups in the various scientific disciplines may be invited to submit problems in the field of logistics, including communications, to the Secretary of the Working Group on Logistics for study and suggested solutions.

4. The SCAR Working Group on Logistics, through its members, will keep itself informed of advances in techniques and equipment which may be adaptable to Antarctic use.

5. The SCAR Working Group on Logistics, within the above framework, offers to assist any logistic activities sponsored by governments.

#### *Logistics problems relating to future Antarctic research*

- (1) R. J. Adie and M. W. Holdgate spoke to the meeting about the logistic support that may be required for future work in the Antarctic. A summary of their statement will be circulated separately.

- (2) International Ursigram and World Days Service (IUDWS).

R. B. Docker and F. E. Cook informed the meeting about Dr Simon's proposals regarding Solar Alerts.

The meeting suggested that Dr Simon should write to the Secretary of SCAR with a view to having his proposals considered by the next SCAR Executive Meeting.

It was also considered advantageous for Dr Simon to communicate with A. H. Sheffield regarding the transmission of reporting messages from the Antarctic.

#### *Proposed government-sponsored meeting on Logistics, Tokyo, 1968*

It was agreed that:

- (1) SCARLOG welcomes the recommendation of the Fourth Antarctic Treaty Consultative Meeting concerning the proposed meeting on logistics.

- (2) SCARLOG considered the provisional list of subjects proposed for dis-

cussion in Tokyo (in IV-25\*) and suggests that the following aspects be given priority:

*buildings* (a) materials, (b) water supply, (c) waste disposal

*vehicles* new vehicles, including air cushion types

*air operations.* (a) navigation and landing aids, (b) new aircraft and equipment

*safety measures*

*special and future logistic support projects* such as tall masts, protective wind walls, rocket-launching pads and installations, submersibles for under-ice work, satellite-supported projects

*personal equipment* (a) new fabrics, (b) new designs and practices tried in the field.

#### *Standardization of documentation*

It was recommended that, so far as possible, all documentation of SCARLOG should conform in size with the proposal in SCAR Circular No 196, eg 210 mm × 297 mm (A 4 size).

#### *Correspondence with the Secretary*

It was again emphasized that the work of SCARLOG could not go ahead unless prompt answers were received by the Secretary.

#### *Expenses*

It was agreed to ask the SCAR Executive:

(1) whether financial assistance could be provided to SCARLOG alternatively:

(2) whether the SCAR Executive would consider maintaining a special fund to which national committees might contribute for SCARLOG purposes.

## ANNEX E

### ICSU Abstracting Board Meeting

London, 10 to 12 July 1967

By H. G. R. King†

The ICSU Abstracting Board Meeting, 1967, was attended by H. G. R. King as SCAR observer. It was essentially a meeting of specialists, the fine details of whose discussions may not all be of direct interest to SCAR, and this brief report is intended only to indicate the kind of organizations represented at this meeting, and to draw the attention of SCAR to a few points arising from the minutes.

1. *Representation.* [Numbers of representatives attending indicated in square brackets.]

(i) ICSU Unions Observers [7]. Unions which are not subscribing members of ICSU Abstracting Board, including SCAR.

\* *Polar Record*, Vol. 13, No. 86, 1967, p. 640. *SCAR Bulletin*, No. 27, 1967, p. 601.

† Librarian, Scott Polar Research Institute.

(ii) *ICSU Member Services* [11]. Subscribing members of ICSU Abstracting Board, including editors and directors of the world's principal abstracting journals, eg *Physics Abstracts* (UK), *Referativnyi Zhurnal* (USSR), *Biological Abstracts* (USA), *Chemical Abstracts* (USA).

(iii) *ICSU Abstracting Board Member Unions*<sup>1</sup> [5]. Representatives of the ICSU unions who subscribe to ICSU Abstracting Board.

(iv) Other observers [14]. Representatives of national and international organisations interested in the field of scientific information, eg National Science Foundation (USA), Office of Scientific and Technical Information (UK), UNESCO, OECD, Fédération Internationale de Documentation (FID).

## 2. Points arising from the minutes

(i) *Scientific periodicals*. ICSU Abstracting Board has conducted and published a detailed investigation of the most important scientific periodicals in the fields of chemistry and physics in an attempt to list and compare such characteristics as authors' abstracts, indexes, advertisements, bibliographies, prices and costs<sup>1</sup>. The National Science Foundation is about to publish a report on the effects of page charges in 500 scientific journals.

(ii) *Abstracting journals*. The scientific literature of the polar regions is interdisciplinary, and there is no single current abstracting journal which covers all aspects of Antarctic or Arctic research. Whether there is a need for such a service in the Antarctic field is a point which SCAR may wish to discuss. In such broad subject fields as physics and chemistry, ICSU Abstracting Board has conducted detailed statistical studies on the main abstracting journals<sup>2</sup> published in these documents and there was much discussion on the findings. There is evidence of a much greater need for co-operation between editors of scientific journals and editors of abstracting journals than exists at present. The former should be ready to provide author abstracts (preferably multilingual) at galley-proof stage to abstracting journals. To further this end, the International Union of Pure and Applied Physics has issued a *Guide for the preparation of authors' abstracts for publication*, which editors within SCAR may wish to study.

(iii) *User's needs*. ICSU Abstracting Board is continually researching on the role of users in relation to the objectives of abstracting and indexing services. This is a controversial and ill-defined field and one which those interested in polar bibliography should follow closely. It would be interesting to discover (by means of questionnaires?) what are the research needs of scientists within the field of polar science. Research on these lines needs to be undertaken if it is felt that the internationalization and standardization of polar bibliography is an aim worth achieving.

(iv) *Standards*. ICSU Abstracting Board co-operates with the International Organization for Standardization (ISO) in a effort to obtain agreement on such points as abbreviation of generic names in titles of periodicals, problems of transliteration and alphabetization, and so forth. Agreement between ICSU members to adhere to these standards would be a desirable step towards an internationally agreed code of practice for editors of scientific and abstracting journals.

(v) *Universal Decimal Classification (UDC)*. There was some discussion on the extent to which UDC lent itself to computer methods of storage and retrieval of information. The FID observer stated that UDC had been demonstrated as well suited to these techniques. The American Institute of Physics is now carrying out experiments with UDC in the field of computer retrieval and comparing it with other classification systems in this context. According to I. N. Sorokin, Secretary of the All-Union Institute for Scientific and Technical Information [Vsesoyuznyy Institut Nauchnoy i Tekhnicheskoy Informatsii, abbreviated to VINITI], UDC is widely used throughout the Soviet Union.

(vi) *World Scientific Information System*. A joint ICSU-UNESCO Working Group on the Feasibility of a World Scientific Information Service has been established; all relevant papers will be sent to SCAR.

(vii) *Cover-to-cover translations*. A list of cover-to-cover translations of scientific periodicals is in the course of preparation by ICSU Abstracting Board. This will include English and French language journals translated into Russian.

(viii) *List of ICSU publications*. ICSU Abstracting Board has published (1966) *Tentative list of publications of ICSU scientific unions, special and scientific committees and commissions of ICSU and corrections and additions to the 1953-1963 and 1964 lists*.

*Conclusion*. ICSU Abstracting Board clearly plays a vital role in bringing together the many different interests in the field of scientific information—scientists, abstractors, information specialists, educationists, etc. If a World Scientific Information System is to come about, then ICSU Abstracting Board will be the catalyst. It therefore deserves the serious attention and support of all ICSU members and it would seem desirable that SCAR should continue to send an observer to the ICSU Abstracting Board Annual Meeting.

#### References

- (1) *Some characteristics of primary periodicals in the domain of the Physical Sciences*. Paris, ICSU Abstracting Board, 1966.
- (2) *World literature in physics as seen through Bulletin Signaletique—1964 issues*. Paris, ICSU Abstracting Board, n.d. 2 vols.  
*World literature in physics as seen through Physics Abstracts—1964 issues*. Paris, ICSU Abstracting Board, n.d. 2 vols.  
*Compared activities of the main abstracting and indexing services covering physics, chemistry and biology during the year 1965*. Paris, ICSU Abstracting Board, n.d.



## EXCHANGE SCIENTISTS IN THE ANTARCTIC, 1966-67

| Country of origin | Name              | Subject             | Host country                    |
|-------------------|-------------------|---------------------|---------------------------------|
| Summer 1966-67    |                   |                     |                                 |
| Australia         | J. H. Bryan       | Geology             | USA (McMurdo, dry valley areas) |
|                   | D. Carter         | Glaciology          | USA ("Byrd")                    |
|                   | B. F. Jones       |                     | USA ( <i>Eltanin</i> )          |
|                   | A. McClaren       | Glaciology          | USA ("Byrd")                    |
|                   | C. T. McElroy     | Geology             | USA (McMurdo, dry valley areas) |
|                   | G. Rose           | Geology             | USA (McMurdo, dry valley areas) |
| Belgium           | G. E. Weller      | Meteorology         | USA ("Plateau")                 |
|                   | E. E. Picciotto   | Glaciology          | USA (McMurdo)                   |
|                   | R. Souchez        | Geomorphology       | USA ("Plateau")                 |
| Czechoslovakia    | J. Sekyra         | Geology             | USSR                            |
| France            | J. Vicariot       | Hydrography         | USA ( <i>Eltanin</i> )          |
| Japan             | M. Yamanaka       | Diesel-engineering  | USA (McMurdo, "Plateau")        |
| New Zealand       | P. K. Falconer    |                     | USA ( <i>Eltanin</i> )          |
|                   | P. C. Harper      | Ornithology         | USA ( <i>Eltanin</i> )          |
| Norway            | O. Orheim         | Glaciology          | USA ("Plateau")                 |
| USA               | W. Dort           | Glacial geology     | Japan ("Syowa")                 |
|                   | V. P. Hessler     | Ionospheric physics | USSR ("Vostok")                 |
|                   | J. P. Katsufakis  | Ionospheric physics | France (Dumont d'Urville)       |
|                   | T. R. Merrill, Jr | Biology             | UK                              |
| USSR              | L. M. Klimov      | Geology             | USA (Marie Byrd Land)           |
| Winter 1967       |                   |                     |                                 |
| Bulgaria          | Ts K. Chapanov    | —                   | USSR ("Molodezhnaya")           |
| UK                | G. S. Wilson      | Biology             | Argentina ("Almirante Brown")   |
| USA               | E. E. MacNamara   | Geology             | USSR ("Molodezhnaya")           |
| USSR              | P. G. Astakhov    | Upper air physics   | USA (South Pole)                |

## NATIONAL COMMITTEES OF SCAR

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(Change of address).

## NOTICE

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