**Business Meeting of the International Radiation Commission**

**St Petersburg, July 26, 2000**

**Welcome:** The meeting was called to order at 5 pm by Dr. Bill Smith, President of the IRC. Meeting location was Tavrichesky Palace, St Petersburg.

**Attendance:** In attendance were:

S. Bakan

J. Bates

R. Cahalan

T. Clough

R. Davies

V. Delnore

E. Eloranta

A. Plana-Fattori

H. Fischer

J. Harries

A. Huang

R. Kandel

S. Kavalac

B. Knutsen

P. Koepke

J. Lenoble

K. N. Liou

D. Lu

P. Menzel

T. Nakajima

A. Ohmura

G. Paltridge

E. Raschke

R. Rizzi

J. Schmetz

P. Simon

W. Smith

K. Stamnes

T. Takashima

Yu. Timofeyev

D. Tobin

A. Uspensky

The President opened the meeting by displaying the following agenda:

1. Welcome
2. Review of Agenda
3. Minutes from Previous Meeting
4. Matters Arising, nominations
5. Correspondence
6. Financial Report
7. Reports of Working Group Chairs and Rapporteurs
8. Working Groups for 2000-2004
9. Election of Executive, 2000-2004
10. Retiring IRC Members/Election of new members/Honorary Members
11. Invitations for IRS 2004
12. New Science Programs/New Satellite Missions
13. Other Business/IAMAS2001, Innsbruck
14. Next Meeting Date and Venue

**Review of Agenda (Agenda Item 2):** The president explained nomination and election scheme, went over the agenda, allowed suggestion changes to agenda. It was decided to work through the agenda items in the following order: 2, 6, 7, 14, 8, 9, 10, 11, 12, 13.

**Financial Report (Agenda Item 6):** The president presented the budget for the past four years: Some money went to supporting travel grants for IUGG-99 and for IRS-2000 expenses. Budget did not include all donations, income, and expenditures associated with IRS-2000. Presently a balance of approximately $13K exists; total report pending.

**Reports of Working Groups (Agenda Item 7):** Dr. Fischer stated the rules for activities of Working Groups, as initially presented last year in Birmingham: Short annual report; longer report at Committee Meetings; Committee to decide if each Working Group should be continued. Not all Working Groups provided reports. Want a 2-page report from each Working Group before the Meeting: what has been done, and what will be done?

* International TOVS Working Group (Dr. Paul Menzel): Dr. Menzel distributed written copies of his report (attached). He reported that a meeting was held in Boulder in February 1999, and discussed the outcome of that meeting. The Working Group will get together at the ITSC-XI meeting, 20-26 September, in Budapest. Approval was requested for continuance of this working group; approval was granted.
* ICRCCM (Dr. Bob Ellingson, not present): Dr. Robert Cahalan presented a written report (attached, as amended by Dr. Cahalan). Approval was requested for continuance of this working group; approval was granted.
* Clouds and Radiation (Dr. Bob Ellingson, not present): Dr. Erhardt Raschke suggested that Dr. Graeme Stephens be contacted to coordinate this Working Group; this would afford the IRC with an association with Dr. Stephens’ research.
* ISCCP (Dr. Ehrhard Raschke): Dr. Raschke explained the ISCCP’s operational mission of data acquisition and accumulation; cited 16 years of global radiances started by Bill Rossow, and pointed out that it is a rich source of data for students to work on. Dr. Smith noted that this long-term record establishes a baseline, but asked how the baseline will be maintained through changes in processing algorithms. In response, Dr. Raschke stated that ISCCP doesn’t tamper with internal calibrations, but acknowledged that this is a concern and will get a fuller answer later. Dr. Menzel mentioned that the coordinating group for meteorological satellites is the catalyst to do this. Dr. Smith wants the IRC to know if there is any doubt about the continuance of this. Dr. Raschke noted that NASA, being a research agency, is not the proper agency to support a continuing, operational effort like ISCCP.
* ICLAS (Dr. Ed Eloranta): ICLAS will hold an international radar/laser meeting every two years. They are the interface between gadget makers and the people who want to make water vapor and other measurements. Dr. Fischer suggested combining active and passive instruments in some of the new ESA missions.
* ASA (Dr. Larry Rothman, not present): Dr. Tony Clough stated that support is marginal, but there has been lots of activity. Dr. Fischer: We need both line and continuum data. Dr.Clough: A small (3-person) ad hoc group is recommended, to work with Dr. Rothman. Dr. Fischer agreed to establish this later.
* Remote Sensing of the Middle Atmosphere (Dr. Yuri Timofeyev): The report is identical with his paper in Session C (attached); will provide a short written summary later. Subgroup A: No evidence of problems with the forward models; only some minor discrepancies, summarized in the Proceedings. The Working Group is active and will be continued.
* UVB (Dr. Paul Simon): Nothing new to report since the Birmingham meeting; no meetings since then. Three-page report (attached). This working group will be continued.
* BSRN (Dr. A. Ohmura): There are three objectives: 1) intensify spectral measurements, 2) resolve calibration uncertainties, and 3) observe important changes in radiation climate. In need of an organization to support these measurements; now have eight years of data. Biannual workshop; wants to intensify the spectral measurements. 21 sites worldwide, but most are at established national meteorological sites. Dr. Raschke expressed concern over the apparent big gaps in Asia, but Dr. Smith pointed out about the six new radiometer sites in China. Dr. Lu, of the Institute of Atmospheric Physics, China, said that the University of Maryland is installing four sets of aeromet instruments to fill some of the gaps: Beijing, Tibet, and other locations. Dr. Ohmura noted to make sure Dr. Lu is invited to future BSRN meetings. Dr. Raschke noted gaps in Chile and other areas.
* Total Solar Irradiance Monitoring Group: (Dr. Crommelink lacks funding, so cannot chair this Group.) Dr. Paul Simon gave the report. Dr. Fischer noted that first, a chairman is needed; decided to table this for a smaller discussion group. Dr. Cahalan suggested to include Dr. Rothman in this group.

**Venue for 2004 Symposium (Agenda Item 14):** President suggested that formal proposals be accepted before the IRC meeting in Innsbruck, so that a decision can be firmed up at that meeting. Locations in Australia and Asia will be favored.

**Working Groups for 2000-2004 (Agenda Item 8):**

* Validation Working Group (VWG), proposed 1999, in Birmingham. Dr. Smith will get Dr. Nikita Pougatchev to furnish a report. Purpose of VWG: to organize validation of new satellite measurements. Membership: M. de Maziere (Belgium), and N. Pougatchev (USA), Allen Huang (USA). Topics: Aqua satellite, advanced IR sounder in polar orbit (AIRS), EOS (AIRS/MODIS) validation. Potential domestic and international validation sites for radiosondes. Need enhanced sondes, with spectroscopic capability, launched at specified times. Dr. David Tobin is the coauthor of the sonde launch procedures. Recommendations to this new WG were given. Dr. Fischer suggested to establish a net of sonde launch sites for all sensors useful in the validation of radiance measurement. Dr. Smith noted that terrain is a consideration for these downward-looking instruments; and also that the effects of cirrus clouds and local weather need to be considered. This new WG was approved to start work.
* Proposed WG for multispectral methods for cloud height allocation from satellites. (Dr. Joe Schmetz): Dr. Schmetz’ notes are attached. A discussion among Dr. Robert Kandel, Dr. Smith, and Dr. Roger Davies centered on stereo looks, side looks, and multispectral measurements and independent validations. This new WG was recommended and approved as a formal Working Group.

**Election of Executive, 2000-2004 (Agenda Item 9):** Dr.Fischer was nominated as the new president. This nomination was seconded, and Dr. Fischer was voted in as new president. Dr. Terry Nakajima was voted in as vice president and Dr. Bob Ellingson was voted in as secretary.

**Retiring IRC Members/Election/Honorary Members (Agenda Item 10**): Dr. Fischer presented a list of IRC members elected in 1996, with chairmen of Working Groups, honorary members, and officers (attached). Dr. Raschke withdrew as chairman of the ISCCP Working Group, and started a discussion to propose prominent scientists from outside of the IRC as honorary members. Dr. Fischer showed a list of members elected in 1992 (attached), and stated that as new president, he needs a list of email addresses. A discussion followed, on how and whom to add new members. Dr. Smith suggested using email to solicit one-page bios to aid in the selection. Dr. Fischer agreed that this will be done.

**Invitations for hosting IRS 2004 (Agenda Item 11):** Dr. Smith suggested favoring locations in Australia or Asia. Dr. Garth Partridge agreed to propose Hobart, Tasmania. Dr. Raschke suggested that we include Korea and China in the consideration. Dr. Daren Lu agreed that China might be a good candidate. Dr. Smith restated that IRC will formally solicit proposals and that the membership would then vote on them.

**New Science Programs/New Satellite Missions (Agenda Item 12):** Dr. Vic Delnore gave a brief description of the planned CRYSTAL field campaigns, with emphasis on opportunities for international cooperation. Dr. Smith pointed out the possible conjunction of CRYSTAL’s main campaign (Tropical Western Pacific in 2004) and IRS-2004. Dr. Raschke suggested the need to coordinate CRYSTAL with several European efforts, most notably one being planned by Dr. Lammerer of KNMI.

**Other Business/IAMAS-2001, Innsbruck (Agenda Item 13):** The next IRC business meeting will likely be at the IAMAS 2001 meeting in Innsbruck, Austria. Dr. Smith read a list of topics from IUGG 99, in order to choose which special IAMAS session to fit into:

Radiation Feedback and Forcing Processes

Aerosol Ozone Chemistry

Assimilation of Satellite Data in Numerical Models

Observational Methods

Surface Radiation Measurements

Remote Sensing of Cloud Radiation Properties

The IRC homepage: Dr. Smith stated that this has not been kept up since June 1999, except for the minutes of the 1999 business meeting, which are posted there. He suggested that a history of the IRC be written and posted.

The efforts of the local committee in hosting the present symposium were recognized. Dr. Timofeyev modestly accepted the unanimously expressed appreciation for a highly successful symposium and especially for the outstanding cultural program.

**Discussion of posters—Comments:**

Dr. Kandel—did not have poster orals in his sessions; better to have parallel sessions instead.

Dr. Fischer—maybe drop the poster orals.

Dr. Smith—maybe have Session Chair summarize the posters.

Dr. Rizzi—session changes on the fly are not a good idea. People count on the published schedule in planning their attendance. And parallel sessions are bad because of limited audience—maybe present to the full attendance.

Dr. Nakajima—maybe have an IRS every two years; the field is changing too rapidly to be reporting only once every four years.

Dr. Smith—stay at every four years, but use other organizations’ meetings in the off years.

Dr. Davies—600 papers were accepted, but there are apparently less than 600 people here. Maybe limit each person to one paper.

Dr. Raschke—note that a poster paper takes more preparation time than a talk does.

Dr. Fischer, the newly elected president, acknowledged that Dr. Smith, immediate past president, is now an honorary member. Dr. Smith closed the meeting, noting that the best is yet to come and that the new decade will be the most exciting since the seventies.

**Adjournment:** The meeting was adjourned at 9:00 pm.

At a follow-on meeting Thursday morning between the outgoing and the newly-elected presidents, the following were discussed:

Determine which session at IAMAS-Innsbruck to get into. Assimilation of hyperspectral remote sensing data. Invite the IRS-2000 sponsors to each provide a corporate or agency logo; these logos to be displayed together on one page of the symposium proceedings.

V. Delnore, acting as recording secretary H. Fischer (president)

**Attachments:**

Original Agenda

Tentative Budget

Membership List

Working Group Reports:

ITOVS

ICRCCM

Remote Sounding of the Middle Atmosphere

UVB

VWG

Multispectral methods for cloud height allocation from satellites