

## COMMISSION NOT ATTACHED TO A DIVISION

### COMMISSION 41: HISTORY OF ASTRONOMY

*(HISTOIRE DE L'ASTRONOMIE)*

**PRESIDENT: Steven J. Dick**

**VICE-PRESIDENT: F. Richard Stephenson**

**ORGANIZING COMMITTEE: S.M.R. Ansari, W. Dick, A. Gurshtein, II. S. Nha, W. Orchiston, E. Proverbio, W. T. Sullivan, X. Zezong**

#### 1. Business Session, Tuesday, August 15, 2000

##### 1.1. General

Commission President S. Dick called the meeting to order at 11:00 hours, August 15 in the Blackett Theatre of Schuster Laboratory at Manchester University. W. Orchiston and W. Dick were appointed Secretaries for the session, and S. Débarbat balloteer for the elections, with Chris Sterken assisting. Of the members of the Organizing Committee, W. Dick, A. Gurshtein, I.-S. Nha, W. Orchiston and W. Sullivan were present, as well as Vice President F. R. Stephenson and Immediate Past President S. M. R. Ansari; E. Proverbio and X. Zezong were unable to attend; 24 others were in attendance and apologies were received from Prof. Warner and Dr. Haynes. A moment of silence was observed for members deceased since the last G. A., including Olaf Pedersen (December 3, 1997), Helen Wright (October 23, 1997), Derek Howse (July 28, 1998), and Heino Eelsalu (July 26, 1998).

President S. Dick reported on highlights of the last triennium. A Commission web site was set up, thanks largely to the efforts of W. Dick. The President issued six Newsletters to Commission members and others. Following up on recommendations at the last G. A., the Commission sponsored IAU Colloquium 178 "Polar Motion: Historical and Scientific Problems," held in Cagliari, Sardinia on September 27-30, 1999. At the time of the General Assembly the 641 page Proceedings, edited by S. Dick, D. McCarthy, and B. Luzum had just appeared as volume 208 of the Astronomical Society of the Pacific Conference series. In conjunction with the U. S. Naval Observatory the Commission sponsored an around-the-world time ball drop on New Year's Eve to usher in the year 2000, involving 20 sites in 8 countries on 6 continents. The event will be repeated for the beginning of the new millennium on January 1, 2001.

W. Orchiston reported on progress on the new Journal of Astronomical History and Heritage, which he and John Perdrix launched following the last G.A. in Kyoto. Five issues had appeared as of June 2000. For the current G.A., F. R. Stephenson and S. Dick organized Joint Discussion 6 "Applied Historical Astronomy", held on August 11 with an audience exceeding 100. A Special Session on Astronomical Archives was to be held August 16. The research of individual Commission members remains strong; highlights are given in the IAU Transactions.

### 1.2. Election of Officers, New Members and Consultants

Elections duly held, taking into account absentee ballots, resulted in the following officers for the 2000-2003 triennium:

|                           |                             |
|---------------------------|-----------------------------|
| President:                | Richard Stephenson (UK)     |
| Vice-President:           | Alex Gurshtein (Russia)     |
| Immediate Past President: | Steven Dick (USA)           |
| Organizing Committee:     | Wolfgang Dick (Germany)     |
|                           | Rajesh Kochhar (India)      |
|                           | Tsuko Nakamura (Japan)      |
|                           | Il-Seong Nha (Korea)        |
|                           | Wayne Orchiston (Australia) |
|                           | Woodruff T. Sullivan (USA)  |
|                           | Brian Warner (S. Africa)    |

New members of the Commission approved were Peter Brosche (Germany), Mary Brück (Scotland), Meidong Chen (China PR), Ileana Chinnici (Italy), Brenda Corbin (USA), Teije de Jong (Netherlands), Hilmar W. Duerbeck (Germany), Daniel Green (USA), Won-Yong Han (Korea), John Hearnshaw (New Zealand), Andre Heck (France), Bambang Hidayat (Indonesia), Masanori Hirai (Japan), Nguyen Dinh Huan (Viet Nam), Siek Hyung (Korea), Bozidan Jovanovic (Yugoslavia), Francoise Launay (France), Eun-Hee Lee (Korea), Kurt Locher (Switzerland), Tsuko Nakamura (Japan), Björn Pettersen (Norway), Theodore Rafferty (USA), Clive Ruggles (UK), Lutz Schmadel (Germany), B. Soonthornthum (Thailand), Helmut Steinle (Germany), Chris Sterken (Belgium), William Tobin (New Zealand), Andreas Verdun (Switzerland), Hitoshi Yamaoka (Japan), George Wilkins (UK) and Endre Zsoldos (Hungary).

New consultants elected were Jean Pierre Cressent (France), Lu Dalong (China), Klaus-Dieter Herbst (Germany), Peter Hingley (UK), Raymond Mercier (UK), M. Nam (Korea), S. R. Sarma (India), Gilbert Satterthwaite (UK), William Sheehan (USA), and John M. Steele (UK). Consultants reelected were James A Bennett (UK), Katherine Bracher (USA), James Evans (USA), Ruth Freitag (USA), Alexander Jones (USA), E. S. Kennedy (USA), David A. King (Germany), Stephen McCluskey (USA), V. N. Sharma (India), B. G. Sidharth (India), Joseph Tenn (USA), Benno van Dalen (Netherlands), Thomas R. Williams (USA), Yarosław Włodarczyk (Poland), and Michio Yano (Japan).

The total membership of the Commission, including new members, stands at 179, plus 27 consultants.

### 1.3. Resolution

On behalf of Alan Batten, the President presented a report relating to the preservation of the sites involved in measuring the Struve arc of the meridian, and their designation as World Heritage Sites, following up a resolution passed at the Hague G.A. in 1994. The meeting asked the President to convey its thanks to Dr. Batten for his continuing efforts. President Dick also reminded members of the long-standing IAU resolution on the preservation and inventory of archives; the special session at this G.A. is meant to regain momentum on this resolution.

New Commission resolutions unanimously approved include the following:

1) Recognizing the historical importance of previous transits of Venus and the numerous transit of Venus expeditions mounted by many countries, and

Noting the rarity of the upcoming transits of 2004 and 2012,

Commission 41 Recommends that the sites of the previous transit of Venus expeditions be inventoried, marked and preserved, as well as instrumentation and documents associated with these expeditions.

2) From IAU Colloquium 178 "Polar Motion: Historical and Scientific Problems" the following resolution was forwarded and approved regarding the International Latitude Service Buildings and Instruments:

Considering the importance of the contribution of the International Latitude Service to the study of polar motion,

Commission 41 Recommends that concerted efforts be made to preserve the buildings and instruments associated with the observatories of the International Latitude Service and predecessor observatories, especially the associated geodetic monuments or pillars.

#### 1.4. Sydney General Assembly Plans, 2003

There was general agreement that Commission 41 should be involved in a Symposium in Sydney, that it should be the chief sponsor of a Joint Discussion, as well as hold the usual business meeting and special meetings of the Commission focusing on specific subjects, perhaps related to its Working Groups. It was noted that the transits of Venus would be a particularly timely subject.

#### 1.5. Relation Of IAU Commission 41 To IUHPS

For many years Commission 41 has been a "Joint Commission of the IAU and IUHPS". Professor Ansari provided some clarification of this relationship as an active member of both organizations, and Prof. Gurshtein offered some elaboration. It is important that the two organizations cooperate for the benefit of both historians (which predominate in the IUHPS sessions) and astronomers (which predominate in IAU Commission 41). After some discussion the matter was referred to the incoming OC for further deliberation as to how communication and cooperation could be maximized.

Professor Ansari noted that the IUHPS will meet in Mexico City July 8-14, 2001; of special interest is a session "Astronomical Heritage of non-European Cultural Areas."

#### 1.6. Other Business

*Working Groups.* The Commission decided to establish the following Working Groups at the Commission level: Archives, Astronomical Chronology, Historical Instruments, and Transits of Venus. Each would have a Chairperson and a clearly defined program of work for the next 3 years.

*Status of Commission 41.* By unanimous vote the Commission reaffirmed the following statement from the Kyoto G.A.: "History of astronomy is a discipline that overarches the entire field of study of the IAU, and therefore should not be confined to one Division. We wish to remain a separate Commission until such time as we can become a separate History of Astronomy Division."

*Vote of thanks.* On behalf of Commission members, Dr. Orchiston moved a vote of thanks to Dr. Dick for his efforts as C 41 President during the past three years.

The meeting was adjourned at 12:45 PM.

## 2. Scientific Sessions

### 2.1. Joint Discussion 6, Friday, August 11, 2000

Friday, August 11 was devoted to JD 6 "Applied Historical Astronomy." Participating were Commissions 4 (Ephemerides), 19 (Rotation of the Earth) and 20 (Positions and Motions of Minor Planets, Comets and Satellites), and supporting were Division I (Fundamental Astronomy), Division II (The Sun and Heliosphere), and Division III (Planetary System Sciences).

More than 100 people in attendance heard wide-ranging papers on Babylonian observations (D. Brown), East Asian observations (F. R. Stephenson), Southern Hemisphere observations (W. Orchiston), Practical astronomy in Indo-Persian sources (S. M. R. Ansari), Early observations and modern ephemerides (E. M. Standish), Secular variation of planetary orbital elements (Y. B. Kolesnik), Ancient eclipses and the Earth's rotation (L. V. Morrison), Earth orientation since AD 1600 (D. D. McCarthy), Creating modern cometary models using ancient Chinese data (D. K. Yeomans), Historical variability of the interplanetary complex (M. E. Bailey), Early telescopic sunspot records (D. V. Hoyt), Recorded long-period comet fluxes as an indicator of historic astronomical activity (D. W. Hughes), Scientific interpretation of historical auroral records (D. M. Willis), and Remnants of historical supernovae (D. A. Green). A final overview was given by W. T. Sullivan.

Poster papers included Exiguus: The Father of the Christian Era (M. Stavinschi), History of cometary exploration at Kyiv University (K. I. Churyumov), Akademische Sternkarten, Berlin 1830-59 (D. Jones), History of Astronomy in Ukraine (A. Korsun), and Sunspot records: 1853 - 1996 (J. M. Brooke et al.)

## **2.2. Inventory and Preservation of Astronomical Archives, Records, and Artifacts, Wednesday, August 16, 2000**

The inventory and preservation of archives has been a long-standing concern of Commission 41. One of the purposes of this session was to serve as input to the Working Group on Archives reactivated at this meeting, by gaining insight into what is being done in individual countries, where progress is being made thanks to individual and institutional efforts. At the same time, the session is part of an IUHPS initiative to encourage preservation and inventory of scientific archives in general.

The session was chaired by S. Dick, and included Adriaan Blaauw (Netherlands) on the Inventory of IAU Archives, and the ESO Archives; Peter Hingley (UK) on the Royal Astronomical Society Library and Archives; George Wilkins (UK) on the Norman Lockyer Observatory Archives; Suzanne Débarbat (France) and Jean-Pierre Cressent (France) on "Alidade" and the iconographic base for astronomical archives preserved in France; Wolfgang Dick (Germany) on German Archives; Andreas Verdun (Switzerland) on the Status of the Euler Edition and Archives; Alexander Gurshtein (Russia) on Russian Archives; Brenda Corbin (USA) and Donna Coletti (USA) on Preservation and Digitization of Observatory Publications; W. Orchiston (Australia) on Inventory and Preservation of Archives in Australia and New Zealand; Il-Seong Nha (Korea) on The Nha Il-Seong Museum of Astronomy; S. M. R. Ansari (India) on Archives in India. Prof. Hasegawa summarized T. Nakamura's paper on Astronomical Archives in Japan.

Also mentioned was the importance of the International Catalog of Sources of the American Institute of Physics, Center for the History of Physics.

Prof. Blaauw pointed out that his inventory of IAU archives (published in 1999) covers only the years 1919-1970, and that efforts should be made to insure that the IAU archives since 1970 are also preserved and inventoried. This problem should be taken up by the Working Group on Archives, as should the general problem of building on this session to insure the worldwide preservation and inventory of archives.

Steven J. Dick  
*President of the Commission*