

Commission 41: History of Astronomy
(Histoire de l'Astronomie)
(A joint IAU-IUHPS Commission)

President: S. Débarbat
Vice-President: S. M. R. Ansari
Secretaries (Business meetings): S. J. Dick, A. Gurshtein

I. Business Sessions (Thursday, Aug 18 & Monday Aug 22)

1.1 General

Commission President S. Débarbat called the meeting to order at 16:30, August 18, in the Mesdag 1 Room of the Congress Center. S. Dick and A. Gurshtein were appointed Secretaries. S. M. R. Ansari and D. DeVorkin were appointed responsible for resolutions. Of the members of the 1991-94 Organizing Committee, S. Dick was present; the remaining members, M. Firneis, K. Moesgaard, and J. North were unable to attend the General Assembly. Deceased members announced since the last G. A. include Alexander Pogo (USA), John Darius (UK), Zun-Gui Chen (China), Massimo Chimino (Italy) and Guy Omer (USA).

The President pointed out that eight circular letters had been addressed to Commission members over the last 3 years. An attempt to keep the IAU apprised of recent publications by Commission 41 members was unsuccessful due to lack of input. Since Commission 41 is a joint IAU-IUHPS [International Union for the History and Philosophy of Science] Commission, a report by John North, representative to the IUHPS, was read regarding the 19th International Congress of History of Science in Zaragoza, Spain, 22-29 August, 1993.

During the triennium Commission 41 has supported a meeting in Tartu, Estonia in 1993 on the occasion of the bicentenary of Friedrich Georg Wilhelm Struve (1793-1864). A. Batten represented the Commission at this meeting. S. Débarbat attended two meetings at Pulkovo Observatory related to the same centenary, Struve having also founded that Observatory.

1.2 Elections and New Members/Consultants

Elections duly held during this meeting, taking into account also postal ballots, resulted in the following officers for the 1994-97 triennium.

President:	S. M. R. Ansari
Vice-President:	S. J. Dick
Organizing Committee:	S. Débarbat A. Gurshtein S. Nakayama J. North

New members of the Commission approved were S. Aoki, E. Botez, F. Bonoli, W. Dick, L. Doggett, R. Haynes, M. Hemenway, R. K. Kochhar, K. Krisciunas, M. Mickelson, B. Morando, I. S. Nha, D. Polozhentsev, I. Pustyl'nik, G. Reaves, Z. Sima, M. Stavinschi, G. Vass. Consultants approved were J. Bennett, K. Bracher, J. Evans, R. Freitag, A. Jones, J. Perdrix, S. R. Sarma, B. G. Sidharth, J. Tenn, B. van Dalen, T. Williams, L. Włodarczyk.

1.3 Restructuring

A good part of the meeting was taken up with the proposed restructuring of the IAU, and the Executive Committee proposal that Commission 41 become part of an "Interdisciplinary Division" including Commissions 51 (Bioastronomy) and 14 (Atomic and Molecular Data). After considerable discussion, in which it was pointed out that our Commission was unique in being related to all other commissions, a statement was adopted requesting that Commission 41 be directly affiliated with the EC, rather than become part of another Division.

This proposal was not adopted by the EC on the grounds that Commission 41 was much broader than the other commissions so affiliated, each of which has a specific function. However, the idea of an Interdisciplinary Division was abandoned, with each Commission left to find its own place. It was suggested that Commission 41 might find a "center of gravity", such as the Fundamental Astronomy Division, from which it could operate. Others felt that considering its broad scope, History should be a separate Division, or that another attempt should be made at affiliation with the EC. No decision was reached; the officers and members will consider the matter over the next few months.

1.4 Resolutions

The Commission forwarded 5 resolutions to General Assembly: 1) that funding be allocated for organizing and cataloguing IAU archives; 2) that individuals and institutions search and inventory archives related to the IAU; 3) on the preservation of relics related to F. G. W. Struve's measurement of the arc of the meridian; 4) congratulating Indiana University on its 175th anniversary and the 100th Anniversary of the founding of its Astronomy Department; 5) supporting the compilation of annual databases of works in history of astronomy; .

Of these, the first three were passed by the General Assembly. The full text, as proposed, follows:

Resolution 1

Whereas The IAU allocated funds for preparation of the IAU History by Prof. Blaauw, not all of which has been expended,

Commission 41 respectfully suggests to the EC that these remaining funds be used for the archival organization and cataloguing of the early IAU files in preparation for depositing them in a suitable archive.

Resolution 2

Considering the scientific, historical and practical importance of the measurement of the arc of the meridian, made by F. G. W. Struve,

The IAU urges the governments of the following countries: Norway, Sweden, Finland, Estonia, Latvia, Lithuania, Ukraine, Byelorussia, Poland, and Moldavia, that still possess relics of that enterprise, to take all possible steps to preserve those relics, including a approach to UNESCO, to declare them to be World Heritage sites.

Resolution 3

Whereas Professor Blaauw's recent history of the IAU shows the great value of astronomical archives.

The IAU supports a search and inventory of all archives related to the history of the IAU, to be undertaken by members at their institutions and other places, and reported to Commission 41.

1.5 Future Meetings

Ansari proposed a meeting on "The Development of Afro-Asian Astronomy in the 20th Century". Débarbat pointed out that 1996 will be the bicentenary of Laplace's *Systeme du monde*, which could provide the basis for a meeting. The Officers and Organizing Committee will decide whether these meetings are feasible, or whether they should be incorporated into a proposal for a Symposium to be held in conjunction with the next General Assembly meeting in Kyoto, Japan.

1.6 Archives and Historical Data

S. Débarbat reported that the WG on Archives had been unable to meet over the past three years. However, individual contacts have supported the idea that steps toward an international registry of archives should be made by first compiling such a registry at the national level. S. Dick pointed out that the Center for the History of Physics of the American Institute of Physics maintains an International Catalogue of Sources in the History of Physics and Allied Sciences, including astronomy and astrophysics. He suggested that once the national registries are compiled, they could be combined with this catalogue.

Ansari gave a brief presentation on "Modern astronomy and its archival material in the Afro-Asian Observatories." Débarbat spoke briefly on "Up-to-Date Proper Motions of Stars from old Carte du Ciel Plates." She pointed out that the importance of historical data was emphasized at a meeting on "Galactic and Solar System Astrometry" held in Cambridge in June, 1993, where it was concluded that by combining the Astrographic Catalogue with recent data, proper motions of stars at accuracy of $0^{\circ}002$ arcsecond/year can be obtained. As an example of the importance of even older data, Débarbat reported on a paper of Xu Zhentao (Purple Mountain Observatory) on the so-called "oracle bones", animal bones and turtle shells dating from the Shang Dynasty (about 1500-1050 BC), and which probably formed part of the royal archives kept at the Shang capital toward the end of that period. Because astronomers are now trying to use these records to shed light on modern astronomical problems such as variation of the rotation of the Earth and solar variability, this could become an exciting new area of astronomy.

The members thanked outgoing President S. Débarbat for her service over the last three years. In light of the ongoing discussions about IAU reorganization, S. Dick pointed out the importance of rethinking the goals of Commission 41, both for its relevance to the IAU and in supporting the discipline of history of astronomy.

2. Scientific Sessions : Joint Discussion, August 19

2.1 Seventy-Five Years of the IAU

The entire day Friday, August 19 was devoted to a Joint Discussion on the History of Astronomy. The theme of the morning session was "75 Years of the IAU." The keynote speaker for the session was A. Blaauw, whose *History of the IAU: The Birth and First Half-Century of the International Astronomical Union* was just published. (Blaauw presented this book to Queen Beatrix at the opening of the General Assembly.) Blaauw's paper "The Birth and First Decades of the IAU," concentrated on some difficult episodes in

the early history of the Union, including efforts to make the Union truly international in the wake of World War I.

Other speakers included D. DeVorkin, "George Ellery Hale's International Union for Cooperation in Solar Research as the Nucleus of the IAU;" S. Dumont and M. J. Martres, "International Survey of the Solar Activity under the Leadership of the IAU;" A. Gurshtein, "The 1958 IAU General Assembly in Moscow;" O. Gingerich, "American Foreign Policy, China and the IAU: Leo Goldberg's Memoirs;" W. T. Sullivan, "Finding a Home for Early Radio Astronomy: IAU or URSI;" B. Welther, "Expanding the Membership: The First Women Appointed to IAU Commissions;" S. Débarbat, "A Call for Indirect Sources to Serve for the History of the IAU."

The session was attended by at least five past General Secretaries of the IAU, including J. C. Pecker (1964-67), E. Müller (1976-79), P. Weyman (1979-82), P. Swings (1985-88), and D. Mc Nally (1988-91). These papers occasioned some discussion of the whereabouts of the IAU archives and where they should eventually be deposited. Blaauw's history lists the archives that he used, but notes that he did not find some of the earliest archives. Müller reported that when she was General Secretary, these early archives had been sent from Belgium to Paris Observatory, and that they had since been moved to the Institut d' Astrophysique on the same grounds. Their exact location needs to be pinpointed before they are lost again. Pecker reported that discussions were underway to deposit IAU archives at the Académie des Sciences in Paris.

2.2 Works in Progress

The afternoon session was devoted to various history projects around the world, and other works in progress. Owen Gingerich reported on "Challenges Confronting the General History of Astronomy;" S. Dick read a paper from John Lankford on the "Encyclopedia of History of Astronomy." Other papers included B. Guinot and S. Yumi, "The History of the BIH and of the IPMS;" P. Brosche and W. Dick, "A New Working Group in History of Astronomy and its Activities: the Arbeitskreis Astronomiegeschichte of the Astronomische Gesellschaft"; F. Edmondson, "AURA, Kitt Peak and Cerro Tololo - The Early Years;" S. Dick, "The NASA SETI History Project;" M. Anderer, "John Mellish and the Craters of Mars;" R. Haynes et al., "A History of Australian Astronomy;" H. R. Butcher, "A History of Australian Astronomy." Reports were also given on activities in Argentina (Bajaja), New Zealand (W. Orchiston) and China (Liu Ciyuan and Xu Zhentoo).