## CHAPTER V

## REPORT OF THE EXECUTIVE COMMITTEE 1994-1997

The present report covers the period between the conclusion of the XXIInd General Assembly on August 24, 1994, and that of the XXIIIrd General Assembly on August 27, 1997.

EXECUTIVE COMMITTEE 1994-1997
L. Woltjer
R.P. Kraft
I. Appenzeller
J. Andersen
C.A. Anguita
B. Hidayat
D.S. Mathewson
F. Pacini
J.I. Smak
V.L. Trimble
A.A. Boyarchuk
J. Bergeron

President
President-Elect
General Secretary
Assistant General Secretary
Vice-President
Vice-President
Vice-President
Vice-President
Vice-President
Vice-President
Advisor
Advisor

## 1. Administrative Matters

## EXECUTIVE COMMITTEE MEETINGS

The full Executive Committee met as follows during the reporting period:
$66^{\text {th }}$ Meeting, August 25, 1994, in The Hague, The Netherlands
$67^{\text {th }}$ Meeting, August 18-21, 1995, at Mt. Stromlo Observatory, Canberra, Australia
$68^{\text {th }}$ Meeting, June 23-25, 1996, at the Space Telescope Science Institute, Baltimore, USA
The activities of the Executive Committee are recorded in the minutes of the Executive Committee meetings. Summaries of these minutes were published in the IAU Information Bulletin (EC 65: IB 74, p. 25; EC 66: IB 74, p. 25; EC 67: IB 76, p. 5; EC 68: IB 79, p. 3).

## OFFICERS MEETINGS

The IAU Officers (President, President-Elect, General Secretary, Assistant General Secretary) met at the IAU Secretariat in Paris, France, on February 25-26, 1995; February 25, 1996; and February 24, 1997.

## IAU SECRETARIAT

The Secretariat continued to function at its premises at the Institut d'Astrophysique de Paris (INSUCNRS), according to an agreement in force since November 1989. The Secretariat staff consisted, as before, of Mrs. M. Léger-Orine (Administrative Assistant) and Ms. J. Saucedo (Secretary).

## IAU ARCHIVES

Among the duties of the General Secretary explicitly mentioned in our Statutes is to preserve the archives of the Union. The Executive Committee, therefore, accepted with gratitude the kind offer of Professor Adriaan Blaauw, former IAU President, to reorganise the IAU archives for the period 1919-1970.

During the past three years, Professor Blaauw (with some help from IAP students) has done an outstanding job in sorting, labelling and describing the many documents which had accumulated in the Secretariat. It is expected that these documents will be deposited, probably in 1998, in a professional archive, where they will be properly maintained and readily accessible to future historians of science.

## REVISION OF THE IAU STATUTES, BYE-LAWS, AND WORKING RULES

A significant fraction of the EC's work was devoted to a revision of the IAU Statutes, Bye-Laws and Working Rules. The successful introduction of Divisions into our organisational structure on an informal basis as decided by the XXIInd General Assembly in The Hague, and the resulting wish to make the Divisions a permanent feature of the IAU, implied a number of revisions of our basic rules.

In the course of making these amendments, the EC decided to also correct a number of deficiencies that had become apparent in the previous version of these documents. Among the proposed modifications is a provision which will explicitly allow Division Presidents to propose astronomers who are not represented by an IAU adhering body as new Individual Members of our Union. While such proposals from Commission Presidents had occasionally been accepted in the past, the actual procedure to be followed was unclear, which had led to difficulties during the XXIInd General Assembly.

Amendments of the IAU Working Rules were also proposed, adding for the first time written rules and guidelines for the drafting and submission of Resolutions at General Assemblies as well as rules concerning the formation of Working Groups of the Union.

As recorded in Chapter II of these Transactions, the proposed revisions were approved unanimously by the General Assembly. The revised Statutes, Bye-Laws, and Working Rules are printed in Chapter VII of this volume.

## ADHERING COUNTRIES

In conformity with the ICSU policy regarding the States of the former Soviet Union and the fofmer State of Yugoslavia, Azerbajan, Croatia, Georgia and Latvia became National Members of the IAU, all in Category of Adherence I, with their Academies of Science as the Adhering Bodies.

The Executive Committee decided to recommend to the General Assembly that Bolivia be admitted as an Associate Member of the Union, and that the Central American Assembly of Astronomers (CAAA) also be admitted as an Associate Member, representing the astronomers in Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. The same rules as for normal Associate Countries will apply also to the CAAA as the Adhering Organisation.

The Executive Committee approved a change in the Category of Adherence of Australia from III to IV and of Spain from II to IV, both effective from 1996, and of Denmark from II to III, effective from 1997.

Regrettably, the dues of the Democratic People's Republic of Korea and Morocco not having been paid for over five years, the IAU membership of these countries terminated at the end of 1995 and 1996, respectively, as laid down in Article 7 of the IAU Statutes.

Number of Adhering National Organisations as of April 30, 1997: 60
Full Members 56
Associate Members 4

INDIVIDUAL MEMBERSHIP AND CONSULTANTS
Individual members admitted at the XXIInd General Assembly 674
Number of individual members as of May 12, 1997
Number of consultants as of May 12, $1997 \quad 219$

The Executive Committee reports, with regret, that the deaths of the following 136 Members of the Union have been reported to the Secretariat since the XXIInd General Assembly:

| Alfven Hannes | Jacchia Luigi G | Mrkos Antonin | Shah Ghanshyam A |
| :---: | :---: | :---: | :---: |
| Baize Paul | Jaks Waldemar | Müller Edith A | Shaw R William |
| Bel Nicole J | Jaschek Mercedes | Nadolschi V | Shchegolev Dimitrij E |
| Bertiau Flor C | Joshi G C | Nagasawa Shingo | Shoemaker Eugene M |
| Boigey Francoise | Jurkevich Igor | Nakano Saburo | Shul'berg A M |
| Bosman-Crespin D | Kaburaki Masaki | Nemiro Andrej A | Shuter William L H |
| Canavaggia Renée | Karandikar R V | Ney Edward $\mathbf{P}$ | Smolinski Jan |
| Candy Michael P | Katsis Demetrius | Nicolet Marcel | Smoluchowski Roman |
| Cardelli Jason A | Kessler Karl G | Ogir Maya | Sobolev Vladislav M |
| Catarzi Marco | King Robert Burnett | Oliver Bernard M | Spitzer Jr Lyman |
| Chandrasekhar S | Konin V V | Onderlicka Bedrich | Strassl Hans L |
| Chanmugam Ganesar | Kothari D S | Page Thornton L | Tarafdar Shankar P |
| Chugajnov P F | Koyama Ko-u-ichi | Parijskij N N | Tayler Roger J |
| Chuvaev K K | Koziel Karol | Petrov Georgij I | Thomas Richard N |
| de Kort Jules J | Krassovsky V I | Pilowski K | Tombaugh Clyde W |
| de Vaucouleurs G | Kristian Jerome | Pohl Eckhard | Tousey Richard |
| Demin Vladimir | Lahiri N C | Prokof'ev Vladimir K | Unsöld Albrecht |
| Di-Sheng Zhai | Lipovetsky Valentin A | Purcell Edward M | Urbarz H |
| Dicke Robert H | Lyttleton Raymond A | Rahe Jürgen | van de Kamp Peter |
| Divari N B | Loose Hans-Hermann | Rana Narayan C | Vanysek Vladimir |
| Doggett Leroy E | Lüst Rhea | Ribes Elizabeth | von Der Heide Johann |
| Epstein Isadore | Lutz Thomas E | Rosenberg J | Wackernagel H Beat |
| Florentin Nielsen R | Luyten Willem J | Rosino Leonida | Wares Gordon W |
| Fowler William A | Macris Constantin J | Rubashev Boris M | Wargau Walter F |
| Gleissberg Wolfgang | Markert Thomas H | Runcorn Stanley K | Wattenberg D |
| Godart Odon | Marx Siegfried | Rybka Przemyslaw | Wehlau William H |
| Götz Woldemar | Mayall Margaret W | Rylov Valerij S | Weigert Alfred |
| Gottlieb Kurt | McKeith Conal D | Sagan Carl | Xanthopoulos B C |
| Habibullin Sh T | Mergentaler Jan | Sagnier Jean-Louis | Yakovkin N A |
| Haug Ulrich | Middlehurst B M | Scaria K K | Yamakoshi Kazuo |
| Herr Richard B | Milovanovic Vladeta | Schiller Karl | Yen Jui-Lin |
| Hirst William P | Mitchell Jr Walter E | Schrutka- | Zel'manov A L |
| Hooghoudt B G ir | Monsignori Fossi B | Rechtenstamm P |  |
| Hubert Henri | Morando Bruno L | Schwarzschild Martin |  |
| Irwin John B | Moutsoulas Michael | Sen S N |  |

## DIVISIONS

The 11 Divisions introduced on a trial basis at the XXIInd General Assembly fulfilled their mission very satisfactorily, leading to their adoption on a permanent basis through the revision of the Statutes, ByeLaws and Working Rules approved at the XXIIIrd General Assembly.

In particular, the advice of the Division Presidents was solicited and carefully considered by the Executive Committee in the selection of IAU sponsored scientific meetings. Considerations were also initiated regarding the optimum organisational structure within each Division. During the triennium, Commission 7 joined Division I, and Commission 50 joined Division III.

## COMMISSIONS

## Commission 6: Astronomical Telegrams

The number of IAU Circulars issued by the Central Bureau for Astronomical Telegrams was 208, 159, and 247 in 1994, 1995, and 1996, respectively. The decreasing number from 1994 to 1995 is explained by the introduction of the Minor Planet Electronic Circulars and other electronic services.

## Commission 7: Celestial Mechanics and Dynamical Astronomy

The proposed change of name of Commission 7 from Celestial Mechanics to the above was approved.

## Commission 20: Positions \& Motions of Minor Planets, Comets \& Satellites

In 1994, 1995 and 1996, Minor Planet Circulars were issued, under the direction of B.G. Marsden for a total of 1574, 1784 and 2432 pages, respectively. In all, 411,550 and 615 minor planets were numbered in 1994, 1995, and 1996, respectively.

## Commission 38: Exchange of Astronomers

The aim of this programme is to provide support to astronomers from developing countries who spend periods over three months at a foreign host institution to pursue their training and formation in astronomy and their scientific collaboration with other astronomers. During the triennium 1994-1997, 31 travel grants were awarded through this programme.

## Commission 44: Space and High Energy Astrophysics

The former Commissions 44 (Astronomy from Space) and 48 (High Energy Astrophysics) merged to form this new, single Commission.

## Commission 46: Teaching of Astronomy

International Schools for Young Astronomers (ISYA)
These schools are of three weeks' duration. They consist of both lectures by national and international senior astronomers, usually with emphasis on a broad astronomical theme, and an introduction to observational techniques, data reduction, and analysis, at an active observatory when possible. Attending students and young astronomers are both from the host country and nearby countries.

The following ISYA's took place during the triennium:
21 ${ }^{\text {st }}$ ISYA Cairo University and Kottamia Observatory, Egypt, September 18 - October 8, 1994
22nd ISYA Belo Horizonte, Brazil, 9-29 July, 1995
23rd ISYA Zanjan, Iran, 4-27 July, 1997

## Teaching for Astronomy Development (TAD)

A major new educational activity introduced by the present EC is the Teaching for Astronomy Development (TAD) programme, which aims at developing astronomy in countries in which astronomy has been developing slowly or not at all, and where local scientists (usually physicists) wish to develop education and research in astronomy. The format of the programme is flexible, adapted to local needs, and may include the provision of teaching materials (including books, PCs, software, or instruments), visits by lecturers from abroad, or support for regional meetings.

The TAD programme was started in 1996 and 1997 with the support of educational institutions in Vietnam and Central America. TAD activities in Morocco and Sri Lanka are under consideration.

## WORKING GROUPS OF THE EXECUTIVE COMMITTEE

The Executive Committee approved the creation of a Working Group on Future Large Scale Facilities, reporting to the Executive Committee. Its mandate is to promote the early discussion and dissemination of information on potential large scale international projects, and to set up and maintain an inventory of such projects, in order to further contacts and cooperation between different projects and to identify areas of significant duplication or lack of clearly desirable efforts. The composition of the Working Group is reported in Chapter VI of this volume.

## REPRESENTATION AT OTHER INTERNATIONAL ORGANIZATIONS

The IAU was represented by the Assistant General Secretary at the following ICSU meetings: General Committee, Rabat, Morocco, October 13-15, 1994 and Chiang Mai, Thailand, October 7-9, 1995; XXVth General Assembly, Washington, DC, September, 1996. At the General Assembly, a major modernisation of ICSU's goals and organisational structure was approved. The Assistant General Secretary, elected to
the ICSU Standing Committee on Membership, Structure and Statutes at the General Assembly, attended the meeting of that Committee in Paris, March 26-28, 1997, the main task of which was to prepare a corresponding revision of the ICSU Statutes and Rules of Procedure.

The IAU was represented by the General Secretary, at the XXXIst Scientific Assembly of COSPAR, the ICSU Committee for Space Research, at Birmingham, UK, July 14-21, 1996. Consultations between COSPAR and the IAU helped to coordinate the scientific programmes of the XXXth COSPAR Scientific Assembly and the XXIInd IAU General Assembly, both in 1994.

The IAU representatives to other international organisations are listed below.
IAU representatives to ICSU and other International Organizations 1994-1997

| Acronyms | Organisations | Representatives |
| :---: | :---: | :---: |
| ICSU | International Council of Scientific Unions General Committee | J. Andersen |
| BIPM | Bureau International des Poids et Mesures | G. Winkler |
| CCDS | International Consultative Committee for the Definition of the Second | - |
| CCDS WG | Application of General Relativity to Metrology | T. Fukushima |
| CCIR | International Radio Consultative Committee Study Group 2 | J. Whiteoak/ A.R. Thompson |
| CIE | Compagnie Internationale de l'Eclairage | S. Isobe |
| CODATA | Committee on Data for Science \& Technology | E. Raymond |
| COSPAR | Committee on Space Research COSPAR SC B COSPAR SC D COSPAR SC E COSPAR Sub. Committee E1 COSPAR Sub. Committee E2 | I. Appenzeller <br> C. de Bergh <br> F. Verheest <br> W. Wamsteker <br> R. Sunyaev <br> O. Engvold |
| COSTED | Committee on Science \& Technology in Developing Countries | I. Appenzeller |
| CTS | Committee on the Teaching of Science | J. Pasachoff |
| FAGS | Federation of Astronomical \& Geophysical Services | P. Pâquet/J. Kovalevsky |
| IAF | International Astronautical Federation | Y. Kondo |
| IERS | International Earth Rotation Service | B. Kolaczek |
| IGBP | International Geosphere-Ionosphere Programme | J. Eddy |
| IUCAF | Inter-Union Commission on Frequency Allocation for Radio Astronomy \& Space Science | B.A. Doubinsky M. Ishiguro R. Sinha A.R. Thompson |
| IUPAP | International Union of Pure \& Applied Physics | V. Trimble |
| IUWDS | International Ursigram \& World Day Service | H. Coffey |
| QBSA | Quarterly Bulletin on Solar Activity | P. Lantos |
| SCOPE | Scientific Committee on Problems of Environment | D. McNally |
| SCOSTEP | Scientific Committee on Solar-Terrestrial Physics | B. Schmieder |
| URSI | Union Radio-Scientifique Internationale | R. Ekers |
| WMO | World Meteorological Union | G. Wallerstein |

## 2. Scientific Matters

## SCIENTIFIC MEETINGS 1994-1997

During the triennium reported on here, 20 Symposia, 18 Colloquia, 2 Regional Astronomy Meetings, and 2 Technical Workshops were held. The Union also co-sponsored 3 meetings with other international Unions and ICSU bodies. These meetings are listed below.

The Executive Committee decided to raise the amount of travel support awarded to IAU sponsored meetings, effective from 1996, to 25.000 CHF for Symposia and Regional Meetings, 16.000 CHF for Colloquia, and 3-5.000 CHF to Co-Sponsored Meetings according to the circumstances of each case.

A new edition of the Rules for IAU Sponsored Scientific Meetings was prepared by the Assistant General Secretary. They are published in Chapter VIII of this volume.

IAU Symposia:
170 Co: Twenty-five Years of Millimetre-Wave Spectroscopy Tucson, AZ, USA, May 29 - June 2, 1995
171 New Light on Galaxy Evolution Heidelberg, F.R. Germany, June 26-30, 1995
172 Dynamics, Ephemerides and Astrometry of the Solar System Paris, July 3-8, 1996
173 Astrophysical Applications of Gravitational Lensing Melbourne, Australia, July 9-14, 1995
174 Dynamical Evolution of Star Clusters - Confrontation of Theory and ObservationsTokyo, Japan, August 22-25, 1995
175 Extragalactic Radio Sources
Bologna, Italy, October 10-14, 1995
176 Stellar Surface Structure
Wien, Austria, October 9-13, 1995
177 The Carbon Phenomenon Antalya, Turkey, May 27-31, 1996
178 Molecules in Astrophysics: Probes and Processes Leiden, Netherlands, July 1-5, 1996,
179 New Horizons from Multi-Wavelength Sky Surveys
Baltimore, USA, August 26-30, 1996
180 Planetary Nebulae
Groningen, The Netherlands, August 26-30, 1996
181 Sounding Solar and Stellar Interiors
Nice, France, September 30 - October 3, 1996,
182 Herbi-Haro Flows and the Birth of Low-Mass Stars
Chamonix, France, January 20-26, 1997
183 Cosmological Parameters and the Evolution of the Universe
Kyoto, Japan, August 18-22, 1997
184 The Central Regions of the Galaxy and Galaxies
Kyoto, Japan, August 18-22, 1997
185 New Eyes to See Inside the Sun and the Stars: Pushing the Limits of Helio and AstroSeismology with New Observations from the Ground and from Space
Kyoto, Japan, August 18-22, 1997
186 Galaxy Interactions at High and Low Redshift
Kyoto, Japan, August 18-22, 1997
187 Cosmic Chemical Evolution
Kyoto, Japan, August 26-30, 1997
188 The Hot Universe
Kyoto, Japan, August 26-30, 1997
189 Fundamental Stellar Properties: The Interaction Between Observation and Theory
Sydney, Australia, January 13-17, 1997

IAU Colloquia.
150 Physics, Chemistry, and Dynamics of Interplanetary Dust Gainesville, FL, USA, August 14-18, 1995
151 Flares and Flashes - Views from the Ground and from Space Sonneberg, Germany, December 5-9, 1994
152 Astrophysics in the Extreme Ultraviolet Berkeley, CA, USA, March 27-30, 1995
153 Magnetodynamic Phenomena in the Solar Atmosphere Makuhari, Tokyo, Japan, May 22-27, 1995
154 Solar and Interplanetary Transients Pune, India, January 23-27, 1995
155 Astrophysical Applications of Stellar Pulsation
Cape Town, South Africa, February 6-10, 1995
156 The Impact of Comet Shoemaker-Levy 9 on Jupiter
Baltimore, MD, USA, May 9-12, 1995
157 Barred Galaxies
Tuscaloosa, AL, USA, May 30 - June 3, 1995
158 Cataclysmic Variables and Related Objects
Keele, UK, June 25-30, 1995
159 Emission Lines in Active Galaxies: New Methods and Techniques
Shanghai, China, June 17-20, 1996
160 Pulsars: Problems and Progress Sydney, Australia, January 8-12, 1996
161 Astronomical and Biochemical Origins and the Search for Life in the Universe Capri, Italy, July 1-5, 1996
162 New Trends in Astronomy Teaching
London and Milton Keynes, UK, July 8-12, 1996
163 Accretion Phenomena and Related Outflows Port Douglas, Australia, July 15-19, 1996
164 Radio Emission from Galactic and Extragalactic Compact Sources Socorro, New Mexico, USA, April 28 - May 2, 1997
165 Dynamics and Astrometry of Natural and Artificial Celestial Bodies Poznan, Poland, July 1-5, 1996
166 The Local Bubble and Beyond
Garching b. München, Germany, April 21-25, 1997
167 New Perspectives of Solar Prominences
Aussois, France, April 28 - May 4, 1997
IAU Regional Astronomy Meetings
VIIIth Latin-American Regional Astronomy Meeting Montevideo, Uruguay, November 27 - December 1, 1996
VIIth Asian-Pacific Regional Astronomy Meeting Pusan, Korea, August 19-23, 1996

## IAU Technical Workshops

Library and Information Services in Astronomy (LISA II)
Garching b. München, May 10-12, 1995
Statistical Challenges in Modern Astronomy II
University Park, PA, USA, June 2-5, 1996
Co-Sponsored Meetings
Commsphere 95 (URSI, IAU)
Eilat, Israel, January 22-27, 1995
31st COSPAR Scientific Assembly (COSPAR, IAU)
Birmingham, UK, July 14-21, 1996

Third SOLTIP Symposium on Solar Transient and Interplanetary Regions
(SCOSTEP, COSPAR, IAU)
Beijing, China, October 14-18, 1996

## IAU PUBLICATIONS

Since the expiring data of the IAU publishing contract with Kluwer Academic Publishers was December 31st, 1997, the EC issued a call for tenders for a new contract early in 1996. From four bids received by the General Secretary, the EC selected the Astronomical Society of the Pacific (ASP) as the new IAU Publisher for the period 1998-2003, and a six-year contract with the ASP has been signed accordingly. It has been agreed that Kluwer will publish the Proceedings of all IAU meetings held through the end of 1997, while the ASP will handle all meetings held from the beginning of 1998.

The publications that have appeared by or under the auspices of the IAU during the reporting period are listed below. Except for the Colloquium Proceedings, these were published by the IAU Publisher, Kluwer Academic Publishers, Dordrecht, The Netherlands.

## LAU Information Bulletin:

Seven issues, No. 74-80

## LAU Transactions XXIIB

Proceedings of the Twenty-Second General Assembly
Ed. I. Appenzeller, 1995

## IAU Transactions XXIIIA

Reports on Astronomy
Ed. I. Appenzeller, 1997
Highlights of Astronomy , Vol. 10
Ed. I. Appenzeller, 1995

## Membership List 1994/1997

IAU Symposium Proceedings:
160 Asteroids, Comets, Meteors 1993
Eds. A. Milani, M. di Martino \& A. Cellino
161 Astronomy from Wide-Field Imaging
Eds. H.T. MacGillivray, E.B. Thomson, B.M. Lasker, I.N. Reid, D.F. Malin, R.M. West \& H. Lorenz

162 Pulsation, Rotation and Mass Loss in Early-Type Stars
Eds. L.A. Balona, H.F. Henrichs \& J.M. Le Contel
163 Wolf-Rayet Stars: Binaries, Colliding Winds, Evolution
Eds. K.A. van der Hucht \& P.M. Williams
164 Stellar Populations
Eds. P.C. van der Kruit \& G. Gilmore
165 Compact Stars in Binaries
Eds. J. van Paradijs, E.P.J. van den Heuvel \& E. Kuulkers
166 Astronomical and Astrophysical Objectives of Sub-Milliarcsecond Optical Astrometry
Eds. E. Høg \& P.K. Seidelmann
167 New Developments in Array Technology and Applications
Eds. A.G. Davis Philip, K.A. Janes \& A.R. Upgren
168 Examining the Big Bang and Diffuse Background Radiations
Eds. M. Kafatos \& Y. Kondo
169 Unsolved Problems of the Milky Way
Eds. L. Blitz \&P. Teuben
170 CO: Twenty-Five Years of Millimetre-wave Spectroscopy
Eds. W.B. Latter, S.J.E. Radford, P.R. Jewell, J.G. Mangum \& J. Bally
171 New Light on Galaxy Evolution
Eds. R. Bender \& R.L. Davies

172 Dynamics, Ephemerides \& Astrometry of the Solar System Eds. S. Ferraz-Mello \& J.-E. Arlot
173 Astrophysical Applications of Gravitational Lensing
Eds. C.S. Kochanek \& J.N. Hewitt
174 Dynamical Evolution of Star Clusters - Confrontation of Theory and Observations Eds. P. Hut \& J. Makino
175 Extragalactic Radio Sources
Eds. R. Ekers, C. Fanti \& L. Padrielli
176 Stellar Surface Structure
Eds. K.G. Strassmeier \& J.L. Linsky
178 Molecules in Astrophysics: Probes and Processes
Ed. E.F. van Dishoeck
IAU Colloquium Proceedings:
145 Supernovae and Supernova Remnants
Eds. R. McCray \& Z. Wang
Cambridge Univ. Press, I1996
146 Molecular Opacities in the Stellar Environment
Ed. U.G. Jørgensen
Springer-Verlag, 1994
147 The Equation of State in Astrophysics
Eds. G. Chabrier \& E. Schatzman
Cambridge Univ. Press, 1994
148 Future Utilization of Schmidt Telescopes
Eds. J. Chapman, R. Cannon, S. Harrison \& B. Hidayat
ASP Conf. Ser. Vol. 84, 1995
149 Tridimensional Optical Spectroscopic Methods in Astrophysics
Eds: G. Comte \& M. Marcelin
ASP Conf. Ser. Vol. 71, I 1995
150 Physics, Chemistry, and Dynamics of Interplanetary Dust
Eds. B.Å.S. Gustafson \& M.S. Hanner
ASP Conf. Ser. Vol. 104, 1996
151 Flares and Flashes - Views from the Ground and from Space
Eds. J. Greiner, H.W. Duerbeck \& R.E. Gershberg
Springer-Verlag, 1994
152 Astrophysics in the Extreme Ultraviolet
Eds. S. Bowyer \& R.F. Malina
Kluwer Acad. Publ., 1996
153 Magnetodynamic Phenomena in the Solar Atmosphere
Eds. Y. Uchida, T. Kosugi \& H.S. Hudson
Kluwer Acad. Publ., 1996
154 Solar and Interplanetary Transients
Eds. S. Ananthakrishnan \& A. Pramesh Rao
Kluwer Acad. Publ., 1996
155 Astrophysical Applications of Stellar Pulsation
Eds: R.S. Stobie \& P.A. Whitelock
ASP Conf. Ser. Vol. 83, 1995
156 The Impact of Comet Shoemaker-Levy 9 on Jupiter
Ed. K.S. Noll
Cambridge Univ. Press, 1996
Barred Galaxies
Eds: R. Buta, D.A. Crocker \& B.G. Elmegreen
ASP Conf. Ser. Vol. 91, 1996
158 Cataclysmic Variables and Related Outflows
Eds. A. Evans \& J.H. Wood
Kluwer Acad. Publ., 1996

159 Emission Lines in Active Galaxies: New Methods and Techniques
Eds: B.M. Peterson, F.-Z. Cheng \& A.S. Wilson
ASP Conf. Ser. Vol. 113, 1997
160 Pulsarst Problems and Progress
Eds: M. Bailes, S. Johnston \& M.A. Walker
ASP Conf. Ser. Vol. 105, 1996
161 Astronomical and Biochemical Origins and the Search for Life in the Universe
Eds: C.S. Cosmovici, S. Bowyer \& D. Werthimer
Editrice Compositori, Bologna, 1997
163 Accretion Phenomena and Related Outflows
Eds: D.T. Wickramasinghe, G. Bicknell \& L. Ferrario
ASP Conf. Ser. Vol. 121, 1997
165 Dynamics and Astrometry of Natural and Artificial Celestial Bodies
Eds: I. Wytrzyszczak, J.H. Lieske \& R.A. Feldman
Kluwer Acad. Publ., 1997
Proceedings of IAU Regional Meetings:
Proceedings of the VIIIth Latin-American Regional Astronomy Meeting
Rev. Mexicana de Astronomía y Astrofísica, Ser de Conf., Vol. 4, 1996
Proceedings of the VIIth Asian-Pacific Regional Astronomy Meeting Journal of the Astronomical Society of Korea, Vol. 29, Supplement, 1996

## 3. Financial Matters

Budget 1994-1996 \& 1997 approved at previous General Assemblies (CHF)

| INCOME | 1994 | 1995 | 1996 | 1994-96 | 1997 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unit of contribution | 2580 | 2660 | 2740 |  | 2820 |
| Number of units of contribution | 248 | 254 | 254 |  | 254 |
| ADHERING ORGANIZATIONS | 639840 | 675640 | 695960 | 2011440 | 716280 |
| SPECIAL CONTRIBUTIONS |  |  |  |  |  |
| ICSU/UNESCO |  |  |  |  |  |
| ICSU: General |  |  |  |  |  |
| UNESCO: General | 30300 | 34000 | 37000 | 101300 | 40000 |
| ICSU/AEI |  |  |  |  |  |
| UNESCO/AEI |  |  |  |  |  |
| COSPAR/AEI |  |  |  |  |  |
| PUBLICATIONS: ROYALTIES | 62000 | 68000 | 68000 | 198000 | 68000 |
| BANK INTEREST |  |  |  |  |  |
| Current accounts |  |  |  |  |  |
| Deposit accounts | 25000 | 25000 | 25000 | 75000 | 25000 |
| Saving accounts |  |  |  |  |  |
| Money market |  |  |  |  |  |
| TOTAL INCOME | 757140 | 802640 | 825960 | 2385740 | 849280 |

Budget 1994-1996 \& 1997 approved at previous General Assemblies (CHF)

## EXPENDITURE

| SCIENTIFIC ACTIVITIES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Assembly |  |  |  |  |  |
| Grants |  |  |  |  | 167000 |
| Commission Presidents |  |  |  |  | 40000 |
| Staff | 275000 |  |  | 275000 | 18000 |
| Operation |  | 9000 | 9000 | 18000 | 30000 |
| Executive Committee |  |  |  |  | 80000 |
| Meetings |  |  |  |  |  |
| Symposia/Colloquia | 143000 | 206000 | 213000 | 562000 | 220000 |
| Regional Meetings |  | 22000 | 22000 | 44000 |  |
| Research projects |  |  |  |  |  |
| ISYA (46) |  | 45000 | 45000 | 90000 |  |
| VLP (46) | 28000 | 15000 | 15000 | 58000 | 15000 |
| EC WGs | 5000 | 18000 | 18000 | 41000 | 18000 |
| Exchange of Astromers (38) | 26000 | 30000 | 30000 | 86000 | 30000 |
| Others | 1500 |  |  | 1500 |  |
| Commission Activities |  |  |  |  |  |
| Telegram Bureau (06) | 3700 | 4000 | 4000 | 11700 | 4000 |
| Minor Planet Center (20) | 3700 |  |  | 3700 |  |
| Meteor Data Center (22) | 1100 |  |  | 1100 |  |
| Variable Star Catalogue (27) | 3700 |  |  | 3700 |  |
| Astronomy Teaching (46) | 5000 | 5000 | 5000 | 15000 | 5000 |
| Commission WGs | 2000 | 18000 | 18000 | 38000 | 18000 |
| Delegates to other Unions | 9000 | 10000 | 10000 | 29000 | 10000 |
| Total | 506700 | 382000 | 389000 | 1277700 | 655000 |
| DUES TO UNIONS/ORGANIZATIONS |  |  |  |  |  |
| ICSU | 22400 | 16900 | 17400 | 56700 | 18000 |
| IERS/FAGS | 7000 | 7000 | 7000 | 21000 | 7500 |
| IUCAF | 7500 | 7500 | 7500 | 22500 | 7500 |
| CTS | 600 | 600 | 600 | 1800 | 600 |
| GLOBMET | 1500 |  |  | 1500 |  |
| Total | 39000 | 32000 | 32500 | 103500 | 33600 |

## Budget 1994-1996 \& 1997 approved at previous General Assemblies (CHF)

## EXPENDITURE (ctd)

EXECUTIVE COMMITTEE
Executive cttee meetings
Officers meetings
General Secretary expenditure
President expenses
Assist General Secretary expenses
Local help to As General Secretary

Total

PUBLICATIONS
Information Bulletin
Distr. Devel. Countries
Distr. Exec. Committee
Other Publications

Total

## ADMINISTRATION/SECRETARIAT

Salaries \& Charges
Training courses
General office expenses:
Audit fee

## Bank

Charges on internal account transfers
Bank charges
Commissions on deposits
Total

TOTAL EXPENDITURE

| 1994 | 1995 | 1996 | 1994-96 | 1997 |
| :---: | :---: | :---: | :---: | :---: |
|  | 40000 | 41200 | 81200 |  |
| 8000 | 5000 | 5200 | 18200 | 5400 |
| 13500 | 22000 | 22700 | 58200 | 23400 |
| 7000 | 7000 | 7000 | 21000 | 7000 |
| 4250 | 3000 | 3000 | 10250 | 3000 |
| 1250 |  |  | 1250 |  |
| 34000 | 77000 | 79100 | 190100 | 38800 |
| 24000 | 40000 | 42000 | 106000 | 44000 |
| 12000 | 12000 | 12000 | 36000 | 13000 |
| 5000 | 5000 | 5000 | 15000 | 5500 |
| 25000 |  |  | 25000 |  |
| 66000 | 57000 | 59000 | 182000 | 62500 |
| 149000 | 153400 | 158000 | \#REF! | 162800 |
| 3000 | 4000 | 4000 | 11000 | 4500 |
| 66000 | 68000 | 70000 | 204000 | 72000 |
| 3500 | 3000 | 3100 | 9600 | 3200 |
| 2500 |  |  | 2500 |  |
| 1450 | 2000 | 2000 | 5450 | 2500 |
|  | 4000 | 4000 | 8000 | 4500 |
| 225450 | 234400 | 241100 | 700950 | 249500 |
| 871150 | 782400 | 800700 | 2454250 | 1039400 |

Excess/Loss of Income over Expenditure

| -114010 | 20240 | 25260 | -68510 | -190120 |
| ---: | ---: | ---: | ---: | ---: |

1994-1996 Statement of income (CHF)

## ADHERING ORGANIZATIONS

SPECIAL CONTRIBUTIONS

ICSU/UNESCO
ICSU: General
UNESCO: General
ICSU/AEI
UNESCO/AEI
COSPAR/AEI
Total

## PUBLICATIONS: ROYALTIES

## BANK INTERESTS

Current accounts
Deposit accounts
Saving accounts
Money market
Total

OTHER INCOME
Refund grants
Refunds SPM/CQM
Refunds bank
Refund Union representation
Gain on exchange 1 Jan current year
Gain on internal transfers
Total

TOTAL INCOME

| 1991-1993 | 1994 | 1995 | 1996 | 1994-1996 |
| :---: | :---: | :---: | :---: | :---: |
| 1728100 | 619862 | 647150 | 562835 | 1829847 |
| 176300 | 184166 | 2122 | 22451 | 208739 |
| 26090 | 11880 |  | 15480 | 27360 |
| 67926 | 17424 |  | 13416 | 30840 |
| 20108 |  |  |  |  |
| 36886 |  | 5800 |  | 5800 |
| 151730 | 29304 | 5800 | 28896 | 64000 |
| 193544 | 64114 | 62803 | 63750 | 190667 |
| 2511 | 109 | 197 | 43 | 349 |
| 117283 | 17279 | 23473 | 6957 | 47709 |
| 1109 |  |  |  |  |
| 35305 | 20706 | 11327 | 11660 | 43693 |
| 156210 | 38094 | 34997 | 18660 | 91751 |
| 2207 | 6467 |  |  | 6467 |
| 7496 |  |  |  |  |
| 509 |  |  |  |  |
| 4415 |  |  |  |  |
| 9039 |  |  | 35404 | 35404 |
| 4891 | 1503 | 2 | 6310 | 7815 |
| 28557 | 7970 | 2 | 41714 | 49686 |
| 2434443 | 943510 | 752874 | 738306 | 2434690 |

## 1994-1996 Statement of expenditure (CHF')

## SCIENTIFIC ACTIVITIES

General Assembly
Grants (XXI)
Grants (XXII)
Commission Presidents
Staff
Operation (XXI)
Operation (XXII)
Operation (XXIII)
Operation (XXIV)
Executive Committee
Meetings
Symposia/Colloquia
Co-sponsored Meetings
Regional Meetings
AEI IAU/UNESCO meeting
Other meetings

## Research projects

ISYA (46)
VLP/TAD (46)
EC WGs
Exchange of Astronomers (38)
Archives
Others

## Commission Activities

Telegram Bureau (06)
Minor Planet Center (20)
Meteor Data Center (22)
Variable Star Catalogue (27)
Astronomy Teaching (46)
Commission WGs (20)
Others
Representation to other Unions
Total

DUES TO UNIONS /ORGANIZATIONS
ICSU
IERS/FAGS
IUCAF
CTS
Total

| 1991-1993 | 1994 | 1995 | 1996 | 1994-1996 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
| 132685 |  |  |  |  |
| 31040 | 402321 |  |  | 402321 |
| 48687 | 22997 |  |  | 22997 |
| 19423 | 2688 |  |  | 2688 |
| 17218 |  |  |  |  |
| 9293 | 15448 | 163 |  | 15611 |
|  |  | 2124 |  | 2124 |
|  | 579 | 2533 |  | 3112 |
| 81848 | 79101 |  |  | 79101 |
|  |  |  |  |  |
| 409398 | 85000 | 225994 | 256193 | 567187 |
| 45658 | 12923 | 2727 | 8000 | 23650 |
| 43156 |  | 24123 | 25000 | 49123 |
| 60420 |  |  |  |  |
|  | 15036 | 142 | 3000 | 18178 |
| 65792 | 31138 | 25183 |  | 56321 |
| 6094 | 1839 |  | 21418 | 23257 |
| 18930 | 1207 | 10517 | 14242 | 25966 |
| 39513 | 17456 | 15752 | 17481 | 50689 |
|  |  | 2301 | 15355 | 17656 |
| 9636 |  |  |  |  |
| 17727 | 3270 |  | 4000 | 7270 |
| 7300 | 3372 |  |  | 3372 |
| 6425 | 1100 | 1000 | 1000 | 3100 |
| 7300 | 3728 |  |  | 3728 |
| 10593 | 2047 |  |  | 2047 |
| 11124 |  | 5494 | 831 | 6325 |
| 1878 |  |  |  |  |
| 10536 | 7341 | 8287 | 9119 | 24747 |
| 1111681 | 708591 | 326340 | 375639 | 1410570 |
|  |  |  |  |  |
| 67706 | 11290 | 10543 | 12144 | 33977 |
| 19915 | 7000 | 7000 | 7000 | 21000 |
| 23389 | 7500 | 7500 | 7500 | 22500 |
| 1768 |  |  |  |  |
| 112778 | 25790 | 25043 | 26644 | 77477 |

1994-1996 Statement of expenditure (CHF) etd

EXECUTIVE COMMITTEE
Executive cttee meetings
Officers meetings
SNC expenditure
General Secretary expenditure
Representation
President expenses
Total

PUBLICATIONS
Infornation Bulletin
Free Distribution
IAU History
Total

## ADMINISTRATION/SECRETARIAT

## Salaries

Salaries \& Charges
Training courses
General office expenses
Leasing telex
Mail
Telephone
Telex
Office supplies
Rental (INSU/IAP)
Furniture
Computers
Audit fee
Bank
Loss on exchange 1 January of the year
Loss on internal transfers
Charges on internal transfers
Bank charges
Commissions on deposits
Total

ECLIPSE USSR (special account)
TOTAL EXPENDITURE

Excess of Income over Expenditure

| 1991-1993 | 1994 | 1995 | 1996 | 1994-1996 |
| :---: | :---: | :---: | :---: | :---: |
| 79525 | 507 | 35137 | 37319 | 72963 |
| 12698 | 5222 | 2215 | 4430 | 11867 |
| 12969 | 9046 | 19044 | 18060 | 46150 |
| 5167 | 971 | 1851 |  | 2822 |
| 120258 | 15746 | 58247 | 59809 | 133802 |
| 167850 | 23319 | 21118 | 41156 | 85593 |
| 20909 | 27854 | 22733 | 34561 | 85148 |
| 6662 | 3666 |  |  | 3666 |
| 195421 | 54839 | 43851 | 75717 | 174407 |
| 466865 | 145841 | 133981 | 161627 | 441449 |
| 3368 | 2997 | 1693 | 1569 | 6259 |
| 4021 |  |  |  |  |
| 19976 | 12510 | 4689 | 6892 | 24091 |
| 31772 | 14814 | 12575 | 14236 | 41625 |
| 9041 |  |  |  |  |
| 37208 | 10467 | 7557 | 11731 | 29755 |
| 5817 | 5180 | 10328 | 4500 | 20008 |
| 23051 | 4347 | 12513 | 274 | 17134 |
| 9920 | 18387 | 13760 | 18641 | 50788 |
| 7156 | 2332 | 741 | 1964 | 5037 |
| 3864 | 30858 | 42478 |  | 73336 |
| 30612 | 1003 | 1293 |  | 2296 |
| 735 | 529 | 486 | 87 | 1102 |
| 9045 | 2383 | 2130 | 2724 | 7237 |
| 10377 | 2675 | 3293 | 4259 | 10227 |
| 672828 | 254323 | 247517 | 228504 | 730344 |
| 33379 |  |  |  |  |
| 2246347 | 1059289 | 700998 | 766313 | 2526600 |


| 188095 | -115780 | 51877 | -28007 | -91910 |
| :--- | :--- | :--- | :--- | :--- |

## Proposed budget 1998-2000 (CHF)

Notes in connection with the 1998-2000 proposed budget:

An allowance for inflation of $2 \%$ for 1998, 2.5\% for 1999 and $3 \%$ for 2000 has been made The royalties from IAU publications have been reduced in order to allow lower selling prices for the IAU books.

| INCOME | BUDGET* | PROPOSED BUDGET |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1997 | 1998 | 1999 | 2000 | 98-2000 |
| Unit of contribution | 2820 | 2880 | 2950 | 3040 |  |
| Number of units of contribution | 254 | 254 | 254 | 254 |  |
| ADHERING ORGANIZATIONS | 716280 | 731520 | 749300 | 772160 | 2252980 |
| SPECIAL CONTRIBUTIONS ICSU/UNESCO | 40000 | 40000 | 40000 | 40000 | 120000 |
| PUBLICATIONS: ROYALTIES | 68000 | 30000 | 30000 | 30000 | 90000 |
| BANK INTEREST | 25000 | 15000 | 15000 | 15000 | 45000 |
| OTHER INCOME |  |  |  |  |  |
| TOTAL INCOME | 849280 | 816520 | 834300 | 857160 | 2507980 |

(*) 1997 budget as approved at the XXIInd General Assembly

1998-2000 proposed budget (CHF)

| EXPENDITURE | BUDGET* | PROPOSED BUDGET |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1997 | 1998 | 1999 | 2000 | 98-2000 |
| SCIENTIFIC ACTIVITIES |  |  |  |  |  |
| General Assembly |  |  |  |  |  |
| Grants | 167000 |  |  | 180000 | 180000 |
| Commission Presidents | 40000 |  |  | 40000 | 40000 |
| Staff | 18000 |  |  | 15000 | 15000 |
| Operation | 30000 | 5000 | 5000 | 30000 | 40000 |
| Executive Committee | 80000 |  |  | 65000 | 65000 |
| Meetings |  |  |  |  |  |
| Symposia/Colloquia | 220000 | 250000 | 256000 | 264000 | 770000 |
| Regional Meetings |  | 25000 | 25000 |  | 50000 |
| Research Projects |  |  |  |  |  |
| ISYA (46) |  | 30000 | 30000 |  | 60000 |
| TAD (46) | 15000 | 30000 | 30000 | 30000 | 90000 |
| EC WGs | 18000 | 18000 | 18000 | 18000 | 54000 |
| Exchange of Astromers (38) | 30000 | 25000 | 25000 | 25000 | 75000 |
| Commission Activities |  |  |  |  |  |
| Telegram Bureau (06) | 4000 | 4000 | 4000 | 4000 | 12000 |
| Meteor Data Center (22) | 1100 | 1100 | 1100 | 1100 | 3300 |
| Astronomy Teaching (46) | 5000 | 5000 | 5000 | 5000 | 15000 |
| Commission WGs | 18000 | 15000 | 15000 | 15000 | 45000 |
| Delegates to other Unions | 10000 | 10000 | 10000 | 10000 | 30000 |
| Total SCIENTIFIC ACTIVITIES | 655000 | 418100 | 424100 | 702100 | 1544300 |
| DUES TO UNIONS/ORGANIZATIONS |  |  |  |  |  |
| ICSU | 18000 | 16000 | 16500 | 17000 | 49500 |
| IERS/FAGS | 7500 | 7500 | 7500 | 7500 | 22500 |
| IUCAF | 7500 | 7500 | 7500 | 7500 | 22500 |
| CTS | 600 |  |  |  |  |
| Total DUES TO UNIONS/ORGANIZATION | 33600 | 31000 | 31500 | 32000 | 94500 |

(*) 1997 budget as approved at the XXIInd General Assembly

1998-2000 proposed budget (CHF)

## EXPENDITURE (ctd)

| EXECUTIVE COMMITTEE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Executive cttee meetings |  | 35000 | 36000 |  | 71000 |
| Officers meetings | 5400 | 5000 | 5100 | 5200 | 15300 |
| General Secretary expenditure | 23400 | 26000 | 26500 | 27500 | 80000 |
| President expenses | 7000 | 3500 | 3500 | 3500 | 10500 |
| Assist General Secretary expenses | 3000 | 3000 | 3000 | 3000 | 9000 |
| Total EXECUTIVE COMMITTEE | 38800 | 72500 | 74100 | 39200 | 185800 |
| PUBLICATIONS |  |  |  |  |  |
| Information Bulletin | 44000 | 32000 | 33000 | 34000 | 99000 |
| Free Distribution | 18500 | 19000 | 19000 | 19000 | 57000 |
| Total PUBLICATIONS | 62500 | 51000 | 52000 | 53000 | 156000 |
| ADMINISTRATION/SECRETARIAT |  |  |  |  |  |
| Salaries \& Charges | 162800 | 155000 | 159000 | 164000 | 478000 |
| Training courses | 4500 | 4500 | 4500 | 4500 | 13500 |
| General office expenses: | 72000 | 70000 | 70000 | 72000 | 212000 |
| Mail, Telephone, Office supplies, Rental (INSU/IAP), Furniture, Computers |  |  |  |  |  |
| Audit fee | 3200 | 2000 | 2000 | 2000 | 6000 |
| Bank: |  |  |  |  |  |
| Loss on exchange |  |  |  |  |  |
| Loss on internal transfers |  |  |  |  |  |
| Bank charges | 2500 | 3000 | 3000 | 4000 | 10000 |
| Commissions on deposits | 4500 | 4000 | 4000 | 4500 | 12500 |
| Total ADMINISTRATION/SECRETARIAT | 249500 | 238500 | 242500 | 251000 | 732000 |
| TOTAL EXPENDITURE | 1039400 | 811100 | 824200 | 1077300 | 2712600 |
| Excess/Loss of Income over Expenditure | -190120 | 5420 | 10100 | -220140 | -204620 |

(*) 1997 budget as approved at the XXIInd General Assembly

