

COMMISSION 5: DOCUMENTATION (DOCUMENTATION)

Report of Meetings, 14, 15 and 20 August 1979

PRESIDENT: J.-C. Pecker.

SECRETARY: L. Remy-Battiau.

(The order of the reports is not the actual order in which the meetings took place, but a more or less logical order).

A. FULL COMMISSION MEETING (15 August, 09.00).

1. President's draft report.

The report is submitted for adoption. See hereafter section F.

2. Membership.

The following proposals for new members are accepted, subject to approval by the Executive Committee: H.A. Abt, N. Baker, R.D. Davies, R.H. Garstang, B. Hauck, A. Heck, V.V. Ivanov, C. Jaschek, J. Lequeux, M.C. Lortet, D.H. McNamara, J.M. Mead, P.F. Renson, H.H. Voigt.

The Consulting Members of the Commission for the period 1979-1982 are: Mme C. Bérardini, Mme A. Berthelot, M.J. Collins, P. Clague, P. Dale, Miss J. Dudley, H.J. Felber, Mme G. Grassi Conti, Mme M. Guidoni, D.A. Kemp, M. Laforge, Mme S. Laloé, Mrs S.S. Martin, Mrs P. Molholt, K. Metzner, Dr. T. Nagy, Mme A.M. de Narbonne, F. Ochsenbein, R.B. Rodman, R.A. Seal, Mr. Schiminovitch, Mme M. Vargha.

3. Officers of the Commission, 1979-1982.

W.D. Heintz will be the new President, and G.A. Wilkins the new Vice-President. The Commission adopts the following composition of the Organizing Committee: B. Hauck, J. Kleczek, P. Lantos, S.A. Mitton, J.-C. Pecker, L. Schmadel, J. Shakeshaft, I. Shcherbina-Samojlova. This composition is provisional in that J. Shakeshaft, chairman of the Working Group on Editorial Policy, and S.A. Mitton, acting chairman of the Working Group at Montreal, are both included in it. This Working Group is to be re-organized, and its president will be ipso facto member of the Organizing Committee.

4. Relations with other International Organisations.

POGSI. The work of the Policy Group on Scientific Information, set up by the International Council of Scientific Unions, and of which J. Sahade was the chairman, has terminated its work and accordingly has been discontinued.

ICSU AB. The ICSU Abstracting Board has been set up more than 20 years ago, to coordinate abstracting problems in all sciences. It has lately undergone a bad financial crisis and has recently been completely reorganized. Its next meeting will be held in Paris in October. The question is: does Commission 5 recommend to keep the adherence of IAU to ICSU AB? The commission thinks that the answer should be "yes" for the next three years period, since reorganization of the board has to prove its efficiency. The answer should be reexamined at the next General Assembly. The IAU representative at ICSU AB is traditionally the president of Commission 5 even if often he designates a different representative to the meetings.

CODATA. The new IAU representative will be B. Hauck.

5. Multilingual Astronomical Dictionary.

Dr. Kleczek has almost finished its revised version of the multilingual Astronomical Dictionary. It is an extended version both in the number of languages concerned and in the scientific area covered. It should be a cheap publication, nevertheless support from the Commission is requested to obtain financial help from IAU. There is complete agreement within the Commission upon the importance of Dr. Kleczek's work. The President has sent to the General Secretary a letter of support of the request made by Dr. Kleczek.

6. Role of the Working Group on Astronomical Data.

In a letter to the President, Dr. C. Jaschek recalls the introduction of a working group on Numerical Data for Astronomers and Astrophysicists at the XIVth General Assembly of the IAU, working group dependent of Commission 5. This working group, of which the name has been often discussed (i.e. "Working Group on the Documentation, Exchange and Retrieval of Numerical Data" vs "Working Group on Numerical Data") should in C. Jaschek's opinion become now a new commission named "Astronomical Data", independent of Commission 5. But some reasons invoked (difference in membership of the commission and the working group for instance) are no more actual. On the other hand, Commission 5 seems to be the right place where "makers" of numerical data have the best chance to meet "users" of these numerical data. Moreover, as Commission 5 depends directly from the Executive Committee, it should also be so of the suggested new commission. This, the Executive Committee does not seem too keen on it. It appears more suitable to make sure that the composition of Commission 5 is extended and includes members from each Center of Astronomical Data. It should be renamed: "Commission on Documentation and Astronomical Data".

B. OPEN MEETING ON THE NOMENCLATURE OF ASTRONOMICAL OBJECTS (14 August, 15.00)
(Special session organized with representatives of other commissions)

PRESIDENT: C. Jaschek.

SECRETARY: F. Ochsenbein.

1. Report of the discussion.

In his report, Jaschek proposed the three following steps to clarify and simplify the nomenclature of astronomical objects:

1. That a recommendation be sent to the editors of the astronomical journals asking them to be careful about designations: at least two identifications should be listed, their abbreviations being completely referenced; one of these identifications could be the position in a specified coordinate system at a given epoch.

2. That a list of catalog abbreviations be issued; the article by Fernandez, Lortet and Spite is a first attempt at such a publication.

3. That a guidebook of designations within the fields of the various commissions be issued.

Pecker suggested that a resolution be submitted to the Working Group on Editorial Policy for the first point, and a financial proposition to the Executive Committee for the publication mentioned in point 2.

The first step was accepted, with an extension to the editors of books and proceedings; authors should also pay attention to these re-

commendations, as emphasized by Mitton, especially in preparing review papers. Teleki and Pecker also suggested that the next issue of the Style Book should be examined by Commission 5 for this problem (resolution no.1 hereafter).

In order to achieve the second step, Jaschek proposed that the work by Fernandez et al. be examined by all the commissions concerned, and that remarks, additions, and corrections be forwarded to him before January 1st, 1980. The resulting list will be published by IAU (resolution no.2, hereafter).

The guidebook, proposed in the third step, will consist of different parts, each dealing with a specified type of astronomical object, and describing the present status of the nomenclature used. Dr. J.Mead agreed to sponsor this publication.

Bidelman reported on the recommendations suggested by subgroup 2 of Commission 5's Working Group on Astronomical Data:

1. For brighter stars, designations Bayer, Flamsteed, HR, HD, BD, CoD, CPD; for fainter stars, designations in specified lists or accurate equatorial coordinates for 1950.

2. For brighter non-stellar objects, Messier, NGC, IC; for other objects, equatorial position coordinate in Parkes' system for 1950.

3. For variable stars, the variable designation, together with other designation if the star is bright enough.

4. Designation schemes be proposed by concerned IAU commissions for objects in crowded regions (globular clusters, etc...).

5. For faint objects, rectangular position measures on Palomar prints are not considered satisfactory alternatives to accurate equatorial positions. (More details will be published in the Bulletin of the Centre de Données Stellaires in Strasbourg).

The question of the coordinates was discussed; equatorial coordinates seem to be better than galactic ones, and 1950 equinox should be retained (Lortet); the permanence of the designation based on the coordinates was stressed (Lynga), even if slightly different coordinates are found in more recent investigations.

The question of whether the priority should be given to the discoverer was discussed by Luyten: the name of the discoverer should be mentioned, but disappears when large surveys are published. In the system used for variable designations, the name of the discoverer has completely disappeared. For double stars (Worley) the original designation, which refers to the discoverer, is kept; but the great majority of double stars also have a BD or CoD or CPD designation. In any case, cross-identification tables are of great interest (Mead), and various designations can be found very easily and quickly with a computer. Various cross-identifications are available at the CDS (Jaschek) and at NASA (Mead); Hauck mentioned the existence of transit table for designations in open clusters. Difficulties nevertheless arise in connection with infrared catalogs (Mead): the size of the sources is a function of the wavelength.

The recommendations reported by Bidelman are accepted as resolution from subgroup 2 of the Working Group on Astronomical Data; de Vaucouleurs disagreed with the recommendations for non-stellar objects, and reported the recommendation of Commission 28 in 1973 (Trans. IAU 15B, 141, 1973). The problem of faint stars should also be carefully examined.

2. Resolution no. 1.

Considering the present unsatisfactory situation of the identification of astronomical objects in astronomical publications, the joint meeting of Commission 5 and representatives appointed by Commissions

8, 24, 25, 26, 27, 28, 29, 30, 34, 37, 40, 42, 45 held in Montreal, on August the 14th, requests strongly that:

- (a) editors of scientific journals and other publications impose stricter standards of object identifications upon the authors through appropriate instructions to the referees;
- (b) catalog abbreviations be explicated either in footnotes or in the bibliography tables;
- (c) two identifications be quoted for each object, in order to provide a check against errors and misprints, especially for faint objects.

3. Resolution no. 2.

Considering the confusion existing at the present time in the literature concerning the abbreviations of catalogs, the joint meeting of Commission 5 and representatives appointed by Commissions 8, 24, 25, 26, 27, 28, 29, 30, 34, 37, 40, 42, 45 desires that:

under IAU auspices, a list of catalog abbreviations be published. This list should be a new version of the work of Fernandez, Lortet and Spite, revised by the IAU Commission representatives and edited by C. Jaschek.

To this resolution, the following note was added, at the intention of the Executive Committee, and in view of the financial implications of the resolution no. 2: "The planned book will be of 60 to 100 pages. A subvention (5000 \$?) will be necessary even if the published document can be sold. The Commission 5 is asking this subvention for Dr. Jaschek."

C. MEETING OF THE WORKING GROUP ON ASTRONOMICAL DATA (20 August, 16.00).

PRESIDENT: G.A. Wilkins.

SECRETARY: L. Remy-Battiau.

The meeting was attended by 27 members and invited participants.

1. Reports.

The chairman drew attention to the printed report of the Working Group for the period 1976-78 (Trans. IAU, 17A, 7-8, 1979), and to the extensive coverage of matters of interest to the Commission in the Proceedings of IAU Colloquium no.35 on Compilation, critical evaluation and distribution of stellar data, published by Reidel in 1977, and in Bulletin d'Information du Centre de Données Stellaires, published by the Observatory of the University of Strasbourg. He stated that the CODATA Secretariat has in hand the preparation of the astronomy chapter of the CODATA Directory of Data Sources; this will be based on the survey carried out by C. Jaschek in 1976, but it requires extension and up-dating and so it will be necessary to find one or more astronomers who will assist in the editorial work. M.S. Davis reported that he had attended the meeting of the CODATA Task Group on Space and Time Dependent Data in Ottawa in 1977 and that several sub-groups were now preparing reviews of relevant techniques in their disciplines.

The chairman stated that C. Jaschek had suggested that the Working Group should become a separate Commission of the Union. This had been discussed by correspondence and the suggestion had been withdrawn, but the Commission, at its first session, had recommended an extension of the name of the Commission to draw attention to its wide scope. Members of the Union with a special interest in data activities

may join Commission 5 without prejudice to their membership of other Commissions.

M.S. Davis stated that his Subgroup on Computer Technology and Standards, which had been set up at the Grenoble meeting, had found it impossible to identify new developments that would be of general interest to astronomical data acquisition and processing. On the Chairman's suggestion it was agreed that the Subgroup should be disbanded, and that members of the Commission should be invited to report items of interest and suggestions for standardization to the Chairman for circulation.

2. Designation of Astronomical Objects.

W.P. Bidelman stated that his Subgroup on the Designation and Astronomical Objects had prepared a report for consideration during the meetings at Montreal. He outlined the report, which included several recommendations on such topics as the order of preference for the use of the current types of designation and the need for a list of catalogues from which numbers could be used. After discussion it was decided that it would be premature to adopt these recommendations but that the report should be referred to the Presidents of other Commissions and published for comment; attention should be drawn in the IAU Information Bulletin to the place of publication (for example, the Strasbourg Bulletin). In the meantime authors and editors should follow the more general guidance given in the resolution adopted at the special meeting on August 14.

3. Presentation of Astronomical Data.

G.A. Wilkins reported that he had circulated a first draft of an Astronomer's Guide to the Presentation of Data to the members of the Subgroup on the Presentation of Data and to some journal editors and other interested persons; a copy had also been on display on the Commission's notice-board. This draft was based on the CODATA Guide for the Presentation in the Primary Literature of Numerical Data Derived from Observations in the Geosciences, which was just about to be published as CODATA Bulletin no.32. The comments showed that the draft was generally acceptable but there were a few points on which further discussion is needed, since it is important that the Guide should be recognised by the Union. J.-C. Pecker commented that the word "paper" is ambiguous and that it should be made clear that it is not intended that the details specified in the Guide be given in short papers that are intended only to announce or summarise new results. The main discussion concerned the recommendation in the draft that "astronomers should abandon the use of metric units that are not SI units". It was agreed that this recommendation should be upheld but clarified. Wilkins said that he hoped to produce a separate guide on the use of SI and other recognised units in astronomical publications. It was also agreed that the Guide should follow the CODATA recommendation that the labels in tables and graphs should be given in the dimensionless form. Pecker considered that after revision the draft should be circulated to the Presidents of Commissions and to the Executive Committee of the IAU for approval, before being submitted to CODATA.

C. Worley deplored the growing practice of the publication of data at reduced sizes which are not easily read. Wilkins and others considered that use of microfiche is acceptable (since readers are readily available and full-size copies can be made if required) and preferable to non-publication of the data.

4. Astrophysical data in the Astronomical Almanac.

The Chairman introduced the next item by informing the Commission that for the editions for 1981 onwards, The Astronomical Ephemeris and The American Ephemeris and Nautical Almanac would be published with the single title The Astronomical Almanac and that many changes in content and arrangement would be introduced. In particular, the Almanac would contain tables of astrophysical data obtained from a variety of sources. D. Pascu suggested that the Commission should liaise with other Commissions in order to produce lists which would be recognised by the IAU as standard data. After discussion, it was agreed that it was neither necessary nor desirable for the Commission to act as an intermediary between the Almanac Offices and the Commissions; it was suggested that the Directors of the Offices should invite the Presidents and members of the relevant Commissions to comment on the content and basis of the tabulations in the Almanac for 1981.

5. Catalogue of Stellar Identifications.

F. Ochsenbein announced that a microfiche edition of the Catalogue of Stellar Identification would be published by the Centre de Données Stellaires, Strasbourg. It would contain data and bibliographic information.

6. Archives.

J.O. Fleckenstein drew attention to desirability of cataloguing and, perhaps, collecting in a central place the archives of the long-established observatories; he considered that there is a grave risk that much valuable information, including astronomical data, will be lost through neglect or deliberate destruction. The Chairman commented on the basis of his experience at the Royal Greenwich Observatory, that the tasks of cataloguing and conservation would be extremely time-consuming and costly, but could reveal much of interest. It was considered that the main responsibility lay with Commission 41, but that Commission 5 should consider whether it could assist in any way.

7. Officers and Membership.

The following officers and members of the Organising Committee were appointed:

Chairman: B. Hauck; Vice-Chairman: G. Westerhout.
Organising Committee: W.P. Bidelman, O.B. Dlushnevskaya, R.L. Duncombe, W.D. Heintz (ex-officio), C. Jaschek, T. Lederle, G.A. Wilkins.

It was agreed that the Subgroup on the Designation of Astronomical Objects should be continued under the chairmanship of W.P. Bidelman, who would agree any changes of membership with the Group Chairman. It was also agreed that there should be a Subgroup on the Distribution of Data; this would cover the distribution of data for use with computers and as well as in printed form; the following were nominated for membership: R.L. Duncombe, B. Hauck, A. Heck, C. Jaschek, J. Mead, J.R. Shakeshaft, Y. Terashita, G.A. Wilkins.

D. MEETING OF THE WORKING GROUP ON UDC 52 (15 August, 11.00)

PRESIDENT: D.A. Kemp

ACTING CHAIRMAN: P. Lantos.

SECRETARY: L. Remy-Battiau.

The working Group on UDC 52 has been active in the past six years

in first writing and compiling UDC 52 and then in implementing its use. UDC 52 has been published as "British Standard 1000: UDC 52", to be ordered from British Standard Institution, 2 Park Street, London W1, U.K.. As to the "Handbook on the use of UDC 52", it is still in its draft form. G.A. Wilkins explains that it is now been used at Greenwich Observatory. It is hoped that through this experience adequate remarks will be made to improve the draft. The use of UDC 52 will probably be mainly restricted to Europe. USA libraries use for national reasons the library of Congress classification. It would be desirable however to establish cross reference between the two classifications.

The group of Physics of the ICSU AB has put up a sub-classification for astronomy. IAU representatives (J.-C. Pecker and P. Lantos) have made efforts to establish connections between it and UDC 52. Users of ICSU AB are mainly secondary papers: they need less details than provided by UDC 52.

Commission 5 carried unanimously the following resolution:

Resolution no. 3.

Considering the steadily increasing number of publications in the field of astronomy and astrophysics, Commission 5 (Documentation and Astronomical Data) of the IAU,

- recommends the introduction and extensive use of proper key words by authors and publishers of primary journals and other publications in order to facilitate indexing and retrieval work,
- welcomes the initiative of Astronomy and Astrophysics Abstracts (AAA) in preparing a draft vocabulary and invites AAA and other astronomical abstracting services to cooperate in the preparation of an agreed vocabulary.

During the next three years period the prime goal of the Working Group will be first to issue an agreed vocabulary and second to attract attention of people preparing thesaurus to what is going on in the Working Group and to keep close contacts. There seems to be within the commission a consensus that a good vocabulary should be bilingual, not too long but well constructed for information retrieval.

L.A. Higgs from NCR has announced the preparation of an astronomical thesaurus for data bank of NCR. P. Lantos will be kept informed about the evolution of this work.

Since work on UDC 52 is about finished, it seems that the name of the working group is no more adequate and that it should be named Working Group on "Classification Systems and Information Retrieval" (Systèmes de Classification et Recherche de l'Information). Its new President will be P. Lantos.

E. MEETING OF THE WORKING GROUP ON EDITORIAL POLICY (20 August, 1965)

PRESIDENT: J. Shakeshaft.
acted also as Secretary).

ACTING CHAIRMAN: S. Mitton (who

1. Organization of the Working Group.

In the absence from Montreal of J. Shakeshaft, this question will be solved by personal contact between Mitton, Shakeshaft and Heintz. Composition and chairmanship have to be reexamined.

2. Bibliographical references.

Should the Working Group to enforce more unity within the various

journals? It is recommended that, first, the IAU Style Book be revised, as a result of a close cooperation between Commission 5 and the IAU General Secretary, before 1980. This first step could be followed by systematic efforts towards Journal editors in order to get an international agreement along the lines of the IAU Style Book.

3. The Working Group expresses its general regret at the proliferation of journals.

4. The Working Group notes the resolution no. 1 made by the whole Commission 5 (see hereabove § B, and hereafter § F) concerning the references to catalogues of stellar and nonstellar objects, and in general the designation of these objects. The Working Group will make these resolutions known to all editors of astronomical journals.

5. Finally, the Working Group discusses the matter of IAU publications.

It has been suggested to issue an IAU journal, which would contain the essence of IAU Symposia, and of IAU Transactions; the sale (as for all periodicals) would be increased, and the ordering by libraries more easy. One notes with regret the still high cost of IAU publications, and the newly adopted request, by Reidel, of prepayments for reprints.

F. CLOSE OF COMMISSION 5 MEETING (20 August)

The President, J.-C. Pecker, asked that his report be now adopted; this was agreed unanimously. He asked also the Commission to confirm its approval of the various resolutions (reported hereabove) discussed at the meetings of its Working Groups, as resolutions of the Commission itself. This was also agreed by consensus. He then welcomed the enlargement of the membership of Commission to well cover the activities of the Working Groups, notably the Working Group on Astronomical Data. He finally thanked the members and consultants who had assisted him during the period of office; in particular he thanked Madame Remy-Battiau, who had acted as Secretary of the Commission so efficiently.