



IFAC

INFORMATION BULLETIN

No. **54** Oct. 1, 1969

**International Federation
of Automatic Control**

Published by the IFAC Secretary
G. Ruppel · Postfach 1139
D 4000 Düsseldorf · Germany

Latest Details of the IFAC Space Symposium Toulouse 1970

The latest information issued on the programme for the 3rd IFAC Symposium on Automatic Control in Space to be held at Toulouse, France, from March 2nd to 6th, 1970 shows a list of 75 technical papers to be presented and discussed in 15 sessions on:

- Man Machine Problem in Space
- Rendezvous and Docking
- Planetary Exploration
- General Problems
- System Design
- Devices
- Optimal Control
- Optimal and Adaptive Control
- Attitude Control
- Guidance and Navigation
- Re-entry Control

Seven survey papers by B.V. Raushenbakh (USSR), A. C. Hall (USA), W. Haeusserman (USA), R. Bellman (USA), A.E. Bryson (USA), B.N. Petrov (USSR) and R.S. Bucy (USA) are included in the programme.

The cooperation of the International Astronautical Federation (IAF) in the programme has been secured.

Conference languages are English, French, Russian. Simultaneous translation in these three languages will be provided.

A number of technical visits are arranged.

The full technical programme and further details on this symposium are contained in a "2nd Information Bulletin" which may be obtained together with the registration and hotel accommodation forms from

Prof. J. Lagasse
L. A. A. S.
B. P. 4036
F - 31 Toulouse - 04/France.

Note: Registration fee before December 1, 1969: \$ 50, after that date: \$ 60.

Reference is made to previous notes on the Symposium in IFAC Information Bulletin Nos. 50 and 51.

Report on Automatic Control Terminology for 1968

issued by the IFAC Committee on Terminology
compiled by P. Anttila, Finland

This annual survey of the activities in the area of standardization is following up the 1967 report as published on p. 3 of the IFAC Information Bulletin No. 52, May 22, 1969.

Belgium:

The Belgian Terminology Committee under the chairmanship of Prof. Dery continues the preparation of the vocabulary of automatic control. This work has not yet been completed but is drawing to an end.

Reported by Prof. J. Hoffmann, IFAC Terminology Committee member; c/o Association Internationale pour le Calcul Analogique, 50 Ave. Franklin D. Roosevelt, Bruxelles.

Denmark:

SAMS (Scandinavian Analog Computer Society) has changed its name to Scandinavian Simulation Society, indicating that the society is concerned with analog, hybrid and digital simulation. A standing working group is active on terminology, symbols and simulation recommendations. General secretary: Prof. P. M. Larsen, Electric Power Engineering Department, Technical University, 2800 Lyngby, Denmark.

Reported by Prof. P.M. Larsen, IFAC Terminology Committee member; c/o Danmark Tekniske Højskole, Lyngby.

Finland:

The Finnish Standards Association published in December 1968, as Finnish Standard SFS 2289, a Finnish-Swedish-English-German version of the 1966 edition of the IEC Publication 50(37) "Automatic controlling and regulating systems".

The Finnish Data Processing Vocabulary (English-Finnish, without definitions) published by the Finnish Data Processing Association in 1967, has been revised and is expected to appear in 1969.

182
72
77

The Finnish Standards Association is preparing a standard for graphic symbols in data processing, mostly concerned with digital signal circuits.

Reported by P. Anttila, IFAC Terminology Committee member; c/o Oy Honeywell Ab, Helsinki.

Germany (FRG):

DNA (Deutscher Normenausschuß - German Standards Organization) through its different subsidiaries, as well as VDE/VDI (Verband Deutscher Elektrotechniker - German Society of Electrical Engineers / Verein Deutscher Ingenieure - German Society of Engineers) have published a number of new German standards, draft standards and directives for definitions, terms and graphical symbols of Automatic Control.

DIN 19226 May 1968 (27 pages) (replacing DIN 19226 January 1954): Regelungstechnik und Steuerungstechnik; Begriffe und Benennungen/Terminology for control systems.

DIN 30600 Sheet 9 Draft April 1968 (1 page): Bildzeichen; Steuerung/Graphical symbols; regulating.

DIN 30600 Sheet 10 Draft April 1968 (1 page): Bildzeichen; Regelung/Graphical symbols; feedback control.

DIN 44300 Draft August 1968 (20 pages) (the final version will replace DIN 44300 April 1965): Informationsverarbeitung; Begriffe - Terms of information processing.

DIN 44302 October 1968 (3 pages): Datenübertragung; Begriffe/Terms of digital data transmission

DIN 66001 Sheet 10, Draft October 1968 (2 pages) Informationsverarbeitung; Sinnbilder für Programmablaufpläne (Ergänzung zu DIN 66001) - Information processing, graphical symbols for program flowcharts (supplement to DIN 66001).

DIN 69900 Sheet 1, Draft May 1968 (4 pages): Netzplantechnik; Begriffe, Kurzzeichen - Network Planning and Control Technique; Terms and Abbreviations.

VDE/VDI 3515 May 1968 (2 pages): Einheitliches Gleichstromsignal für elektrische Meß- und Regelanlagen; Begriffe und Empfehlungen - Standardized D. C. signal used in electrical measuring and control systems; definitions and recommendations

(The German titles are binding and the English equivalents are mostly given for explanation only.)

All these standards, draft standards and directives may be obtained from

Beuth-Vertrieb GmbH
Burggrafenstrasse 4-7
D - 1000 Berlin 30

Reported by Dr.-Ing. G. Vafiadis, IFAC Terminology Committee member; c/o VDI/VDE-Fachgruppe Regelungstechnik, Düsseldorf.

Hungary:

Four sheets of the Hungarian standard MSZ 18450 „Control Engineering Terminology“ have been issued by the Hungarian Standards Office: 1) General Terms, 2) Control Circuit, 3) Control Line, 4) Control Theory, terms and definitions. A fifth sheet „Open loop control terms“ exists in draft form.

Reported by Dr.-Ing. J. Szalay, IFAC Terminology Committee member; c/o Hungarian Measuring Instrument Research Institute, Budapest.

Israel:

Anglosaxon, mostly USA, terminology is used. Hebrew terminology is beginning to develop.

Reported by Prof. J. Preminger, Chairman of the Israel Committee for Automatic Control.

United Arab Republic:

No work on control terminology yet but a committee is expected to be formed shortly.

Reported by Moheb Stino, Director General, General Organization for Industrialization.

United Kingdom:

British Standards Institution: BS 1523, Glossary of Terms used in Automatic Controlling and Regulating Systems, Part 1 Process and kinetic control, has been published. It lists approximately 175 terms, with definitions, and contains 13 diagrams to clarify concepts.

British Computer Society, Terminology Committee: The Committee is preparing definitions of terms, some of which refer to automatic control, in particular to numerical control of machine tools and other equipment, for submission to the International Federation for Information Processing.

Society of British Aerospace Companies, Terms and Definitions Panel: The Panel has been preparing a glossary of „Terms and Definitions for Maintainability and Reliability“ for some time, and has now completed a final draft. Of approximately 100 terms, many relate to automatic flight control and other aircraft control systems.

Reported by D. T. Broadbent, Chairman of the IFAC Terminology Committee; c/o Elliott Flight Automation Ltd., Rochester, Kent.

Union of Socialist Soviet Republics:

Draft for state standard „The main concepts of automatics. Terminology“ (Recommendation of SEV) was finished and is to be approved as a state standard in 1969.

Reported by Prof. M. A. Gavrilov, IFAC Terminology Committee member; Chairman of the USSR National Committee on Automatic Control.

United States of America:

Report for 1968 compiled by W. J. Kudlaty, USA, see IFAC Information Bulletin Nr. 52, May 22, 1969, p. 8.

IEC Technical Committee on Graphical Symbols

IFAC was represented by the IFAC Terminology Committee member P. M. Larsen, Denmark, at the meeting of IEC/TC 3, Graphical Symbols, held in Copenhagen from January 14 to 17, 1969. The meeting was concerned with the preparation of a proposal to International Recommendations for Graphical Logic and Functional Symbols for Diagrams of Binary Devices.

IFAC Symposia 1971 as approved by the Executive Council of IFAC

Subject	Date	Place
Automation and Instrumentation in the paper, rubber, and plastics industries („PRP-Automation“)	May, 4th week	Antwerp (Belgium)
Digital Computer Applications to Process Control	June, 1st week	Helsinki (Finland)
Fluidics	July, 1st week	Prague (CSSR)
Control of Distributed Parameter Systems	July	Banff (Canada)
The Operator, Engineer, and Management Interfaces with the Process Control Computer	August, 4th week	Lafayette Ind. (USA)
Control of Water: Resources, Storage, Distribution, Utilization, Pollution and Desalinization	Sept., 1st week	Haifa or Tel-Aviv (Israel)
Digital Continuous Process Simulation	Sept., 2nd week	Budapest (Hungary)
Automatic Control in Space	Sept., 2nd week	Dubrovnik (Yugosl.)
Automatic Control in Lime, Cement, and Connected Industries	Sept., 3rd week	Brussels (Belgium)
Management Control and Related Multi-Level Problems	Oct., 1st week	USSR
Multivariable Control Systems	Mid-Oct.	Germany/ Fed. Rep.

Relevant announcements and calls for papers will be issued in due course.

The list is likely to be extended by one or two more symposia, pending final decision of the IFAC Executive Council.

PUBLICATIONS

Space Symposium Proceedings, Vienna 1967

2nd IFAC SYMPOSIUM ON AUTOMATIC CONTROL IN SPACE, Vienna, Austria, September 1967. Proceedings (960 pages) at \$ 28.50 from:

Instrument Society of America (ISA)
530 William Penn Place
Pittsburgh, Pa. 15219/USA.

Automatic Control Education of the Medium Level Engineer

The IFAC Education Committee under its Past Chairman W. Oppelt had been charged with the preparation of a Survey Report on Education of the Engineer of Medium Level in Automatic Control. The majority of the National Member Organizations of IFAC have made valuable contributions and the final report compiled by W. Oppelt was ready for the recent IFAC Congress in Warsaw. A limited number of copies is still available and may be obtained upon request (for single copies) on a complimentary basis from the

Secretary of IFAC
Postfach 1139
D - 4000 Düsseldorf-1/Germany.

Warsaw Congress Preprints

Available for sale:

1. a complete set of preprints including 50 volumes of papers (in English or Russian respectively) corresponding to the 50 technical sessions, with a supplement (three additional volumes) of translations of the Russian papers into English: \$ 60,--

Instead of the complete set, the following individual volumes may be obtained:

1.1 Each technical session volume (papers in English or Russian respectively) \$ 2,50

1.2 Set of translations from Russian into English (3 volumes): \$ 20,--

2. Each set of abstracts in either English or French or German or Russian: \$ 5,--

3. Set of survey papers (9 in English, 1 in French): \$ 10,--

Orders should be sent to:

Naczelna Organizacja Techniczna (N. O. T.)
Biuro Sekretariatu IV Kongresu IFAC,
Czackiego 3/5
Warszawa/Poland.

Payment by cheque to be made out for:

Naczelna Organizacja Techniczna (N. O. T.)