THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

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ADHOC COMMITTEE ON SOCIAL IMPLICATIONS OF TECHNOLOGY

Saturday, June 24, 1972 - 9:00 a.m.

Commodore Hotel, New York

Dr. Edward Wolff, Vice Chairman, IEEE Technical Activities Board, called the meeting to order at 9:00 a.m. Those present:

Edward A. Wolff, Vice Chairman, TAB
Richard M. Emberson, Secretary, TAB
Peter D. Edmonds, TAB staff, Secretary

Norman Balabanian
J. Malvern Benjamin
Joseph E. Casey, IEEE staff, EAB
William A. Higinbotham, Past Chairman, Nuclear Science Group
Victor Klig
Frank Kotasek
Michael Pessah
Anthony Robbi
Homer Sarasohn, Past Chairman, Engineering Management Group
Paul Stoller
Lawrence A. Tate
Stephen Unger
Ted Werntz

Full names, addresses and telephone numbers are given in Attachment A.

1. Agenda

After introductions Dr. Wolff distributed a proposed agenda (Attachment B) with attachments. The agenda was amended by substitution of Item 3 (a), Purpose, and addition of Item 3 (f), Name. Dr. Wolff also distributed correspondence from Mr. W. E. Cory, Chairman of the IEEE AdHoc Committee on the Applications of Electrotechnology to Social Problems (Attachment C) and from Professor William Welch, Assistant Dean, Arizona State University (Attachment D). Mr. Werntz distributed "a proposed plan for the first (interim) year of the new IEEE Group on the Social Implications of Technology" (Attachment E). Messrs. Klig, Kotasek and Unger distributed "proposed structure for IEEE Committee on Social Implications of Technology" (Attachment F).

2. Review

Dr. Wolff reviewed the history of events leading to the present meeting. Sporadic requests and actions prior to 1971 lead to the formation of the IEEE AdHoc Committee on Applications of Electrotechnology to Social Problems, chaired by W. E. Cory, which reported in November 1971. Concurrently several IEEE members and others formed the Committee for Social Responsibility in Engineering (CSRE). The decision of the IEEE Executive Committee on the Cory report was not to form a new committee as recommended, but to advise that appropriate activity be conducted within the IEEE Groups and Societies. The CSRE then submitted a petition to form a new IEEE Group on "Social Implications of Technology." This petition was discussed by TAB Operating Committee, Regional Activities Board and IEEE Executive Committee. The decision of the Executive Committee was to deny the petition but to form an AdHoc IEEE Committee on Social Implications of Technology and to assign administrative responsibility for this committee to TAB. This decision was taken in a knowledge of impending re-organization of IEEE, to follow the anticipated constitutional amendment permitting professional activities, during which it may be found appropriate to incorporate the committee elsewhere in the IEEE structure in a manner which cannot yet be determined. The concern of the petitioners for the consequences of technical activity and the past experience of forming interdisciplinary and AdHoc committees, such as that for Manufacturing Technology, make it appropriate for the AdHoc committee to be initially assigned to TAB. Consequently the present meeting was called.

In response to a question from Dr. Wolff, no comment was offered to amend the foregoing view.

3. Plans

The major part of the meeting was occupied by a discussion of various drafts describing the purpose, scope, first-year goals and first-year activities. All variations in viewpoint were amicably resolved during discussion of the intended meanings of phrases in the various drafts. The following paragraphs report the wording finally agreed upon, together with comment excerpted from the discussion where further clarification of intent is desirable. For ease of future reference the agreed wording alone is reproduced on separate sheets as appendices to these minutes. Appendix 1: Purpose. Appendix 2: Scope. Appendix 3: First-year Goals. Appendix 4: First-year Activities.

(a) Purpose

1. Develop means to encourage and support professionalism and social responsibility in the practice of engineering.

2. Promote sensitivity to and understanding of the impact of technology on society.

3. Promote an interaction among IEEE members and others on the impact of technology on society.

4. Promote the conception of means, and implement programs, for predicting and evaluating the impact of technology on society.

5. Take appropriate action to implement programs.

Comments: The activities of the committee should provide an open forum for the interchange of ideas and should not result in taking stands on specific issues.

In cases of ambiguity the wording of the purpose should be interpreted inclusively, rather than exclusively.

(b) Scope

The scope includes:

1. Effects of present and probably new technology on society.

2. New technology needed to solve society problems.

3. Attitudes of society towards engineering.

4. Programs to explain technology to society.

5. Communication among engineers, and between engineers and society, on needs and concerns of society and capability of technology.

6. Impact of society on technology.

7. Professional and social responsibility in the practice of engineering.

8. Content and levels of existing educational programs and relevent new programs.

9. Awareness of other activities directed at the technology/society interface.

10. Involvement of IEEE members in the above.

Comment: Examples of the topics included in these general scope statements will be found in Attachments B and D. Additional examples of the effects of present and probable new technology on society include electronic warfare and electronic surveillence.

(c) First-year Goals

1. Document existing efforts directed at the technology/ society interface and establish liasion with those involved.

2. Identify and acquire required resources within and outside IEEE.

3. Establish appropriate programs.

4. Develop organizational structure.

5. Broaden participation by IEEE members.

Comment: Further explanation of the first of these goals will be found in Attachment D, page 3.

(d) First-year Activities

The following activities were accorded highest priority among the list of possible activities:

A. Develop committee procedures.

B. Publicize the aims and programs of the committee to encourage participation.

C. Produce a newsletter.

D. Generate articles and proposals for submission to IEEE publications.

E. Generate proposal and organize session(s) and related activities for INTERCON 73.

F. Survey and summarize existing IEEE activities.

G. Survey and summarize present activities of other societies.

H. Assemble a bibliography and reading list of material already published.

I. Survey opinions and experience of individuals already active in IEEE (recipients of "Electrical Engineering").

J. Develop matrix of subject areas, potential activities and resources (compare Attachment D, page 2a).

The following activities were accorded lower priority:

Survey of present activities at educational institutions.

Develop a roster of speakers and program material to assist IEEE Sections.

Form task forces to work on specific local problems.

Compile a list of areas of technology that now or will interface with society.

Compile a preliminary list of technological needs of society.

Design a program for documenting attitudes of society toward engineering.

Design a program for communicating capability of technology to society and for communicating society needs and desires to IEEE members.

Provide stimulus for instructional courses for engineers and others so they are aware of the present activities of government organizations, industrial organizations, and in other countries.

Comment: Descriptions of the content and audience for the bibliography and surveys listed above will be found in Attachment E. Contributions to the subject areas for the matrix of activity activity J: Energy, Communications, Logistics, Health and Safety, National Defense, Education, Entertainment, Data Handling, Environment, Law and Crime Prevention, Agriculture, Food Processing, Housing, Ethics.

(f) Name

"IEEE AdHoc Committee on Social Implication of Technology" was agreeable to all present. Comment was made that limitation to "Electrotechnology" would be appropriate.

4. Committee Organization

Subject to approval by the IEEE Executive Committee, of paragraph 3 and subparagraphs 3(a) through 3 (f), above, the first year activities listed with highest priority in paragraph 3 (b) will be pursued by Working Groups lead by the following chairmen:

Working Group and Name	Chairman	Others Willing to Assist
A)Committee Procedures	Klig	
B)Publicity and Participation	Kotasek	Robbi, Tate
C)Newsletter	Pessah	Klig, Balabanian
D)Publications	Unger	
E)INTERCON 73	Benjamin	Werntz
F)Current IEEE Activities	Sarasohn	Kotasek
G)Other Societies' Activities	Tate	Stoller
H)Bibliography	Werntz	
I)Survey of IEEE Active Individuals	Stoller	Robbi
J)Matrix	Higinbotham	

Anthony Robbi was nominated for Vice Chairman of the Committee.

(a) Short Term Procedures

The following deadlines were established:
July 24, 1972: Working Group chairmen send documentation on first year activities comprising schedules (what and when) and resources required (what and when) to IEEE Headquarters, attention Dr. R. M. Emberson. Address: IEEE, 10th floor, 345 East 47th Street, New York, N.Y. 10017, telephone (212) 752-6800, ext. 535 (RME) or ext. 333 (PDE).

July 31, 1972: IEEE Headquarters to distribute information received to all members of the committee as it is then constituted and others having a need for the information.

5. Other Business

(a) Involvement of IEEE members

Lawrence Tate advocated a mailing to signers of the petition to form an IEEE Group on Social Implications of Technology and to IEEE student branches, reporting the events to date and expressing appreciation of support received. The consensus was to defer this action until after the meeting on August 12 when more definitive information should be available.

Dr. Emberson confirmed that it was appropriate for the committee to prepare editorial material to be offered to Group and Society Newsletters and Section Bulletins announcing the existence of the Committee and soliciting the support of interested IEEE members. Such members would be added to the mailing list to receive the Newsletter of the Committee and could be mailed a questionnaire

inviting their participation in the Working Groups. This procedure follows the precedent of interdisciplinary TAB Committees, such as the Oceanographic Coordinating Committee.

(b) Other IEEE Activities

Dr. Wolff reported on the United States Activities Committee, the Washington Office, the Washington Section, Technical Activities Board activities. Attachment H shows organizational relationships.

United States Activities Committee: This Committee consists of the Directors of IEEE Regions 1-6 which constitute all of the United States. USAC activities are:

Professional Activities
Salary Survey
Public Relations
Employment Practices
Pensions

IEEE Washington Office:

An office was opened in Washington in April 1, 1972 and is staffed by Mr. Ralph Clark and one secretary. Its purpose is to facilitate rendering technical advice to Congress as described in news release, Attachment G.

Washington Section: A recent activity within the Washington Section is the formation of a committee to investigate pension plans currently and potentially available to scientists and engineers and to develop plans for IEEE activities in this area for implementation when the constitutional amendment is passed. This activity, known as PAPE, is coordinated with USAC.

(Editorial note: Dr. Irwin Gray, IEEE Group on Engineering Management, Stanford University, has proposed and is preparing to implement plans for the production for a "journal" consisting of reprints of articles on the Social-Economic-Employment issues; this would be a loose-leaf publication. Approval of the TAB Publications Committee is being sought July 27.)

Technical Activities Board:

Interdisciplinary committees under the Technical Activities Board include the Environmental Quality Committee (Chairman, B. H. Manheimer, Department of HUD, Washington), Transportation Committee (Chairman, Arthur Goldsmith, Department of Transportation, Washington), Technology Forecasting and Assessment Committee (Chairman, William D. Rowe, Environmental Protection Agency, Washington), Oceanographic Coordinating Committee (Chairman Algernon Badger, Geospace Incorporated, Houston). The EQC has organized a workshop to be held in Gaithersburg, Maryland in September 1972 entitled "Technology and Governance in Achieving Environmental Quality" to which delegates of 16 societies are invited, including those from the legal, medical and public administration professions. The Transportation Committee and the OCC activities are confined to conference organization. The Technology Forecasting and Assessment Committee is currently training representatives of the IEEE Groups and Societies in the methodology of TFA and intends to initiate an extensive program encompassing all areas of electrotechnology. The head of the scientific staff of the New York State Legislature has approached IEEE/TAB for assistance in connection with bills related to technology. The assistance envisaged includes organizing informal seminars for the information of state legislators.

6. Next Meeting

The next meeting will be held Saturday August 12, 1972 at 9:00 a.m. at the Commodore Hotel, New York City. Attendance at this meeting is restricted to Working Group chairmen, others who are volunteering to undertake the Chairmanship of additional Working Groups for tasks listed in paragraph 3(d), IEEE officers or their representatives and IEEE staff having relevent responsibilities.

PETER D. EDMONDS
SECRETARY, TAB STAFF

Issued on June 29, 1972

Attachments: A
B
C
D
E
F
G
H

Exhibit I. Petition to form IEEE Group.
Exhibit II. ASCE Committee on Social and Environmental Concerns in Construction