

THE COMMITTEE FOR SOCIAL RESPONSIBILITY IN ENGINEERING

137a West 14th Street, New York, N.Y. 10011

April 26, 1972

Working Committee:

Tony Agnello, CCNY
Prof. Ralph Akkoyunlu, SUNY
Dr. Aaron Ashkinazy, RCA
Prof. P.M. Brown, CCNY
Prof. Frank Collins, PIB
Prof. Douglas Davids, NYU
Dr. Albert Friedes, BTL
Dr. William Higinbotham, BNL
Alan Horowitz, IPE
Barry R. Horowitz, PIB
Elsa Horowitz, IBM
Lee M. Horowitz, NCE
Prof. George M. Katz, Col. Med.
Justin Kodner
Frank Kotasek, Sperry-Rand
Larry S. Liebovitch, CCNY
Brad Lyttle, WTR
Ted Mankovich, Col. U.
Prof. Seymour Melman, Col. U.
Prof. Marvin C. Paull, Rutgers
Rowan Hay Rifkin, PIB
Dr. Anthony Robbi, RCA
Dr. Harvey Rubin, BTL
Prof. Philip Sarachik, NYU
Paul Stoller, SUNY
Steve Tencer, Col. U.
Jack Tucker
Prof. Stephen H. Unger, Col. U.
Rod Wallace, Col. U.
Prof. Richard Wiener, CCNY
Prof. Sheldon Weinbaum, CCNY
David Wuchinich, Cooper Union

Coordinator:
Ted Werntz

(Affiliations for
identification only)

Dear Friend:

Your support of the petition to establish a new IEEE Group on Social Implications of Technology is gratefully acknowledged. To date, over six hundred signatures from members in over ninety schools and companies (see enclosure) have been sent to the IEEE Technical Activities Board (TAB) - the required number is one hundred. While the size and nature of the response exceeded our best expectations, there is no assurance that the proposed group will be created or that its purpose or structure will not be limited by IEEE.

After submission of the first two hundred signatures to TAB, an exchange of letters resulted in an informal meeting during the IEEE Convention with Mr. Tanner, Dr. Chestnut, Mr. Guerera (District 6), Mr. Dillard (TAB chairman) and Dr. Emberson (TAB Secretary). The purposes of the proposed group were put forth, and it soon became clear that there was disagreement within the IEEE leadership. Some felt that the present organizational structure was adequate to deal with most issues, that engineers have no special competence in social areas, and that these issues might pertain to the profession but could not be presented on a technical or professional level. Others felt that social issues should be specially considered, but at a regional level and with constraints in scope. Still others recognized the need for a new group along the lines proposed.

We pointed out that member interest is a sufficient condition for a new group, and that several existing groups would never have started if expertise was the

sole criterion. Further, that the group was to serve as a forum for the broadest range of ideas pertinent to the profession and society, that its constitution would not only guarantee turnover of leadership, but would assure maximum participation by the membership. Moreover, that the IEEE's past efforts were minimal, that those most fearful of dissent seemed to be locked into these past practices, that a new group staffed by people with a fresh outlook would serve as a stimulus to other groups, and that there was ample precedent for overlap between groups. CSRE, though involved in a number of other projects, is prepared to actively participate in the establishment of the new group.

The issue is presently under IEEE consideration. However, it was felt that this matter was of sufficient importance that it should be considered by the entire membership. Accordingly, a letter was sent to Spectrum (it will appear in the May issue with a response from Mr. Tanner) outlining the issues, presenting the body of the petition, and requesting the membership to send letters to TAB supporting the petition. You are urged to send letters to TAB and Spectrum.

Many signers from universities will work in industry this summer, and the petition should be circulated and discussed there. Moreover, consideration should now be given to the establishment of local groups, as well as the level and nature of the activities to be undertaken. Finally, it is important to hear your ideas as to what should be done.

We will make every effort to keep you informed of future developments.

Sincerely,

Victor Klig
Frank Kotasek
Stephen Unger

April 22, 1972

Professional Affiliations of Signers of Petition for an IEEE Group on
Social Implications of Technology. (number of signers indicated in parentheses)

65 Colleges and Universities

U. Akron (9)
U. Alabama (2)
A. Einstein Coll. Med. (3)
Bucknell U. (1)
U. Cal. Berkeley (5)
U. Cal. Irvine (5)
U.C.L.A. (2)
U. Colorado (3)
Columbia U. (14)
Cornell U. (2)
U. Conn. (8)
Dartmouth Coll. (3)
U. Delaware (7)
Fairleigh Dickenson U. (5)
U. Florida (22)
U. Idaho (5)
Indiana U. (1)
Johns Hopkins U. (4)
Lamar U. (Texas) (8)
U. Kansas (11)
U. Louisville (4)
M.I.T. (5)
Memphis State U. (3)
U. Michigan (8)
Michigan State U. (5)
Milwaukee Sch. of Eng. (8)
U. Minnesota (5)
U. Missouri (1)
Mt. Sinai Sch. of Med. (1)
Mt. Wachusett Comm. Coll. (2)
U. New Hampshire (11)
N.Y.U. (1)
S.U.N.Y. Stony Brook (11)
N. Dakota State U. (7)
Norwich U. (Vt.) (1)
Ohio U. (6)
Oregon State U. (15)
U. Pennsylvania (4)
Penn. State U. (5)
U. Pittsburgh (1)
Polytech. Inst. B'klyn (1)
U. Puerto Rico (9)
Rockefeller U. (4)
Rose-Hulman Inst. (Ind.) (3)
Rutgers U. (4)
San Diego State Coll. (2)
U. Southern Cal. (2)
U. S.W. Louisiana (3)
Southern Methodist U. (3)
Stanford U. (4)

Stevens Inst. Tech. (6)
Stout State U. (Wis.) (2)
Swarthmore Coll. (4)
Syracuse U. (21)
Temple U. (4)
U. Tennessee (1)
U. Texas at El Paso (7)
Texas Tech. U. (13)
Trinity Coll. (Conn.) (2)
U. Toledo (5)
Villanova U. (1)
Virginia Polytech. & State U. (1)
Washington U. (St. Louis) (8)
Western New England Coll. (3)
Yale U. (1)
total (338)

26 Companies, Gov't Agencies, etc.

Allen-Bradley Co. (2)
Bell Tel. Labs. (Holmdel) (14)
Bell Tel. Labs. (Murray Hill) (5)
Berkeley Enterprises (1)
California Computer Products (1)
Chronotechnology Assoc. (1)
Compuscan Inc. (1)
Env. Prot. Agency (8)
Geo. A. Hormel Inc. (1)
I.B.M. (Yorktown Heights) (6)
I.B.M. (Kingston) (6)
Inficon (1)
Massey-Ferguson Inc. (1)
Metro-Dade Cnty DOTT (1)
Mt. Sinai Hospital (4)
N.A.S.A. (12)
N.Y. State Legislature Staff (1)
Park Ohio Industries Inc. (10)
Picatinny Arsenal (1)
RCA Laboratories (36)
Response Systems Inc. (1)
Ronald Press (1)
Sanders Associates (19)
Sperry Rand Corp. (126)
Sylvania Corp. (12)
Western Electric Eng. Res. Ctr. (1)
total (273)

Grand total: 611.

Some additional signers did not list
affiliation.

SPEAKERS AND CHAIRMEN FOR THE IEEE OPEN FORUM, 1973.

MARCH 23, 1973 (Subject to Change)

Morning sessions start at 9:30 A.M.; afternoon sessions start at 2:00 P.M. Sessions are held in the Chelsea Room, 5th floor, Americana Hotel, Seventh Ave. and 52nd St. Speakers are listed in order of scheduled appearance. Each presentation is approximately 1/2 hour in length.

POS. SPEAKER

SUBJECT

Wednesday Morning

Chmn. Victor Klig, Bioeng'r	--
Coch. J. Malvern Benjamin, Jr.	--
Russell Spikula	Conquest of Cancer: Moonlaunch of the '70's
Norman Balabanian	Cable Television
Gerald Rabow	Health Costs of Air Pollution
Kenneth Maclean, MD	Energotherapy in Cancer and Diseases of the Aging

Wednesday Afternoon

Chmn. Prof. A.J. Bernstein	A Programmer Training Project for Ghetto Residents
Computer Science	
State U. of NY	
Coch. J. Malvern Benjamin, Jr.	--
Harry E. Stockman	P.K. Instruments for Research
Arthur Bronwell	Engineering and National Policy

Thursday Morning

Chmn. Prof. Joseph S. Kauiman	Lets Electrify the Classroom or Electro-
E.E. Dept., Columbia	cute the Professors
Irwin Feerst	IEEE and Portable Pensions--Attempted
	Murder by Benign Neglect
Anthony Robbi	Professional Ethics and the Engineer
Robert Bruce	Similarities and Differences in the
	Objectives of PAC and CSIT

Thursday Afternoon

Chmn. Prof. Stephen H. Unger	Professional Ethics for Engineers
E.E. Dept., Columbia	
Coch. J. Malvern Benjamin, Jr.	The Purpose of Business: Profit or Service?
Carl Barus	Engineering - Profession or Trade
W.A. Higinbotham	Arms and the Man

Thursday evening 8:00 pm Biarritz Room, fourth floor

Workshop Session: THE ENGINEER AND MILITARY TECHNOLOGY

W. E. Cory, William Davidon, Edward Ramberg, Howard Levy, Harry Davis.

NO ADMISSION CHARGE.....CONVENTION REGISTRATION NOT REQUIRED

- ⑤ Freeman — S ✓
 ⑥ Klig — 947-6755 LFF
 ⑨ Kotasek — S ✓ LF
 ① Balabanian ✓ wolf Copy F
 ⑦ Gross — V ✓
 ② Benjamin V WOLFF
 ⑬ — Fete S ✓
 ⑪ — Robbi S ✓
 ⑫ Jack Sklansky — V
 ⑧ Higgenbotham — V
 ⑩ Pessah — S ✓ ⑭ Citrini F ✓
 ④ Ellery — F ✓ ⑮ Frank F ✓
 ③ Bose — S ✓
 ⑭ Chy Paul Russo

WYNER

INTERVIEW

SUGGESTS

DAVE SLEPIAN

(BACK IN A WEEK)

June 24

Lawrence Tate	(617) 864-5770	X 2883 X 2872 (Sec)	A.D. Little, Calif.	CM	R
Harry Freeman	(609) 667-6592	HOME WORK (609) 963-8000 PE 6332	RCA Camden	C	
Harry Rubin	581-5620 X2464	Holmes	BTL	C	
Anthony Robbi	(609) 452-2700	X 3218	RCA Subs	CM	R
Jack Sklansky	(714) 833-6726	H. B. Jones UC-IRVINE	ON LEAVE 7/26	CM	R
Carl Dreher	(914) BR9-4257	writer - Brewster, NY		C	can be act - after sun
Keith Bore	(516) 724-2500	X 211 HOME (516) 265-0949	SUFFOLK CNTY Dpt Sub - Fed Hlt and Condit	CM	
Wayne Chen	(904) 392-0913	Head EE Dpt. U. Fla. Gainesville		C	away till late August
Wm. Higginbotham	(516) 345-2908		Rutgers Nat. Lab. Rutgers - CS Dpt.	CM	R
M.C. Paull				CM	R
Michael Pessah	920-4438 or 4818		Montefiore	CM	
J. Mahon Benjamin			phila. Geni Institute	CM	
Norm Balabanian			Syr. ECE		
Carl Baras			Swarthmore ENG.	CM?	
Sam Mason			MIT	C	
Frank Kotasek	(516) 574-3530		Spry - Rad	CM	
Victor Klig			East Coll. med.	CM	
Steve Unger			Col. EE	CM	R
John B. Lewis	(814) 865-6452		EE Dpt Penn. St. U.		
James Dixon	(901) 321-1225		EE Dpt. Memphis St.	C	
Arnon Wigner	581-5620	MIT X 2916	OTL MIT.		
Paul M. Russo			RCA Subs.		
Wm. A. Gross			VP. Res. & Dev. Dir. Per. & Ad. Tech. Assoc.	C	
John Schuder	(314)		EE Dpt U. Missouri		

Norman Whitaker

Director Ref. Dir. Sanders Assoc.

Geo. Ellery

Mary Ferguson Detroit

Wm. S. Watkins

Cons. Eng.

William H. O'Brien

Wm. Higgins

John Hopkins

Ed Frank

Charles Paccia

Dir. of U. Mich.

Anthony Segman

Staff EE Dept.

EE Wg.

John Hopkins Un.

Balt. Maryland 21218

Sale OK

Freeman

609-963-(8000)
3117
-6332

Rubin 581-5620
2464

Robbi on 6/17
BEFORE 12:00

OK BUT
PROB.
CAN'T
TAKE
MEETING
6/17

PC-6332

609-667-6592

Sklauskas

JAMES D. VAC. TILL JUNE 20
Dixon (901)321-1225

Dreher OK CMT. BUT NOT
TILL AFTER
SUMMER BREASTEN N.Y.

(914) BR9-4257

Wagner X2916 MH

Wayne Chen (904)392-3261
1:30 20913

John Lewis

X211
(516) 724-2500
(516) 265-0949

BOSE
SUFFOLK
CMTY.
DEPT. LABOR
RED-STATE AID COORD. PLAN
DROPPED JEE

Boyle

W.H. Huggins
WEISS

(301)366-3300

X404 - WEISS

Higginbotham 659-5231 X542

SABBS.

JULY 26

(707)
(714) 833-5011
-6726

June 17

IRVINE

NEEDS
FARE

1 hour

Boston
Cal.

hpr.

Set

Chile

NYC

LI

June 17

EXAMINE

(201366-3300)

Staples

Staples

Balabanian ?

Benjamin ~~✓~~ ~~A~~

~~Bose~~

Citron F

Ellery F

Freeman ✓

606 Cooper Landing Rd. A102
Cherry Hill, N.J. 08034

~~Gross~~

Higgenbotham ✓

Klig ✓

Kotach w ✓

Pessah w ~~✓~~

Robbi ✓ →

Russo

Skolansky w →

Tate ✓ →

Unger ✓

Trunk

Werny F

(Cory
Welsh)

Homer Sarason
IBM

HOMER SARASOHN
DIR. ENG. COMM.
IBM ARMONIC

Wm. H. Welch Jr. (FST)
Asst. Sec. + Prof.
Arizona State Univ.

WOLFF

(301) 982-2265

Paul Russo

085 40

Goals

To ~~stimulate~~ ^{concentrate} interest in SIT
among IEEE members

To present problems &
suggest alternative solutions

To develop an organizational structure
of an IEEE ~~Committee~~ SIT group

means

nevertheless

try to form one issue of
Transactions.

Organize
~~Plan~~ session for IEEE Committee

Pool of speakers to offer to
~~IEEE~~ IEEE section meetings.

Hold our own meeting(s)

regular article in ~~IEEE~~ Spectrum

Citrus (F) Mike Persah

Kotusik S Robbi

S Dreher

Klig

S Myers

S Rabier

V Viavot - Utah -

S Jate (F) NY-miss.

V Mason MASS

Ed Frank - (F)

V { Barnes } Phil

S { Sreemore } Conder

→ Lewis - Penn St.

V Balabanin

S { Wayne Cher } Thistle

S { Dixon - myki } Hile

S Huggins - John Hybin

Inch	Var
6	3
4	3
1	1
1	1
1	2
1	1
1	
15	11

V Pucci - U. med.

S Chen - Jo - Tai "

Geo. Elly - Detroit (F)

(Watten, Clend. - (F)

(Jun 17
NY mnt
Wolfe)

S Sklansky - Irvine Cal.

S Siegman - Stated Cal.

Henry Larson - Anaheim Cal.

VP. a guy? Cal.?

Higgelock?

★

Kotasek (316) 574-3530

IEEE SIT GROUP

Possible ^{officers} ~~not~~ members of board, editors etc.

Kotasek	Spillane
Klig	George Ellery
Balebanion	Watkins (Chick)
Unger	Chen-So Tai (U. Michigan)
Mason	A.E. Siegman (Stanford)
Benjamin	Harvey Freeman (RCA - Camden)
Sklansky	Michael Rensah
Bell (Canada)	Whitaker (Sanders)
VP Ampex	Frank Simpson (Texas Tech)
Rubin	Texas Tech. (admin. asst. asks if
Robbi	they can help fund)
Tate	Wayne Chen
Vivant	W. H. Heeggin (Johns Hopkins)
Dixon (of Memphis State)	Joe Kaufman
Larson	Charles Paccia - (U. of Mich.)
Dreher	John B. Lewis (Penn State)
Barus	Keith Bose
Citron	
Heggenbotham	
Orayson	
Arnon Wyner	



THE INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS, INC.

TECHNICAL ACTIVITIES BOARD

TECHNOLOGY / SOCIETY INTERFACE COMMITTEE

Meeting Notice

The first meeting will be held as follows:

Date: Saturday, June 24, 1972
Time: 9:00 AM to 4:00 PM (lunch will be served)
Place: Studio Room 115
Commodore Hotel
42nd Street and Park Avenue
New York, NY

Note: Please notify

Dr. Edward A. Wolff
1021 Cresthaven Drive
Silver Spring, Maryland 20903
Office phone: 301-982-2265
Home phone: 301-439-1152

if you plan to attend so adequate hotel arrangements can be made.

Agenda

1. Introductions
2. Review of IEEE actions and present organizational arrangement.
3. Formulation of
 - a. Name
 - b. Scope
 - c. First year goals
 - d. First year activities
 - e. First year results
(suggestions attached)
4. Committee organization
5. Other business

2/15/72



Engineering has social responsibilities

It has been brought to our attention that a committee, called the "Committee for Social Responsibility in Engineering," has been circulating a petition requesting that the Executive Board of the IEEE authorize the formation of an IEEE Professional Group on Social Implications of Technology.

The purpose of this Group would be "... pursued by encouraging research and study, by the publication of the resulting reports and treatises, by the holding of meetings for the reading and discussion of papers, and by any other activities necessary, suitable and proper for the fulfillment of these objectives."

Pertinent topics to be considered by the Group would be "... the application of electronics to the alleviation of pollution problems, the effects of energy consumption on the biosphere, effects of data banks and electronic surveillance techniques on privacy, the application of engineering talent to urban problems and transportation, and the role of government in technological research and development."

Stated in these terms and with such purposes, the establishment of such a Group within the IEEE is a desirable goal and something we concur in and are whole-heartedly for.

We would question, though, how representative of the engineering community the Committee promoting the establishment of such a Group actually is. On their official letterhead, 18 of the 32 members of the working committee are academicians, either teaching at, or associated with, various universities. It's possible, and quite probable, of course, that these people possess the best balance of conviction, dedication, and credentials to form such a working committee whose purpose is to promote initial action.

But the vast bulk of engineers in the United States, whether inside IEEE or out, are associated with industry. And it is these engineers who can, and should, be most concerned with social responsibility in engineering.

We feel, therefore, that if the Committee for Social Responsibility in Engineering is to be a viable and useful organization, it should concentrate its efforts on the typical working engineer who is intimately involved in, and whose livelihood could be affected by, the social implications of engineering.

(The Committee for Social Responsibility in Engineering can be contacted at 137a West 14th Street, New York, NY 10011.)

Frank Egan

Editor

UNIVERSITY of PENNSYLVANIA

PHILADELPHIA 19104

The Moore School of Electrical Engineering

February 11, 1972

The Committee for Social Responsibility
in Engineering
137a West 14th Street
New York, New York 10011

Gentlemen:

I am in receipt of your plea to sign a petition for formation of a PG on Social Implications of Technology. I am very much in sympathy with your social concern, but I am opposed to a PG as the proper vehicle for action. The trouble with a PG in this area is:

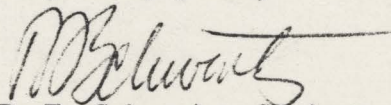
- (1) it would have a characteristic very different from all the other PG's;
- (2) If there were transactions, the papers therein could easily be less acceptable as scholarly papers than in the other transactions;
- (3) the interactions of members of the PG would tend to be with one another and therefore would minimize the impact of the group upon society;
- (4) Because of the economic situation you would have trouble securing members (no one has anything for extra dues).

I think a more proper action would be an IEEE society-wide committee to work on the question. After all this is a matter that cuts across all specialties in Electrical Engineering as well as all branches of engineering. An engineering-wide committee would be better still.

In the meantime as individuals we must all do our part. I, for one, regularly complain to elected and appointed officials about situations that need correction. And I needle my industrial friends about the inhumane and anti-society aspects of business, particularly big business. I have been planning a series of articles on various aspects of the current scene that I consider intolerable.

I trust these comments will be accepted as friendly criticism, not sour grapes. And if your PG gets going, good luck. I might even join.

Very truly yours,



R. F. Schwartz, Chairman
Graduate Group Committee
in Electrical Engineering

UNIVERSITY OF CALIFORNIA, IRVINE

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

SCHOOL OF ENGINEERING

IRVINE, CALIFORNIA 92664

June 7, 1972

Dr. Edward A. Wolff
1021 Cresthaven Avenue
Silver Spring, Maryland 20903

Dear Dr. Wolff:

At the request of Dr. S.H. Unger, I am herewith sending you a biographical sketch of my professional career, as well as a list of my publications. I understand you need this material for the formation of the IEEE Committee on Technology and Society.

Sincerely yours,

A handwritten signature in cursive script, reading "Jack Sklansky".

Jack Sklansky
Professor and Chairman
Information Engineering Group

JS:dlb

cc: S. H. Unger

RESUME

*currently with
A.D. Little, Boston*

Lawrence Tate
63 East Sunnyside Lane
Irvington, N.Y., 10533

Profession: Engineer

Employed by: International Business Machines Corp.
1000 Westchester Avenue
White Plains, N.Y., 10604

1968 - 1971: Staff of Ass't. General Manager for Operations,
Data Processing Group. Salary: \$31,200/yr.

Analysis, risk assessment, and resource evaluation of product development and manufacturing programs, resolution of interdivisional problems, long-range technical planning studies including organizational and business implications.

1966 - 1968: Manager of Technical Staff for the Director of Data Communications, CHQ, Armonk, N.Y.

Preparation of IBM response to the FCC Inquiry on Interdependence of Computer and Communications Services and Facilities.

Member of United States Delegations to technical standards agencies of the United Nations: International Organization for Standards, TC 97, SC 6 on Data Transmission, and the International Electrotechnical Commission, TC 53 & SC 53B on Computers and Information Processing.

Member of five U.S. standards committees and subcommittees of BEMA X3.3 on Data Transmission (since 1960), and EIA TR 30 on Data Transmission Systems and Equipment (since 1957).

1965 - 1966: Manager of Technical Staff, Office of Vice-President for Special Common Carrier Liaison, CHQ, Armonk, N.Y.

Negotiations with domestic and foreign common carriers on the application of data processing techniques in communications plant facilities.

1962 - 1965: Engineering Manager, Data Communications Development, Poughkeepsie & Kingston Labs. (management of 125 people, budget of \$3 million)

Development responsibility for IBM 2701, 2702 & 2703 transmission control units, 7770, 7772 & 7960 voice response systems, 7711, 7712 & 2816.

(cont.)

(cont.)

Product and special engineering responsibility for the above and other products.

Negotiations with various common carriers for new data communications services and interfaces (since 1954).

1956 - 1962: Data Transmission Development Manager, Poughkeepsie Lab.

Development and product engineering responsibility for IBM 7701, 1013, 1948, 7273, 7282 II, 7702, 7287 & 7710.

1953 - 1956: Development of data communications products, IBM 065, 066, 067 & 068 Data Transceiver.

Previous Employment:

1952: Boeing Airplane Co., Seattle, Washington.
Engineer, simulation of aircraft.

1950 - 1952: Purdue University, West Lafayette, Indiana.
Graduate Ass't., School of Electrical Engineering.
1949 - 1951: Synchrotron Project, Physics Dept.

1943 - 1946: U.S. Navy, Electronics Technician 1/c.

Citizenship: U.S. Age: 45 Marital Status: divorced

U.S. Patents: 13 issued, several of which were further patented in major industrial nations in Europe, Canada, and Japan.

Education: BSEE 1950, MSEE 1952, Purdue University.



SYRACUSE UNIVERSITY

DEPARTMENT OF ELECTRICAL ENGINEERING

111 LINK HALL | SYRACUSE, NEW YORK 13210
TELEPHONE 315 | 476-5541 | EXTENSION 4444

^{X4401}
Dec 12, 1971

Just saw your petition re IEEE Group on Social Responsibility. Please send me one or two copies (with covering letter) for circulation. I would like to get involved; how can I do it?

Norman Balabanian
Prof of EE

hnp
(315) 474-0666

December 22, 1971

Professor Norman Balabanian
Department of Electrical and Computer Engineering
111 Link Hall
Syracuse University
Syracuse, New York 13210

Dear Professor Balabanian:

In response to your December 12 letter, I am enclosing two copies each of our petition and covering letter concerning the formation of an IEEE Professional Group on Social Implications of Technology.

The number of signatures required in order to get such a petition considered is 100, but we feel that in order to ensure favorable action, we should obtain several times this number. Hence one very useful way in which you could get involved would be to collect as many signatures as possible from among your colleagues.

Since the petition must be acted upon by both the Technical Activities and Executive Boards of IEEE, any personal influence you could exert on members of these boards could be of major importance.

Should the proposal be carried (and we think it will), I hope you would play an active role in the resulting group.

If you have any suggestions or questions that you would like to discuss, I can be reached at home most evenings at (201)567-5923 .

Yours truly,

Stephen H. Unger

*p.s. I might add that my checks are sent to CSRE
would be most helpful..*

2339 Briar Hill Drive,
Ottawa, Ontario K1H 7A7
Canada

March 19 1972

Dear Steve Unger,

I saw the letter in the Feb/ Friends Journal about your interest in the possible formation of a committee on technology and society in IEEE. I am a member of IEEE and will assist you if possible.

My job is Senior Engineer, Power Generation Planning with the National Energy Board (somewhat similar to your FPC) and I am a member of the Ottawa Friends Meeting and Chairman of the Canadian Friends Service Committee and also a member of council of our provincial eng. association.

Recently the IEEE has been showing an interest in social issues which is a healthy sign. I am also a member of ASCE but not of ASME.

Your friend
Edward Bell

replied
4/1/72

825 N. 4TH ST.
MONTROSE, COLO. 81401
FEB. 8, 1972

DEAR STEVE UNGAR,

I UNDERSTAND THROUGH VICTOR
PASCHKIS THERE IS A POSSIBILITY
OF ESTABLISHING AN IEE
COMMITTEE ON "TECHNOLOGY AND
SOCIETY". I WISH TO GIVE MY
FULL SUPPORT OF THE PROPOSED
COMMITTEE.

SINCERELY

Bob Stucklen

ROBERT A. STUCKLEN
IEE #1045475

UNIVERSITY OF CALIFORNIA, IRVINE

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SANTA BARBARA • SANTA CRUZ

SCHOOL OF ENGINEERING

IRVINE, CALIFORNIA 92664

January 13, 1972

Dr. Steve Unger
Dept. of Electrical Engineering
S.W. Mudd Bldg.
Columbia University
New York, N.Y. 10027

Dear Dr. Unger:

Please add my name to those of other IEEE members who would like to see a Standing Committee (or Division) on Technology and Society established within IEEE. This matter came to my attention through a note by Victor Paschkis in a recent SSRS Newsletter.

Sincerely,

Roland Schinzinger
Assoc. Prof. EE
IEEE Member 3649282M

THE COMMITTEE FOR SOCIAL RESPONSIBILITY IN ENGINEERING

137a West 14th Street, New York, N.Y. 10011

December 3, 1971

Dear friend:

Working Committee:

Tony Agnello, CCNY
Prof. Ralph Akkoyunlu, SUNY
Dr. Aaron Ashkinazy, RCA
Prof. P.M. Brown, CCNY
Prof. Frank Collins, PIB
Prof. Douglas Davids, NYU
Dr. Albert Friedes, BTL
Dr. William Higinbotham, BNL
Alan Horowitz, IPE
Barry R. Horowitz, PIB
Elsa Horowitz, IBM
Lee M. Horowitz, NCE
Prof. George M. Katz, Col. Med.
Justin Kodner
Frank Kotasek, Sperry-Rand
Larry S. Liebovitch, CCNY
Brad Lyttle, WTR
Ted Mankovich, Col. U.
Prof. Seymour Melman, Col. U.
Prof. Marvin C. Paull, Rutgers
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Prof. Philip Sarachik, NYU
Paul Stoiler, SUNY
Steve Tencer, Col. U.
Jack Tucker
Prof. Stephen H. Unger, Col. U.
Rod Wallace, Col. U.
Prof. Richard Wiener, CCNY
Prof. Sheldon Weinbaum, CCNY
David Wuchinich, Cooper Union

Coordinator:
Ted Wertz

We are writing to ask you to support the enclosed request to the IEEE Executive Board that they authorize the formation of an IEEE Professional Group on Social Implications of Technology.

The time is surely ripe for such a step. The Aviation and Space Division of the ASME has a Technology and Society Committee, and within the IEEE Computer Society there is a Committee on Social Implications. Interest in this area on a broader level is evident in the pages of the Spectrum.

An IEEE Professional Group on Social Implications of Technology could play an important role in raising the level of discourse on this very important topic.

We hope you will not only sign the enclosed petition, but that you will also ask interested colleagues to sign it.

Yours truly,

Frank Kotasek

Frank Kotasek
Sperry Rand

Stephen H. Unger

Stephen H. Unger
Columbia University

GEORGE D. CURTIS
1447 LIHOLIHO ST.
HONOLULU, HAW.
96822

(Affiliations for
identification only)

When AIEE merged with IRE, they created a larger and less efficient organization. They have tried to satisfy everyone by adding more + more groups, and now we have too damn many. Your goals are good, but I don't think we need a special group added to include them in IEEE.

George D. Curtis

MISC

Responses to
petition on

DEBB G SIT

DAVID V. VANDELINDE

To PROF. UNGER

Date 6/9/72 Time 255

WHILE YOU WERE OUT

M DENNIS WEISS

of JOANS HOPKINS UNIV.

Phone _____

Area Code

Number

Extension

TELEPHONED	<input checked="" type="checkbox"/>	PLEASE CALL	<input checked="" type="checkbox"/>
CALLED TO SEE YOU	<input type="checkbox"/>	WILL CALL AGAIN	<input type="checkbox"/>
WANTS TO SEE YOU	<input type="checkbox"/>	URGENT	<input type="checkbox"/>
<input type="checkbox"/>		RETURNED YOUR CALL	<input type="checkbox"/>

Message DAVE VANDELINDE WANTS

TO BE MEMBER SOCIAL
IMPLICATIONS GROUP

G.C.G.
Operator

(301) 366-3300 x 404

WHILE YOU WERE OUT

JENNIS WEISS

JOHN HOPKINS

Area Code Number Extension

TELEPHONED	<input checked="" type="checkbox"/> PLEASE CALL
WANTS TO SEE YOU	URGENT
WILL CALL AGAIN	
RETURNED YOUR CALL	

DAVE VANDELINDE WANTS
TO BE MEMBER SOCIAL
IMPLICATIONS GROUP

Q.T.C.

Dec. 20, 1971

Steve,

This is what I can collect fairly early (I have 2 more sheets circulating). With some real effort I could get more if needed.

Regards

Toni

THE COMMITTEE FOR SOCIAL RESPONSIBILITY IN ENGINEERING

137a West 14th Street, New York, N.Y. 10011

December 3, 1971

Mr. Larson:

Dear friend:

We are writing to ask you to support the enclosed request to the IEEE Executive Board that they authorize the formation of an IEEE Professional Group on Social Implications of Technology.

The time is surely ripe for such a step. The Aviation and Space Division of the ASME has a Technology and Society Committee, and within the IEEE Computer Society there is a Committee on Social Implications. Interest in this area on a broader level is evident in the pages of the Spectrum.

An IEEE Professional Group on Social Implications of Technology could play an important role in raising the level of discourse on this very important topic.

We hope you will not only sign the enclosed petition, but that you will also ask interested colleagues to sign it.

Yours truly,

Frank Kotasek

Frank Kotasek
Sperry Rand

Stephen H. Unger

Stephen H. Unger
Columbia University

*I hope you will want to
get involved in this.*

S.H. Unger

Working Committee:

Tony Agnello, CCNY
Prof. Ralph Akkoyunlu, SUNY
Dr. Aaron Ashkinazy, RCA
Prof. P.M. Brown, CCNY
Prof. Frank Collins, PIB
Prof. Douglas Davids, NYU
Dr. Albert Friedes, BTL
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Prof. Richard Wiener, CCNY
Prof. Sheldon Weinbaum, CCNY
David Wuchinich, Cooper Union

Coordinator:
Ted Werntz

(Affiliations for
identification only)

Prof. Unger
The matter deserves emphasis, & although I'd rather see each of the many arms of IEEE set up such groups, perhaps this is a good way to get things rolling more vigorously -- at least it will have an interdisciplinary characteristic. I'm very interested, as evidenced by 14 long & lonely hours chipping away at it in the Computer Group & AFIPS. However, to fulfill a commitment to my doctor, my family, & myself, I'm firmly cutting back
(over)

on the ceaseless overload that I've sustained throughout my adult career, not infrequently amounting to 100 hrs / wk. Therefore, I cannot offer real involvement. In my professional society activities, I've decided to confine my activity to editing "The Forum on Social Implications" in the Computer Society's publication "COMPUTER". I can probably be of service to you there, by including announcements of your meetings, an occasional paper published, or whatever.

HTL

THE UNIVERSITY OF MICHIGAN
THE RADIATION LABORATORY
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
2216 SPACE RESEARCH BUILDING

ANN ARBOR AREA CODE 313
764-0500

2455 HAYWARD STREET
ANN ARBOR, MICHIGAN
48105

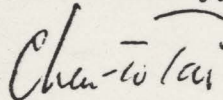
10 January 1972

Professor Stephen H. Unger
The Committee for Social Responsibility in Engineering
137a West 14th Street
New York, New York 10011

Dear Professor Unger:

In response to your letter of December 21, I have circulated your letter among my colleagues and have obtained a number of signatures in support of your petition. If I can be of further help, please let me know.

Yours sincerely,



Chen-To Tai
Professor of Electrical Engineering

jrt



THE JOHNS HOPKINS UNIVERSITY · BALTIMORE, MARYLAND 21218

DEPARTMENT OF
ELECTRICAL ENGINEERING
BARTON HALL

March 6, 1972

Professor Stephen H. Unger
The Committee for
Social Responsibility in Engineering
137 a West 14th Street
New York, New York 10011

Dear Professor Unger:

I am returning herewith the petition which has
been signed by four members of the Electrical Engineering
Department at Johns Hopkins.

Cordially yours,

W. H. Huggins
Westinghouse Professor
and Chairman
Electrical Engineering Department

WHH:dc

THE COMMITTEE FOR SOCIAL RESPONSIBILITY IN ENGINEERING

137a West 14th Street, New York, N.Y. 10011

December 3, 1971

Dear friend:

Working Committee:

Tony Agnello, CCNY
Prof. Ralph Akkoyunlu, SUNY
Dr. Aaron Ashkinazy, RCA
Prof. P.M. Brown, CCNY
Prof. Frank Collins, PIB
Prof. Douglas Davids, NYU
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Coordinator:
Ted Wertz

(Affiliations for
identification only)

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An IEEE Professional Group on Social Implications of Technology could play an important role in raising the level of discourse on this very important topic.

We hope you will not only sign the enclosed petition, but that you will also ask interested colleagues to sign it.

Yours truly,

Frank Kotasek

Frank Kotasek
Sperry Rand

Stephen H. Unger

Stephen H. Unger
Columbia University

I'm sure you'll do some good.

The reverse is also true. Current social attitudes are affecting technology adversely. Yet technology

is needed to help provide the necessities and some of the pleasures of life for more human beings while at the same time working on pollution, ecology etc.

I'm not convinced now of the need for a special group, but rather I think a more general awareness is needed.

Martin Littmann

RECEIVED
DEC 21 1971
RF ARCH

P.O. Box 976,
Bellingham, Wash., 98225.
Feb. 26, 1972

Mr. Steven Unger,
Department of Electrical Engineering, S.W. Mudd Building,
Columbia University,
New York,
New York, 10027.

Dear Mr. Unger:

Please send information concerning the petition which you
are preparing to submit to IEEE.

Very truly yours,

Erik Ackerlind

Erik Ackerlind,
Senior Member, IEEE.

EA/rs

replied 3/1/72

P.O. Box 976,
Bellingham, Wash., 98225.
March 13, 1972

Professor Stephen A. Unger,
Department of Electrical Engineering and Computer Science,
Columbia University,
New York,
New York, 10027.

Dear Professor Unger:

Thank you for your letter postmarked March 1st.

I am returning the petition unsigned since no provision has been made to protect engineers and scientists against reprisals. In this connection, please see copy of March 1971 Spectral lines enclosed herewith.

Sincerely yours,



E. Ackerlind

EA/rs

*I DON'T KNOW WHAT HE
IS TALKING ABOUT*

Spectral lines

Professional integrity. Ralph Nader's Jan. 15 editorial in The New York Times is reprinted here because he has effectively used public presentation of cases of neglect of the public interest to promote legislation and the movement he represents may be even more successful in the future. His remedy, the ability to "turn the company in," is a clumsy means of last resort. The real remedy lies with ourselves, the practicing engineers. We make the technical proposals and formulate the nature of new products and programs. We propose the improvements in existing products. We must adopt the professional view that our efforts serve the public and that our companies deserve and can afford our services because what we propose and achieve is a profitable public service.—David DeWitt, Editor

At what point should corporate or government scientists, engineers or other professionals dissent openly from their employer-organization's policy? If the professional does dissent, what is there to protect or defend his decision to place his professional conscience over what he believes is his organization's illegal, hazardous or unconscionable behavior?

These are important questions and they are rarely answered in the context of controversies such as the defoliation of Vietnam or the standards for constructing nuclear power plants. "Duty," said Alfred North Whitehead, "arises from our potential control over the course of events." Staying silent in the face of a professional duty, almost invariably articulated in the profession's canons of ethics, has direct impact on the level of consumer and environmental hazards. This awareness has done little to upset the slavish adherence to "following company orders."

Employed professionals are among the first to know about industrial dumping of mercury or fluoride sludge into waterways, defectively designed automobiles, undisclosed adverse effects of prescription drugs and pesticides. They are the first to grasp the technical capabilities to prevent existing product or pollution hazards. But they are very often the last to speak out, much less refuse to be recruited for acts of corporate or governmental negligence or predation.

The twenty-year collusion by the domestic automobile companies against development and marketing of exhaust control systems is a tragedy, among other things, for engineers who, minion-like, programmed the technical artifices of the industry's defiance. Settling the antitrust case brought by the Justice Department against such collusion did nothing to confront the question of subverted engineering integrity.

A prime foundation for professionalism is sufficient independence to pursue a mission that could save lives, secure rights, or preserve property unjustly imperiled by the employer-organization. The overriding ethic of the professional is to foresee and forestall the risks to which

he is privy by his superior access and knowledge, regardless of vested interests. Physicians should strive first to prevent disease; lawyers should apply the law to prevent auto casualties; economists should try to clarify product and service characteristics in the context of quality competition; engineers should make technology more humane as a condition of its use; scientists should anticipate the harmful uses of their genius.

All these ideal missions unfortunately possess neither the outside career roles for their advancement nor the barest of independence for the organizationally employed professional to exert his conscience in practice beyond that of the employer's dictates. The multiple pressures and sanctions of corporate and government employers are very effective to daunt the application of professional integrity. When on occasion such integrity breaks through these restraints, the impact is powerful, which might explain the organization's determined policy of prior restraint.

During the past half dozen years of disclosures about corporate and government injustices, the initiators have largely been laymen or experts who were outsiders to the exposed. The list is legion—black lung, brown lung, DDT, mercury contamination, enzymes, phosphates and NTA in detergents, SST hazards... MER-29, and nerve gas storage and disposal. Inside the systems, however, mum's the word.

Three basic changes are needed as a start.

First, Congress should enact legislation providing for safeguards against arbitrary treatment by corporations against employees who exercise their constitutional rights in a lawful manner. At a minimum, such an act would help Congress obtain expert witnesses for its hearing and authorize the courts to protect a professional's "skill rights" in a far more defined manner.

Second, employed professionals should organize to provide a solid constituency for the adoption by management of the requisite due process procedures, which the professional can appeal to or enforce in the courts.

Third, professional societies should clearly stake out their readiness to defend their colleagues when they are arbitrarily treated for invoking their professional ethics toward the corporate or government activity in which they were involved. Most of the established professional societies or associations never challenge corporate or governmental treatment of lawyers, engineers, scientists, or physicians as the American Association of University Professors has done on occasion for university teachers denied academic freedom. And where there is no willingness to challenge, there is less willingness for the employee to dissent.

To require an act of courage for stating perceived truth is to foster a system of self-censorship and the demise of individual conscience against the organization.

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quest of the Office of Telecommunications Management, Executive Office of the President. Copies of the full report, *The Application of Social and Economic Values to Spectrum Management*, may be obtained from the Committee on Telecommunications, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

Remote-control laser could control air pollution

A new device for detecting and measuring air pollution may result from recent research at the Polytechnic Institute of Brooklyn.

This research indicates the technical possibility of an instrument that could scan the sky for kilometers around, measuring types and degrees of air pollution by remote control.

Using a similar device, exhaust fumes from jet or rocket engines could be measured quickly and accurately. This same instrument could even lead the way to a cleaner gasoline engine.

The experiments of Prof. S. Lederman and Dr. G. F. Widhopf are based on the Raman scattering principle.

They have worked out a way of asking a specific question and getting an immediate answer. To do this they used narrow-bandpass filters and preset spectrographs to block out all light radiating from the test mixture except the specific wavelength of the gas being checked for. The light then passed into a phototube, which registered not only whether gas was present but also how much of it—according to the light's intensity.

The report is entitled "Specie Concentration Measurements Utilizing Raman Scattering of a Laser Beam." The work was supported by the Advance Research Projects Agency through the U.S. Office of Naval Research.

Lehigh adopts program in environmental sciences

A new program for undergraduates, leading to a major in environmental sciences and resource management, has been adopted at Lehigh University in Bethlehem, Pa. The program embraces numerous disciplines within the university's three colleges—the College of Arts and Science, the College of Engineering, and the College of Business and Economics; it will be directed by Dr. E. E. MacNamara, assistant professor of geology.

Students electing the new major may tap the resources of the university's departments of mathematics, physics, English, chemistry, geology, biology, civil engineering, chemical engineering, economics, and government.

Individual programs may be arranged to provide concentration on a specific environmental problem such as air or water pollution, solid-waste disposal, or land planning. A broad program may also be developed to create an awareness of the total environment and its problem.

The program provides basic preparation either for advanced study or an immediate career in environmental management and conservation. Graduates of the program might expect to take part in planning, education, research, and coordination of environmental programs for all levels of government, schools, and industry.

As graduate study is available for students contemplating some of these career areas, the program provides thorough preparation for further study in specific areas of environmental science.

Technology-society relationship is probed

"Engineering and the Technological Society" provided the topic for a ten-day conference at Ohio University, Athens, during the month of July. The conference, which was supported by the National Science Foundation, was attended by 40 faculty members from 25 states in the U.S. and from Canada and Brazil. Approximately 60 percent of those present were from engineering fields; the others were from the social sciences and the humanities.

The purpose of the conference was to provide an opportunity for college teachers to study and discuss the relationship of new courses and perhaps curriculums concerned with this matter. One of the principal topics of discussion was the development of courses whereby nonengineering students can obtain an insight into the world in which the professional engineer operates. Another meeting objective was to discuss the development of better programs in the social sciences and the humanities for engineering students. As the conference progressed, the broad aspects of the interrelationship between engineering and society were brought into focus and considered at length.

At the conclusion of the conference, the following resolution was adopted.

• • •

"We, the undersigned engineers, scientists, scholars and educators, have examined the human implications of modern technology. We conclude that irresponsible uses of technology present a clear threat to human life. We further conclude that the humane and judicious use of technology offers untold promise for the future.

"We affirm that man is morally responsible for the manner in which he

uses technology to diminish or to enhance the quality of life.

"As educators we resolve to seek to promote a general understanding of the societal implications of modern technology. To do so we shall encourage new interdisciplinary courses, research, project and area studies, and innovative educational methods to supplement and enrich the traditional curricular programs.

"As concerned individuals we resolve to encourage governmental and industrial policies which reflect an increased awareness of the impact of technology upon mankind."

Signed by: R. C. Dorf, Ohio Univ.; C. M. Overby, Ohio Univ.; I. Blajberg, Federal Coll. of Rio de Janeiro; S. Borman, Newark Coll. of Engineering; D. C. Botting, Univ. of Washington; J. Brown, Southern Illinois Univ.; R. H. Clark, Univ. of Missouri at Rolla; T. S. Dean, Oklahoma State Univ.; M. A. Eisenberg, Univ. of Florida; J. Fuller, Univ. of Montevallo; M. J. Furey, Virginia Polytechnic Inst.; H. A. Kallsen, Univ. of Alabama; R. Keil, Stout State Univ.; G. H. Keitel, Drexel Inst. of Technology; J. H. Krenz, Univ. of Colorado; D. C. Lemmon, Western New England Coll.; A. Luknic, Worthington State Junior Coll.; C. P. Marion, Jr., Univ. of Miami; H. McQueen, Sir George Williams Univ.; Brother P. S. McGarry, Manhattan Coll.; D. E. Moe, Windham Coll.; J. B. Murdock, Univ. of New Hampshire; M. O'Brien, Univ. of California at Davis; J. Onila, Purdue Univ.; D. M. Parke, Pennsylvania State Univ.; W. Rand, City Univ. of New York; H. P. Sheng, Youngstown State Univ.; G. R. Town, Iowa State Univ.; R. C. Walker, Bucknell Univ.; C. P. Wolf, Brown Univ.; D. T. Worrell, West Virginia Univ.; W. Tripp, Kansas State Univ.

EMC report highlights 'equal opportunity' data

Some 4500 women and 3000 U.S. Negro engineering students are currently enrolled in U.S. engineering schools according to a recent survey by the Engineering Manpower Commission of Engineers Joint Council.

The 108-page report gives detailed breakdowns of enrollment by school and class in 827 different institutions, from preengineering to doctor's degree programs, for the 1969-70 school year. Statistics are reported for 106 different engineering and technical curriculums. Particular emphasis in the survey was placed on identifying the whereabouts of Negro, women, and foreign students in U.S. engineering schools. This information should be of value to employers interested in developing "equal opportunity" hiring plans.

The survey confirms a general de-

June 7, 1972

Mr D. G. Fink
IEEE
345 West 47 St
New York 10017

Dear Donald

Stephen Unger called me today and asked that I serve on a committee within the Committee for Social Responsibility in Engineering, and I said I would but I can't be active until the fall, when I'll be through with a biography of David Sarnoff.

I just wanted to say to you, and to President Tanner and Dr Emberson, that I am sympathetic with the efforts of CSRE and am glad its petition is getting serious attention by the officers and board of directors. As you know, I have harbored these ideas, you might say pre-natally, before CSRE was formed. Through my work at The Nation, I know of Seymour Melman's efforts, also antedating the formation of CSRE, to correct the imbalance between military and space technology on the one hand and civilian-oriented technology on the other. Melman's piece in the March 20, 1972 Nation, "The Big Machine Breaks Down," is of particular interest in this connection. Even if you discount some of Melman's observations, his thesis must be taken seriously.

I think Spectrum is a fine magazine; further attention to the social aspects of engineering would make it even better. And that holds for IEEE as a whole. I don't speak as an economically distressed engineer; I have been inactive in the profession for many years. But once having been in it, one remains spiritually an engineer in some part, a member of a fellowship. So I would feel a lot better if we shouldered our collective responsibility and played a more creative role. I think that feeling will be increasingly evident among our members.

Sincerely



Carl Dreher

July 5, 1972

DR. DONALD P. GEESAMAN
Bio-Medical Division
Lawrence Radiation Laboratory
P.O. Box 808
Livermore, California 94550

Dear Dr. Geesaman:

I am sorry to be so late in thanking you for the copy of your AAAS paper, "Adversary Science and Energy Decisions," which you sent me last February at my request. I find your paper very thought-provoking and your specific proposal constructive. You asked in your note if I had more than passing interest in the subject, and I do indeed, but unfortunately I do not have more than passing time to devote to it.

One suggestion has occurred to me that might interest you. You propose university groups to prepare public adversary arguments on some technologies. It seems to me that if the professional societies were fulfilling their proper function, they might undertake to form such groups. Up till recently it would seem most unlikely that the societies would undertake any such activity. However, the American Society of Mechanical Engineers has recently formed a Division on Technology and Society which is one of the eight or ten ASME Divisions. Similarly, the Institute of Electrical and Electronics Engineers is in the throes of forming (over some opposition) a Professional Group on Social Implications of Technology which will be one of 25 or 30 Professional Groups of the IEEE.

It is possible that these two branches within these professional societies would be interested in undertaking activity similar to that which you propose. If you wish, I could bring your ideas to the attention of either or both of these groups, or you could contact them directly. The Chairman of the ASME Technology and Society Division is Dr. Victor Paschke, c/o Fellowship House Farm, R.D. 3, Pottstown, Pennsylvania 19464. The IEEE group is not really in existence yet, but you could contact Professor Stephen H. Unger, Electrical Engineering Department, Mudd Building, Columbia University, New York 10027.

Even if this suggestion doesn't seem useful to you, I would like to be on your mailing list, so to speak, for items you may be distributing pertinent to your proposal.

Sincerely yours,

CB:fs

CC: Victor Paschke

✓ Stephen Unger

CARL BARUS

Associate Professor of
Electrical Engineering



THE INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS, INC.

Postmarked June 8

TECHNICAL ACTIVITIES BOARD

TECHNOLOGY / SOCIETY INTERFACE COMMITTEE

Meeting Notice

The first meeting will be held as follows:

Date: Saturday, June 24, 1972
Time: 9:00 AM to 4:00 PM (lunch will be served)
Place: Studio Room 115
Commodore Hotel
42nd Street and Park Avenue
New York, NY

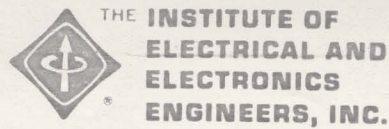
Note: Please notify

Dr. Edward A. Wolff
1021 Cresthaven Drive
Silver Spring, Maryland 20903
Office phone: 301-982-2265
Home phone: 301-439-1152

if you plan to attend so adequate hotel arrangements can be made.

Agenda

1. Introductions
2. Review of IEEE actions and present organizational arrangement.
3. Formulation of
 - a. Name *purpose*
 - b. Scope
 - c. First year goals
 - d. First year activities
 - e. First year results
(suggestions attached)
4. Committee organization
5. Other business



TECHNICAL ACTIVITIES BOARD

Technology/Society Interface Committee

May 23, 1972

SCOPE

1. Examine effects of present technology on society.
Lack of engineering for environmental preservation, good communications, weather satellites.
2. Examine effects of probable new technology on society.
Energy needs, broadcast satellites, cable to home, low-cost telephone, low-cost computer services, earth resources satellites, physiological monitoring, environmental monitoring, automobile electronics, electronic mail
3. Determine new technology needed to solve society problems.
Mass-produced housing, effective mass-transit, pollution sensors
4. Determine attitudes of society toward engineering.
Attitude surveys
5. Conduct programs to explain technology to society.
Position papers for society, information for congress, PR function (examine different groups in society and approaches thereto)
6. Conduct programs to explain society needs and concerns to IEEE members.
7. Identify IEEE resources in technology areas interfacing with society and develop programs to utilize these resources.
8. Monitor other activities directed at the technology/society interface.
(gov't, universities, industry, other societies, IEEE)

FIRST YEAR GOALS

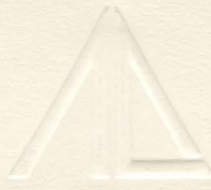
1. Document existing efforts directed at the technology/society interface.
2. Design programs appropriate to IEEE.
3. Identify IEEE resources available and required for the programs.

FIRST YEAR ACTIVITIES

1. Compile a summary of existing activities directed at the technology/society interface being undertaken by IEEE, other societies, government, education and industry both in the U.S. and abroad.
2. Compile a list of areas of technology that now or will interface with society.
3. Compile a preliminary list of technological needs of society.
4. Compile a list of resources within IEEE knowledgeable in the interface areas that might be utilized by this committee and develop plans for such use.
5. Design a program for documenting attitudes of society toward engineering
6. Design a program for communicating technology to society and a program for communicating society needs and desires to IEEE members.

RESULTS OF FIRST YEAR ACTIVITIES

1. Lists of existing activities, areas of technology, technology needed, and resources needed.
2. Plans for programs to document society attitudes and to communicate with society and IEEE members.



Arthur D. Little, Inc. ACORN PARK · CAMBRIDGE MASSACHUSETTS 02140 · (617) 864-5770

June 20, 1972

Prof. Stephen H. Unger
229 Cambridge Avenue
Englewood, New Jersey 07631

Dear Steve:

Per our telephone conversation, this is to summarize what I believe an IEEE Professional Group (or equivalent) should do in the area of social responsibility in engineering.

First and foremost, this must include publishing papers in this subject area. Historically, this has been the means whereby all professional societies exchange views and information, disseminate new ideas, and formulate a consensus of opinion. Because of the highly subjective and controversial nature of this subject, providing a public forum for discussion would be particularly important, and I would anticipate that the exchange of views might get to be very lively and of general interest to a large proportion of the membership.

This raises the question of the media for publication--i.e., a publication of the Professional Group or Spectrum. This Group will probably generate a higher than average percentage of papers suitable for Spectrum, and I hope that Spectrum responds by devoting a significant amount of space. After all, we have a lot of catching up to do after years of virtually ignoring this area. But I do not believe that Spectrum can be the only means for publication. The Group should publish its own periodical, as a "sounding board" addressed to those particularly interested in this subject and to permit publication of papers which treat some aspects in more depth than would be of general interest to readers of Spectrum.

As second priority, I would nominate the activities in Student Chapters. The image of the engineering profession, particularly among younger people, has become somewhat tarnished, and this is the place to meet that challenge head-on. One of the primary objectives should be to promulgate the view that engineering is the means for solving environmental problems, not just the cause of all of them. Activities in the engineering schools would be required to attract and keep competent students and to keep them working within the "establishment".

CAMBRIDGE, MASSACHUSETTS

ATHENS BRUSSELS CARACAS LONDON MEXICO CITY NEW YORK PARIS RIO DE JANEIRO SAN FRANCISCO TORONTO WASHINGTON

Arthur D. Little, Inc.

June 20, 1972

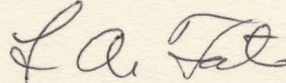
- 2 -

Prof. Stephen H. Unger

Third, there should be sessions and discussion forums at the IEEE Conventions. In short, I believe that the IEEE should include all the activities implicit in the formation of a Professional Group on Social Responsibility. Furthermore, this Professional Group should correspond and interact with other professional societies where the activities and interests are interdisciplinary or where an unified position or cooperation of a broader spectrum of the engineering-scientific fraternity is involved.

Getting this subject out into the open forum for thoughtful discussion is long overdue, and our public image is suffering for our inaction. I believe that IEEE should initiate prompt action in joining other professional societies in becoming active in this area.

Very truly yours,

A handwritten signature in cursive script, appearing to read "L. A. Tate".

L. A. Tate

LAT/ml

Professor Steven H. Unger
Electrical Engineering
Columbia University
New York, New York 10027



Dear Professor Unger:

June 20, 1972

I would like to express to you my interest in serving on the committee that the IEEE is contemplating setting up, to study social implications of technology. To that effect, I have already sent Dr. E. A. Wolff (IEEE TAB) a biographical sketch (a copy is enclosed for your records).

My primary interests in the area of social implications of technology are pollution and the misuse of technology. As a sideline, of course, I am also a great believer in population control (ZPG at the very least!) since, in my opinion, as the standard of living increases, so does the per capita pollution. Hence, the most effective method of decreasing overall pollution is via a decrease in the overall population of the earth. In this way, hopefully, an ecological balance may be achieved between nature and man.

With regards to pollution, I feel that the IEEE has a lesser role to play than with regards to the misuse of technology, especially since most production associated with electrical engineering is of the "clean" variety. I feel, rather, that the elimination of pollution is best accomplished by the pressure of active social groups and individuals. Though I feel that the IEEE has only a minimal role to play in the elimination of pollution, I personally, have been active in this area. As evidence of this, I am enclosing a copy of a letter recently sent to me by the N. J. Department of Environmental Protection.

In the areas dealing with the misuse of technology, some of my areas of interest include privacy, misuse of information stored in computer data banks, the development of inhumane weapons, and the general effects of high technology on the quality of life.

Professor Steven H. Unger
June 20, 1972
Page 2



If you need more detailed information, please feel free to contact me anytime. My phone numbers are 609-443-1320 (home) and 609-452-2700, X3370 (work).

Thank you for your consideration.

Paul Russo

Dr. Paul M. Russo
Systems Design Research

PMR:ln
Enclosures

To: Dr. Edward A. Wolff, IEEE TAB

Subject: Paul M. Russo - Bio Sketch

Personal data: Born in Plevlje, Yugoslavia, on February 22, 1943.
Emigrated to Canada in 1951 (presently a Canadian citizen).
Became a permanent U.S. resident in 1972.

Education: B. Eng. (Eng. Phys.), McGill University, 1965.
M.S. (EE) and Ph.D. (EE) in 1966 and 1970 respectively,
both at the University of California, at Berkeley.

Occupation: 1969-70, acting assistant professor in EE at U.C.
Berkeley. 1970 to present, member of the technical staff
at RCA Laboratories, Princeton, N.J. Areas of interest
have included lasers, system and circuit theory, computer-
aided design, and computer architecture. Author of four
technical articles, primarily in the area of computer-
aided design.

Memberships: IEEE, ACM, Eta Kappa Nu, Sigma Xi, McGill University
Engineering Honors Society (President 1964-65), Princeton
Ski Club (President for 1972-73 term), CSRE (Committee
for Social Responsibility in Engineering).

1021 Cresthaven Dr.

*Silver Spring, Md.
20903*

Dr. Paul M. Russo
/ck



State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY
JOHN FITCH PLAZA, P. O. BOX 1390, TRENTON, N. J. 08625

June 8, 1972

Mr. Paul Russo
Davonshire Drive
Windsor Castle Apts., Apt. C-2
Cranbury, N. J.

Re: Department of Environmental Protection vs. Walker Gordon
Laboratory Company.

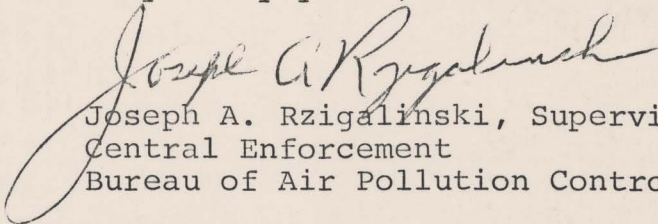
Dear Mr. Russo:

Please be advised that on April 27, 1972, a Court Order was issued to the Walker Gordon Laboratory Company dictating that they correct all air pollution emission sources by December 15, 1972. The Order includes a complete schedule which indicates dates for the completion of control installations relative to specific emission sources.

At this time, the Department wishes to thank the residents of your community for their cooperation in providing the necessary information and affidavits which eventually brought this matter to a successful conclusion. It is only through the concerned and enlightened citizens' response which you and your neighbors so clearly demonstrated that the Department of Environmental Protection can effectively enforce the air pollution laws of this State.

Should you have any questions regarding the Order or the enforcement of its provisions, please do not hesitate to call or write us. Thank you very much, again, for your very kind cooperation.

Very truly yours,


Joseph A. Rzigalinski, Supervisor
Central Enforcement
Bureau of Air Pollution Control

JAR:dlc

Written in Spring 1971

Biography of A. D. Wyner

Aaron D. Wyner (S'58-M'63) was born in New York, N.Y. on March 17, 1939. He received the B.S. degree in mathematics and physics from Queens College, Flushing, N.Y., in 1960, and the B.S., M.S., and Ph.D. degrees in electrical engineering from Columbia University, New York, in 1960, 1961, and 1963 respectively.

He has been a full and part-time faculty member of the Department of Electrical Engineering at Columbia University, and a consultant to the IBM Thomas J. Watson Research Center, Yorktown Heights, N.Y. He is now a member of the Mathematics Research Center of Bell Telephone Laboratories, Murray Hill, N.J., and a part-time Professor of Electrical Engineering at the Polytechnic Institute of Brooklyn. For the year 1969-1970, he was on leave from Bell Laboratories at the Weizmann Institute of Science, Rehovot, Israel, and the Technion Israel Institute of Technology in Haifa, on a Guggenheim Foundation Fellowship.

Dr. Wyner is a member of Tau Beta Pi, Eta Kappa Nu, Sigma Xi, and SIAM. He has served as Chairman of the Metropolitan New York Chapter of the IEEE Information Theory Group, and is presently a member of the National Administrative Committee of this Group. Since September, 1970 he has been Associate Editor of these Transactions (for the Shannon Theory).

Frank Kotasek
104-60 Queens Blvd.
apt. 17-L
Forest Hills, N.Y. 11375

Education

BSEE - 1963 - M.I.T., Cambridge, Mass.
MSEE - 1969 - M.I.T.

Employment

1959-61 technician - IBM, Kingston, N.Y.
1963-67 electronic engineer - Sanders Assoc., Nashua, N.H.
1969-pres. electronic engineer - Sperry Rand, Sperry Div., Great Neck, N.Y.

Pertinent Activities

- participated in effort to form an IEEE Group on Social Implications of Technology
- member, The Committee For Social Responsibility In Engineering, 637 W. 125th St., New York, N.Y. 10027
- member, IEEE
- assoc. member, National Society of Professional Engineers

Paper

"A Step Toward Responsible Technology: Modernizing Our Engineering Societies," N.Y. Academy of Sciences conference on the social responsibility of engineers, April 15, 1972, New York, N.Y.

Frank Kotasek

SUGGESTED ACTIVITIES FOR TAB COMMITTEE ON THE ELECTROTECHNOLOGY/
SOCIETY INTERFACE

1. Publicize Committee activities via Committee newsletter, Spectrum, section newsletters, trade journals.
2. Publish one issue of a journal comprised of papers on social implications of technology.
3. Organize panel discussions on social implications of technology at IEEE Convention and other conferences.
4. Provide speakers for and stimulate regional activities.
5. Co-ordinate and stimulate activities of existing IEEE groups in area of social implications of technology.
6. Encourage broad, direct membership participation in Committee activities at local and national level. Build up a contact list of interested IEEE members and potential speakers and authors.

I am particularly interested in taking part in activities 1,2, and 6 above.

SOME SUGGESTED TOPICS FOR STUDY

1. Long term availability of power sources; effect of thermal pollution on biosphere.
2. Application of electronics and systems engineering to the alleviation of pollution problems.
3. Application of engineering talent to urban problems and transportation.
4. Setting of technological priorities to allocate R&D funding in accordance with the needs of society.
5. The role of the government in technological research and development.
6. The role of technology in the Indo-China War.
7. Effects of data banks and electronic surveillance techniques on privacy.
8. Responsibility of engineers for the consequences of their work.

0527-548

KEITH W. BOSE

11 Dexter Lane
Kings Park, L.I., New York 11754
Telephone 265-0949 Area Code 516

June 14, 1972

Mr. Steve Unger
229 Cambridge
Englewood, New Jersey

Dear Steve:

Since talking to you I discovered that I am no longer on the IEEE rolls. In view of that, together with my disenchantment with the IEEE, I feel that I will not be able to accept your invitation to work on the new Committee. Nevertheless, please keep me in mind so far as your efforts are concerned. I will continue to contribute wherever I can. In my new work as a job-developer, I interview many unemployed engineers. There appears to be plenty of sentiment for stronger organization, but the economic realities are ominous.

The sociological aspects of engineering, toward which we are concerned, mean that the profession must develop the ability to protect the public from harm due to fraud, misspent effort, and shoddiness committed in the name of engineering and technology. Because engineers are salaried workers, they are subject to coercion. Maybe we need a highly motivated group that can work outside of the engineering establishment, free of both corporate and educational hierarchy. There is a great segment of the technical management elite who react as though people exist to serve the vested interests of technology, rather than vice versa. Moreover, an attractive bit of gadgetry that has no social function should be considered a laboratory curiosity, rather than an exotic gimmick to attract investment capital.

Please extend my regards to your colleagues on the Committee for Social Responsibility in Engineering. If you need help with a newsletter, let me know.

Kindest regards,

Keith

KEITH W. BOSE

KWB:bp



IEEE Group Statements (brief summary)

Citroni (very brief statement) Committee ^{purpose} should be to motivate concern by presentation at Conf. & public. of articles.

Elly Concern ~~to~~ about crimes against humanity via technology
(VN - nuclear - anti-personal bombs etc.)
environmental problems

engineer's freedom of action - AAUP type approach
Classify engineer w.r. to ~~some~~ responsibility levels
(project engineer etc.) & salary schedule.

Engineers committees to advise public bodies on use of technology.

RCA

June 13, 1972

- Dear Steve,

Toni Robbi called me and told me about the change in plans and format for the IEEE meeting on Social Responsibility. As I expect to change jobs and probably end up on the West Coast within the next few months, I don't feel that I would be able to contribute very much if the working committee consists of only 3 or 4 people. If the group's concept is changed again, I would like to be a part of this larger group. Enclosed is a copy of my biography

Sincerely

Harry G. Freeman

Ford Foundation

Norm Balabanian

573-5000 Mr. Grinker

Gov't. & Law Division

Call Tom Cooney if necessary

301-982-2265

June 24

Comodore Hotel
9:00

~~June 24~~

Mason

Paul ^{M.}~~Em~~ Russo (RCA Subs.)

John B. Lewis (814) 865-~~4700~~ 8-10:50
-6452
EE Dept Penn. St. Un. Ph. Pa.
Call 11:00 wed.

man Paul ✓

GROSS
arch. Bernstein

5. Aims of Purpose

- (2) Promote sensitivity to and understanding of technology and society.
- (3) Promote the conception of means and implement programs for predicting and evaluating the impact of technology on society.
- (4) Promote an interaction ^{between} IEEE and others on the impact of technology on society.
- (1) Develop means to encourage and support professional and social responsibility in the practice of engineering.
- (5) Take appropriate action to ~~complement~~ implement programs.

Scope includes

apdx 1-8 (see mod. of 5 & 6)

- 5 & 6 Committee among agencies of between engineers & society or needs of citizens of society & potentials of technology
9. The impact of society on technology (constraints & stimulators)
10. Promoting of social responsibility in the practice of engineering
11. Existing content & levels of educational programs and relevant new programs
12. involvement of IEEE members.

Aug. 12 - next meeting

Provide for 1st year action

1 Aug A. develop committee procedure

^{Ko-Taspen}
~~Stoller~~ B. Publishing direct program to encourage participation

Persak C. Newsletter

Chyn D. ~~Publ. Committee~~ ~~Proc. and a spectrum sub.~~

Benz E. Intercomm.

^{SAGE}
~~Stoller~~ F. list IEEE activities ~~methodology & publishing~~

Jate G. other study

Watt H. Bibliography

Emerson 752-680

X 535 RDE

X 333 PDE

Publin I. IEEE Activists

(Committee to help
Tech.)

Higgins J. Subject matter group

Stoller - contact IEEE activists

By July 24
staff (V. Ch. etc)
Schedule

Sub (Mal Birney) NYAC. of CSRE King Co
plan # of speakers.

Harpers' brake article to mal

6/12/72

Proposed Structure for IEEE Committee on Social
Implications of Technology

This outline is intended as a basis for discussion.

(See also the statement of purpose of the proposed IEEE Group on Social Implications of Technology.)

1. The purpose of the committee is to provide a forum for the interchange and promulgation of ideas. Care should be taken to keep the forum open to a variety of viewpoints, and to involve as many people as possible in the process.

Organizationally there should be a governing board, local chapters, topical and functional subcommittees, and the usual set of officers. Terms of office should be short and not renewable without a break. Continuity can be attained by means of overlapping terms.

2. Suggested Functional Subcommittees

2.1 Publications

To handle procedural matters having to do with the production of a newsletter and/or other such publications to be issued by the committee. To arrange for publication in other IEEE publications of material generated by the committee.

2.2 Meetings and Speakers

To deal with procedural aspects of workshops, meetings or sessions organized by the committee or to provide assistance in such matters as requested by local chapters of the committee.

To organize a speaker's bureau on topics within the scope of the committee to serve IEEE local or student chapters, and perhaps other organizations.

2.3 Liason

To maintain contact with and, where appropriate, coordinate activities with social implications committees within IEEE Groups and Societies or within other technical societies such as ASME or ACM. To assist in and promote the formation of local chapters of the committee.

2.4 Membership

To actively seek new members.

2.5 Group Formation

To prepare a constitution for an IEEE Group on Social Implications of Technology and to recommend appropriate steps leading to the formation of such a group.

3. Suggested Topical Subcommittees (Descriptive statements merely suggest the scope and should not be considered as definitive. Nor should the list be considered as necessarily complete.)

3.1 Environment.

Matters involving the effects of technology (principally electrical) on the environment, and how constructive changes can be made leading toward a stabilized ecology.

3.2 Urban Technology.

Problems involving urban transportation, crime, energy distribution, etc. The application of system theory to social problems.

3.3 Social Responsibility in Engineering.

Codes of ethics for engineers, extent of personal, group and corporate responsibility, roles of professional societies, relations with non-engineering co-workers, the rights of employed engineers.

3.4 Information Transmission and Processing

Social consequences of data processing, CTV, satellite communications systems, etc.

3.5 National Defense.

Analyses of various alternative strategic assumptions and concepts as well as particular weapons systems or non-violent techniques with respect to military security, economic and other effects.

3.6 Education.

Consideration of curriculum changes in engineering schools to better serve society's needs. Courses in technology and society for engineers. Student participation might be encourage on this subcommittee.

3.7 Health Systems.

Social and ethical problems implied by new technology.

Victor Klig
Frank Kotasek
Stephen H. Unger

The undersigned IEEE members (above student grade) hereby petition the Executive Committee of the IEEE to authorize the formation of a Professional Group on Social Implications of Technology as described below.

The purpose of this group is to promote among IEEE members a sensitivity to the impact of their technology on society, and to conceive means to predict and evaluate that impact.

Some pertinent topics are the application of electronics to the alleviation of pollution problems, the effects of energy consumption on the biosphere, effects of data banks and electronic surveillance techniques on privacy, the application of engineering talent to urban problems and transportation, and the role of government in technological research and development. Ethics, the professional status of engineers, and the engineer's application of his technical knowledge to community affairs are also to be considered.

These purposes shall be pursued by encouraging research and study, by the publication of the resulting reports and treatises, by the holding of meetings for the reading and discussion of papers, and by any other activities necessary, suitable and proper for the fulfillment of these objectives. In keeping with the broad interests implicit in the purposes of this group, papers and articles shall be comprehensible to the non-specialist reader engineer.

Signature

Name (please print)

Affiliation

[illegible]

Articles for Transactions

opening editorial on publication policy

Controversy, both sides, quality

Survey of ^{social} ~~social~~ ^{engineering} ~~engineering~~ committees in existing IEEE

groups & societies

Invited papers ^{from} ~~from~~ each of above.

Papers on ~~concern~~ ^{concern} ~~on~~ ^{on} social implications

Codes of ethics & back-up by prof. societies

Can prof. unions ~~be~~ be used to support ethics

Restructuring of industrial council of consumer practices
to stabilize environment - waste

Survey of engineering & scientific groups concerned with
uses of technology, ethics, etc.

~~Fast~~ "Middle" technology for poor countries

Specific areas where technology is lagging (focus on EE)
transportation, power systems

CTV - how is it going to develop - effects of tech
& legal decisions on its value to society

Portraying technology - various etc.

Use of "system theory" in solving social problems

Military strategies as related to technology - alternatives &
methodology. Nonviolent defense of technology.

Effects of military development on industry, jobs,
education, economy etc.

Effects of secrecy, security clearance etc. on civilian

~~Person~~ Conversion of electronic identity to peacetime production

Civil Liberties ~~and~~ the employee and his employer

Right to communicate with fellow employees at job site

invitation to speakers at company sponsored forums

use of intra-company mail system

Use of company name for identification



THE INSTITUTE OF
ELECTRICAL AND
ELECTRONICS
ENGINEERS, INC.

TECHNICAL ACTIVITIES BOARD

TECHNOLOGY / SOCIETY INTERFACE COMMITTEE

Meeting Notice

The first meeting will be held as follows:

Date: Saturday, June 24, 1972
Time: 9:00 AM to 4:00 PM (lunch will be served)
Place: Studio Room 115
Commodore Hotel
42nd Street and Park Avenue
New York, NY

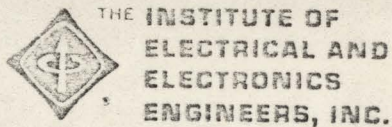
Note; Please notify

Dr. Edward A. Wolff
1021 Cresthaven Drive
Silver Spring, Maryland 20903
Office phone: 301-982-2265
Home phone: 301-439-1152

if you plan to attend so adequate hotel arrangements can be made.

Agenda

1. Introductions
2. Review of IEEE actions and present organizational arrangement.
3. Formulation of
 - a. Name
 - b. Scope
 - c. First year goals
 - d. First year activities
 - e. First year results
(suggestions attached)
4. Committee organization
5. Other business



TECHNICAL ACTIVITIES BOARD

Technology/Society Interface Committee

May 23, 1972

SCOPE

1. Examine effects of present technology on society.
Lack of engineering for environmental preservation, good communications, weather satellites.
2. Examine effects of probable new technology on society.
Energy needs, broadcast satellites, cable to home, low-cost telephone, low-cost computer services, earth resources satellites, physiological monitoring, environmental monitoring, automobile electronics, electronic mail
3. Determine new technology needed to solve society problems.
Mass-produced housing, effective mass-transit, pollution sensors
4. Determine attitudes of society toward engineering.
Attitude surveys
5. Conduct programs to explain technology to society.
Position papers for society, information for congress, PR function (examine different groups in society and approaches thereto)
6. Conduct programs to explain society needs and concerns to IEEE members.
7. Identify IEEE resources in technology areas interfacing with society and develop programs to utilize these resources.
8. Monitor other activities directed at the technology/society interface.
(gov't, universities, industry, other societies, IEEE)

FIRST YEAR GOALS

1. Document existing efforts directed at the technology/society interface.
2. Design programs appropriate to IEEE.
3. Identify IEEE resources available and required for the programs.

FIRST YEAR ACTIVITIES

1. Compile a summary of existing activities directed at the technology/society interface being undertaken by IEEE, other societies, government, education and industry both in the U.S. and abroad.
2. Compile a list of areas of technology that now or will interface with society.
3. Compile a preliminary list of technological needs of society.
4. Compile a list of resources within IEEE knowledgeable in the interface areas that might be utilized by this committee and develop plans for such use.
5. Design a program for documenting attitudes of society toward engineering
6. Design a program for communicating technology to society and a program for communicating society needs and desires to IEEE members.

RESULTS OF FIRST YEAR ACTIVITIES

1. Lists of existing activities, areas of technology, technology needed, and resources needed.
2. Plans for programs to document society attitudes and to communicate with society and IEEE members.

The undersigned IEEE members (above student grade) hereby petition the Executive Committee of the IEEE to authorize the formation of a Professional Group on Social Implications of Technology as described below.

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These purposes shall be pursued by encouraging research and study, by the publication of the resulting reports and treatises, by the holding of meetings for the reading and discussion of papers, and by any other activities necessary, suitable and proper for the fulfillment of these objectives. In keeping with the broad interests implicit in the purposes of this group, papers and articles shall be comprehensible to the non-specialist reader engineer.

Signature

Name (please print)

Affiliation

[illegible]

✓ Robbi

609-452-2700 x 3218

✓ Kate

(617) 864-5770 x 2883 (n ac 2872)
(914) 591-6086 (NY)

✓ Skolansky

(714) 833-6726

✓ Balabanian

(315) 476-5541 x 4401

home (315) 474-0166

✓ Reeman

(609) 963-6332
8000
PC6332

(609) 667-6592

Kotman (516) 574-3530

Wick

X:00 → X:35

X:11:30

1:40
40

1:80

2:20

8:00

10

2

7:40

(In preparation for meeting with
Tanner, Eubank etc.)

IEEE Group on Social Implications of Technology

Outline for Position Paper

Why is such a group necessary?

Issues involved are common to most, if not to all
subdisciplines.

Provides for a broader view of the problems.

Even where a problem in this area falls within a
particular sub-discipline, a more heterogeneous
group may have a perspective different from
those who are too close or too involved.

etc.

The existence of such a group would underscore
the importance of the area & ~~will stimulate~~
will stimulate research by providing a prestigious place to publish.

The group can stimulate additional activity by
committees within existing groups and societies.

We can interest younger engineers in joining IEEE

What issues would it deal with?

Ethics. Professionalism, particularly as it
affects the engineer's ability to act responsibly.

Technological assessment and forecasting. Studies of side effects of various proposed projects. Moral issues affecting technology. General trends in the technological needs of society.

What would the group do?

Publish transactions, hold meetings and forums, sponsor travelling lecturers, organize IEEE Convention sessions, etc.

In general, provide a variety of forums for the exchange of information ^{and} ideas as well as for the development and discussion of specific proposals.

How would it be organized?

Names
Kotasek
Kling
Baldwin
Unger
Robbi
Rubin
Mason
Higginbotham
Citron
Skolansky
John B. Smith
(Pres. S-C S)
Mal Benjamin
Harry Larson
Carl Baruch
Carl Wacker

Petition originators are prepared to assume the initial responsibility for launching the group, and preparing a constitution. We will stress the formation of local chapters.

How do we react to their specific suggestions for members?

Alkergunda
Ashkenazy
Bernstein
Corcoran
Ken Kuniton
Orazio
Julie Knapp
Donald Keating

6/26/72

Dear Mal,

Enclosed is material on the Neurology Conference and the Neurology of Academic Conf.

The aircraft Brake scandal ref. is Harper's mag Apr. 1972 pp. 45-52. It also appears in a book that is scheduled for publication in Apr. '72, Heilbroner et al, In the Name of Profit, Doubleday & Co. ~~too~~ Kermit Vandiver wrote the article (I was himself involved in the episode). He is now with the Troy Daily News (Ohio). Searle Sanson is the young engineer (I assume an M.E.) who was a principal participant (largely a victim). He is now with LTV. I am sorry I don't have a copy of the article to send you but I think Victor might be interested since it involves M.E. (Probably he already knows about it.)

Someone who might help with the Conference planning is Prof. John Lewis of Penn State & C. V. (814) 865-6452. I haven't spoken to him, but Victor King did & I know Lewis expressed interest in the Committee that will attend the meeting. He is a Chairman of the Committee on the Academy.

Keith Bose, an ex aerospace engineer who did some deep thinking while unemployed, might also be helpful both directly and indirectly (there supplying names of others who can report on military R & D). He is also interested in the committee, but ~~has~~ let his IEEE membership lapse

11 Dexter Lane

Kings Park, L.I., NY 11754

home phone (516) 265-0949

at work (Suffolk County Dept. of Labor)
~~(516) 265-0949~~ (516) 724-2500

X211

The page 1 story in the 6/30/72 issue of American Report (CALC) is by Robert Barkan, Pacific Studies Center, East Palo Alto, Cal. He is listed as a former MTS at BTL & a former Senior Engineer at Syracuse Electric's Electronic Defense Lab. He writes about unmanned bombers to be used in Vietnam. I know nothing else about him but he might be worth checking into.

On the privacy stuff: Alan ^{F.} Westeri (212) 280-3198

He is Prof. of Public Law at Columbia.

On tenure: William Van Alstyne, Prof. of Law, ~~Duke~~ Duke Un. currently chairman of AAUP Committee on Tenure & Academic Freedom. How about Admiral Hyman Rickover for ~~a panel~~ either the military or the ethics panel!

In citizen feedback: Thomas B. Sheridan Prof. of Mech. Eng., MIT
Dr. Chandler H. Stevens, Sloan School of Management, MIT
Prof. Edwin B. Parker, (Prof. of Communications - he's a social scientist) at Stanford Un.

On CTV, a leading authority is ^{Mr.} ~~Prof.~~ John E. Ward,
MIT EE Dept. (Vice President, Electronic Systems Lab.).

On non-technical aspects (~~the~~ legal, social etc.) of CTV,
Ralph Lee Smith of Mitre Corp. in Washington D.C. is
an excellent, extremely well informed & thoughtful man
(he wrote the World Nations crime of Nations mag. 5/18/70).

Sam Mason might be another good man to call on for
general help & advice - also to contact other MIT people.
He is very interested in the Committee.

(617) 864-6900 x2504 - office

(617) 522-7667

MIT EE Dept
Cambridge MASS 02139

Let me know if I can be of any further help.

Best regards,

Steve

U. Akron (9)
 U. Alabama (2)
 A. Einstein Coll. Med. (3)
 Bucknell U. (1)
 U. Cal. Berkeley (5)
 U. Cal. Irvine (5)
 U. C. L. A. (2)
 U. Colorado (3)
 Columbia U. (14)
 Cornell U. (2)
 U. Conn. (8)
 Dartmouth Coll. (3)
 U. Delaware (7)
 Fairleigh Dickenson U. (5)
 U. Florida (22)
 U. Idaho (5)
 Indiana U. (1)
 Johns Hopkins U. (4)
 Lamar U. (Texas) (8)
 U. Louisville (4)
 MIT (5)
 Memphis State U. (3)
 U. Michigan (8)
 Michigan State U. (5)
 Milwaukee Sch. of Eng. (8)
 U. Minnesota (5)
 U. Missouri (1)
 Mt. Sinai Sch. of Med. (2)
 Mt. Wachusett Comm. Coll. (2)
 U. New Hampshire (11)
 NYU (1)
 SUNY, Stony Brook (11)
 N. Dakota State U. (7)
 Norwich U. (Vt.) (1)
 Ohio U. (6)
 Oregon State U. (15)
 U. Pennsylvania (4)
 Penn. State U. (5)
 U. Pittsburgh (1)
 Polytech. Inst. B'klyn (1)
 U. Puerto Rico (9)
 Rockefeller U. (4)
 Rose-Hulman Inst. (Ind.) (3)
 Rutgers U. (4)
 San Diego State Coll. (2)
 U. Southern Cal. (2)
 U. S.W. Louisiana (3)
 Southern Methodist U. (3)
 Stanford U. (4)
 Stevens Inst. Tech. (6)
 Stout State U. (Wisc.) (2)
 Swarthmore Coll. (4)
 Syracuse U. (21)
 Temple U. (4)
 U. Tennessee (1)
 U. Texas at El Paso (7)
 Texas Tech. U. (13)
 Trinity Coll. (Conn.) (2)
 Villanova U. (1)

Virginia Polytech. & State U. (1)
 Washington U. (Stl Louis) (8)
 Western New England Coll. (3)
 Yale U. (1)
 U. Kansas (11)
 U. Toledo (5)

Companies, Gov't. Agencies etc.

Allen-Bradley Co. (2)
 Bell Tel. Lab's. (Holmdel) (14)
 Bell Tel. Lab's. (Murray Hill) (5)
 Berkeley Enterprises (1)
 California Computer Products (1)
 Chronotechnology Assoc. (1)
 CompuScan Inc. (1)
 Env. Prot. Agency (8)
 Geo. A. Hormel Inc. (1)
 IBM (Yorktown Heights) (6)
 IBM (Kingston) (6)
 Inficon (1)
 Massey-Ferguson Inc. (1)
 Metro-Dade Cnty DOTT (1)
 Mt. Sinai Hospital (4)
 NASA (12)
 NY State Legislature Staff (1)
 Park Ohio Industries Inc. (10)
 Picatinny Arsenal (1)
 RCA Laboratories (36)
 Response Systems Inc. (1)
 Ronald Press (1)
 Sanders Associates (19)
 Sperry Rand Corp. (126)
 Sylvania Corp. (12)
 Western Electric Eng. Res. Cntr. (1)

List current as of 4/22/72.
 Some additional signers did not list affiliation.

PROPOSAL FOR ESTABLISHMENT OF TECHNICAL COMMITTEE ON ECONOMIC DECISION ANALYSIS

Curt F. Fey

CONTENTS

I. MOTION

II. PURPOSE

III. ACTIVITIES OF OTHER ORGANIZATIONS

IV. REFERENCES

5/17/72

I. MOTION

I move that the board instruct the president to establish a technical committee on economic decision analysis.

II. PURPOSE

Economics has become an increasingly important part of computer engineering. To support this area a new technical committee is proposed. The committee is to function in the same manner as any other technical committee, differing only in subject matter.

The subject matter of this committee is computer industry economics. Two principal areas of economics concern members of our society. Professional problems (such as portable pensions, labor laws and other activities carried out by professional societies in medicine and law and university teaching) and underlying economic conditions which make or break our industry. (How has the industry attained its current position? What are industry alternatives? By what criteria can the alternatives be evaluated? Which of the alternatives are the most attractive?) The committee is to deal with both of these areas.

The committee will form work groups consisting of individuals living within communication distance. We are exploring the possibility of establishing one such work group in the Rochester, N.Y. - Washington, D.C. area. This work group is to prepare and analyze factual material for presentation at a workshop or meeting to be held in conjunction with one of the major computer societies conferences. The result of this workshop and meeting is to be submitted for publication either in the form of articles, special issues or as separate books.

III. ACTIVITIES OF OTHER ORGANIZATIONS

1. On March 24th the IEEE Board of Directors agreed in principle to recommend to the membership a change in the IEEE Constitution to permit expansion into nontechnical areas. (Tanner, 1972)
2. John Guarrera, President Guide Scientific Industries, Inc. , 11855 Wicks St., Sun Valley, Calif. 91352 has been appointed IEEE Government and Economics Coordinator for the U.S. by the IEEE Executive Committee. (N.A. 1972)
3. IEEE Ad Hoc Committee to Assess U. S. Economic Conditions

The committee consists of:

- V. J. Adduci, president, Electronic Industries Association
- E. Q. Daddario, senior vice president, Gulf and Western Precision Engineering Corp.
- D. E. Eckdahl, vice president, National Cash Register Corp.
- W. O. Fleckenstein (Chairman), executive director, Bell Telephone Labs of Research
- T. W. Folger, vice president, Kidder, Peabody and Co.
- W. F. Glavin, group vice president, Xerox Corp. president Business Development Group
- D. L. Grove, vice president and chief economist, IBM Corp. and chief executive officer
- C. L. Hogan, president, Fairchild Camera and Instrument Corp.
- A. R. McCord, group vice president, Texas Instruments, Inc.
- J. M. Kinn (Secretary), Director, IEEE Educational Services

The committee recommends:

1. Reduction in trade barriers
2. Incentives for capital investment
3. Lessening inflation
4. Incentives for industrial R & D through tax writeoff and special tax treatment of capital gains from venture capital and small business.

A summary of the report has been published in Spectrum (Fleckenstein, 1971). A full report is currently in preparation (IEEE (in prep.).

4. The IEEE Economic Analysis Committee concludes (Goldberg, 1971):
The plight of the industry "requires positive action, much publicity, dedicated bodies and hard work. We hope that these are forthcoming. We propose that the responsibility for making these assignments be the purview of the IEEE President. We now declare the work of the Economic Analysis Committee complete in accordance with our mandate."
5. Division 4 Committee on Professional Action and G-MTT PAC, chairman, identifies a strong need for the promotion of economic interests of engineers in such areas as conditions of employment, informing and influencing the government and publishing the engineers point of view through the media. (Division 4, 1972)
The chairman of the committee, Robert A. Rivers, Aircom, Inc., Union, N. H. 03887 has published an analysis of the economic environment and employment of Scientists and Engineers. He foresees a surplus of engineers and scientists in the years ahead. (Rivers, 1972)

7. Joint Societies National Employment Advisory Committee (JSNEAC)
Is a group of engineering societies, including the IEEE is aiding the U. S. Department of Labor by "launching a general information program emphasizing the role of engineers and scientists can fill". (Tanner, 1972)
8. AFIPS Committee on Social Implications, Dr. H. Sackman, Kansas State University, Manhattan, Kansas, Chairman. The committee has sponsored a series of invitational workshops and resulting in publications in book form. Abstracts of the publications are attached.

The Information, Utility and Social Choice - 1970
Planning Community Information Utilities - available summer 1972
Computers and the Problems of Society - available summer 1972
International Use of Computers - in preparation

9. Other AFIPS Publications

Legal Aspects of Selected Issues in Telecommunications, 1971
World Markets for Electronic Data Processing, 1971
Information Systems for Development and Future Expansion, 1970
Professionalism in the Computer Field, 1970
Government Regulation of the Computer Industry, 1972
National Survey of Public's Attitude Towards Computers, 1972

IV. REFERENCES

Fleckenstein, W. O., "Economic Conditions in the U. S. Electrical, Electronics and Related Industries: An Assessment", IEEE Spectrum, 8, December 1971, 63-71.

Goldberg, H. (chairman), "Economic Analysis Committee Report to the President of the IEEE", IEEE Transaction on Aerospace and Electronics Systems, EES-7, Nr. 5, Sept. 1971, 746-767.

IEEE Ad Hoc Committee to Assess U. S. Economic Conditions in the Electrical, Electronics, and Related Industries. "Economic Conditions in the U. S. Electrical Electronics and Related Industries:" New York: IEEE (in preparation).

"John Guarrera Named New Economic Coordinator", IEEE Spectrum, 9, April 1972, 8.

Rivers, R. A. (chairman), Division 4 Committee on Professional Action and G-MTT PAC, "Transforming IEEE", IEEE Spectrum, 9, February 1972, 11-14.

Rivers, R. A., "The Economic Environment and Employment of Scientists and Engineers", IEEE Transactions on Aerospace and Electronic Systems, Vol. AES-7, No. 5, September 1971, 768-776.

Tanner, R. H., "IEEE and the U. S. Employment Problem", IEEE Spectrum, 9, February 1972, 7-9.

Tanner, R. H., "IEEE Board Recommends Expansion Into Nontechnical Areas", IEEE Spectrum, 9, April 1972, 7.

THE IEEE and YOUR ECONOMIC FUTURE

- * What do you think the IEEE's future goals should be?
- * What are its present goals?
- * What does the IEEE do / not do for you?

The Rochester Section has asked an IEEE vice-president, Dr. Harold Chestnut, and the Director of Region 1, Mr. Harold Goldberg to join us March 28, to enable us to express our views on these and other critical issues.

Be sure to attend! The exchange of ideas will influence the IEEE's future.

TIME & PLACE:

March 28, 8:00 P.M.

R.G.& E. Employee Center, 700 Jefferson Rd.



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ARE YOU WORRIED ABOUT THE
FUTURE OF THE U.S. COMPUTER
INDUSTRY?

THEN ATTEND THE ORGANIZATIONAL MEETING OF
THE SOCIO-ECONOMIC COMMITTEE OF THE IEEE COMPUTER
SOCIETY. IT WILL BE HELD AT 12 NOON ON THURSDAY,
MAY 18, IN THE VENTNOR A ROOM OF THE HOLIDAY INN,
THE BOARDWALK, ATLANTIC CITY.

AMONG THE SUBJECTS WHICH WILL BE DISCUSSED
ARE THE CAUSES OF THE RECENT DECREASE IN ENGINEERING
EMPLOYMENT AND POSSIBLE REMEDIAL ACTION. PORTABLE
PENSIONS WILL ALSO BE DISCUSSED.

IEEE Computer Society
Socio-Economic Committee
The Ventnor A Room
12 noon, Thursday May 18
Holiday Inn
Boardwalk, Atlantic City, N. J.



INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.



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Name

Date

On the basis of newspaper accounts, it appears evident to us that Mr. Lawrence A. Tate has been the victim of an abuse of police power, and certainly he has been the victim of the usurpation of the judicial function by the IBM Corporation, his employer of 18 years standing.

The precipitous firing, of a highly valued employee, immediately upon his conviction of vague misdemeanor charges unrelated to his job, constitutes an arbitrary punitive action that is morally, if not legally, violative of our system of justice.

We call upon the management of the IBM Corporation to reinstate Mr. Tate with back pay, and to revise its administrative procedures so as to preclude penalizing of any employee for reasons unrelated to his qualifications or performance on his job.

We also call upon our fellow citizens to consider seriously this illustration of the fact that no one is immune to the exercise of arbitrary police power.

NAME

ADDRESS

AFFILIATION

Please return to: The COMMITTEE FOR SOCIAL RESPONSIBILITY IN ENGINEERING
137a West 14th Street
New York, N.Y. 10011