

Bookside - rough notes of 5/13/89 Mtg.

SOCIETY ON SOCIAL IMPLICATIONS OF TECHNOLOGY

SSIT AdCom Minutes
March 11, 1989

Attendees:

- N. Balabanian, Pres. 315-443-2652
- C. Barus 215-544-6130
- M. Benjamin 215-438-9729
- J. Bogumil 212-862-3188
- R. Brook 516-595-3136
- H. Lipson 201-735-2358
- P. Lubell 516-328-6710
- R. Newcomb 301-454-6869
- S. Unger 201-567-5923 H 914-789-7225 W
- A. Wald 212-305-2575

add - Jerry Rabow

1. Meeting at Empire State College called to order by Pres. Balabanian at 10:15 A.M., 3/11/89.
2. Previously circulated agenda adopted without change.
3. Minutes of previous meeting, 12/10/88, adopted without correction.
4. President's Report: Balabanian reported on several items of interest to us from a recent TAB Mtg. he attended:

TAB OPCOM will fund up to 4 officers from each Society to use "Compmail" on their computers.

Headquarters is moving all publication activities except Spectrum to Piscataway. The Education Board was cut from 54 to 14. It is hoped and expected that these changes will improve the operations significantly.

The Membership and Student Services Committee circulated a list of trade publications that they are providing free to new prospective members. This list was circulated at our meeting for additions and comments.

The Standards Coordinating Committee invites us to appoint a member to their Battery Standards Committee. No name was forthcoming.

Headquarters will provide an unaudited year end Financial Statement to us by Jan. 31 of the following year!

C. Specter has been exploring with the ^{*Geoscience & Remote Sensing Soc. of the*} ~~Canadians~~ the possibility of cooperating in producing a special issue of T & S on Disarmament. The discussions proved not to be fruitful. Norman H. Jacobson is willing to help edit, and she would like to move ahead with him. *She is pursuing*

Dorinda Paul, U. of Toronto as 2nd guest editor

The circulation of his c.v. produced questions about his point of view in selection of material. It was agreed that Balabanian would write Jacobson asking for his views on the subject matter. Unger will also contact others he knows.

5. Past President's Report: Unger reported on a special meeting on Ethics called by IEEE President Emerson Pugh to discuss whether the Ethical Code should be rewritten and what other measures should be taken to promote engineering concerns regarding ethics. The Dwon proposal, the Board of Director's amendment, the lack of activity of the Member Conduct Committee, and many other issues were discussed. Since this was a meeting to help inform the President's thinking, it was not expected to produce direct action.
6. Treasurer's Report: Apter wrote that he had been in touch with Headquarters regarding account of \$1,000 he had sent in that had apparently not been properly recorded.
7. Other Society Liaisons: Gardner sent in full report which is attached.

P. Lubell reported on USAB's standing committee on Communications and Information Policy (CCIP). Meeting in Washington, DC, it is concerned with industrial productivity, computer security, and high definition TV among other things. It formulates position papers for IEEE on these and similar topics. Balabanian suggested that it might be a good source of articles for T & S.

B. Brook reported on the ElectroMagnetic Compatibility Society's recent B of D Mtg. From that report, the following items were of particular interest:

EMC currently send Symposium records to Wroclaw, Poland, the IERE in the UK, and to Zurich, Switzerland.

A newly instituted engineer's certification program is hoped to upgrade the position of EMC engineering, particularly with respect to the people who control the budgets.

A new technical committee on consumer safety has been formed.

A. Wald reported on a new organization called The American Engineers for Social Responsibility based in Wash. DC. He will ask them for more information.

N. Balabanian reported that Osepchuk wants us to push the IEEE to support a committee for standards on radiation. Brook and Lubell will study the situation and report at the next mtg.

8. Standing Committee Reports:

Awards: Barus reported that Eric Brenner, a SSIT member in Nicaragua would like SSIT to interact with local members. It was suggested we send some

T & S magazines to them, and that they write us an article for T & S.

Also, the Awards Committee of USAB would like suggestions for award candidates.

Publications: Rabow reported that the March issue of T & S should be in the mail in early May. Material for the June issue is almost complete. The next Special Issue may be off schedule (Dec.'89 - Communications in Third World Countries). Leon Zelby at the U. of Okla. is willing to take over for Welchel who is resigning. Much appreciation was expressed for the excellent job done by Welchel. Balabanian will appoint Zelby. *Approved by Adams*
Rabow has not heard from Roger Stern the printer who appeared at the last mtg. with an interest in publishing T & S. It was decided not to pursue him since he was not showing an interest. Bogumil feels that the IEEE is now doing much better, and shows promise of further improvement with the move to Piscataway.

A long discussion took place regarding the possible dangerous social impact from the introduction of CD ROMS used for information transfer. Howard Lipson will organize a session at the Boston ELECTRO.

Conferences: Benjamin reported that the SSIT LA Conference is proceeding nicely. They are planning for 100 to 200 attendees! Papers were due for submission deadline in March, but they might accept one later. Conference Announcement is attached. The St Lawrence Section of the ASEE is holding a Conference "Science, Technology and Society". Announcement attached.

Specter asked Balabanian to detail her duties as a Conference Chairman. He suggested the following:

- 1) Contact our Chapter for specific information
- 2) Contact IEEE staff member in charge of conferences. Establish liaison for information about conferences that we could co-sponsor.
- 3) Contact Lipson regarding the Boston ELECTRO Conf.

Membership: The new Membership Brochure was circulated and greeted with enthusiastic approval. It was suggested that it be printed on both sides of a page in T & S with the suggestion that it be cut out by the reader, Xeroxed and circulated to colleagues.

12. New Business: Lubell circulated a petition on behalf of Earl Merrill Buckley who wishes to become a petition candidate for IEEE Pres. While, of course, SSIT took no official position, individuals were free to sign or not as they wished.
9. The next meeting will be held on Sat., May 13, 1989.
- 13 The meeting adjourned at 2:30 P.M..

8 Conferences - Spencer circulated report of her ISY activities. Unger moved we approve ~~the~~ her activities including the following plan for ISY Ed. Prog. as she reported below:

(~~the~~ copy items 1-3 of attachment III)

Lipson - Boston 90 ELECTRO. Implications of CD ROM session call it VLS Electronic Publishing. See A attachment Robbi raised a question about the usefulness of ELECTRO and other very large mtgs which are now being underattended. Suggestions were made to ~~be~~ present at smaller more specialized society mtgs. (e.g. - this one for Computer Society) ~~or publishing~~ Alternatively, continue with ELECTRO to get use of large facility but invite publishers and other non-IE³ people to make it really valuable. Also, ~~attracting authors to a "prestigious" session may ~~not~~ attract~~ high grade authors whose papers will be publishable.

Also talk to ~~Steger~~ IE³ Publishing Div. for ideas.

Benjamin - reported 48 papers scheduled; 6 turned down.

Memberships - follow	Mar 2 1989	2144	total active members
	Apr 23 1989	2295	

Nominations - Unger will call Malvina Tortos for accurate list of present ADCOM members. Unger select ~~the~~ ^{Nom. Comm.} ~~the~~ ^{Comm.} Unger select a slate of nominees (with due consultation) and see that the ~~balloting~~ ^{and balloting} nomination process is followed.

10 Boquinil moved - SSIT will participate in BIT Net. Unanimous

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

SOCIETY ON SOCIAL IMPLICATIONS OF TECHNOLOGY

**A DELICATE BALANCE:
TECHNICS, CULTURE, AND CONSEQUENCES**

The Los Angeles Chapter

Society on the Social Implications of Technology
calls engineers and scholars, business leaders and artists
for an Interdisciplinary Conference at:
California State University, Los Angeles
20-21 OCTOBER 1989

CALL FOR PAPERS

Our goal is to bring together recognized experts, committed professionals and interested students from widely disparate fields to discuss the applications and the implications of *technics*. Technology involves not only the knowledge of *how to do*, but must provide as well answers to: *should it be done*, and *can its consequences be managed*. These questions are the proper domain of cultural commentary. The conference will bring your ideas to a receptive audience and send you home with a network of peers and colleagues upon whose expertise and continued support you can rely.

Our themes were initiated at the Camahan Conference on **Harmonizing Technology with Society**, held at the University of Kentucky under the leadership of Professor John Jackson. We invite papers under the following broad themes:

- o THE DEPENDENCE OF GLOBAL PROSPERITY ON THE INTEGRATION OF MATERIALS AND INFORMATION
- o THE RESPONSIBILITY OF THE ENGINEER IN EDUCATION AND PRACTICE
- o THE ENGINEERED ENVIRONMENT AND NATURAL RESPONSE
- o THE ARTIST AS MAKER, COMMENTATOR, AND TRANSFORMER IN TECHNICS AND CULTURE

These major speakers are confirmed participants:

Hans Joachim Queisser, Ph.D., Director, Max Planck Institute for Solid State Physics, Stuttgart, Germany and Member, Board of Directors, Scientific American.
 Edward Wenk, Jr., Ph.D., Professor Emeritus of Engineering, Public Affairs and Social Management, University of Washington, Seattle.
 Crawford Holling, Ph.D., Professor, Institute of Animal Resources Ecology and Department of Zoology, University of British Columbia, Canada.
 Sheila Pinkel, M.F.A., Chair, Department of Photography, Pomona College, California.

We welcome historical, philosophical, and artistic contributions which parallel and complement technical studies. Prospective authors are invited to submit 600 word abstracts of original, unclassified papers or definitive proposals of art contributions.

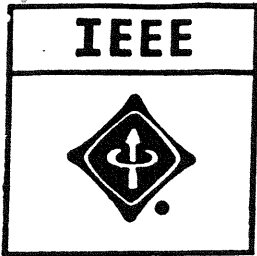
Submission deadline for abstracts and art proposals:	1 March	1989
Notification of acceptance:	1 April	1989
Final, camera ready, revision due:	1 June	1989

Send abstracts and proposed submissions to the Technical Program Chair or the Interdisciplinary Chair as appropriate:

TECHNICAL
 Professor Allen Jay Freedman
 School of Engineering and Technology
 California State University, Los Angeles
 5151 State University Drive
 Los Angeles, CA 90032
 (213) 224-2002; (818) 889-4676

INTERDISCIPLINARY
 Nik Warren, Ph.D.
 Otis/Parsons Art Institute
 134 Hart Avenue
 Santa Monica, CA 90405

(213)392-6595; (213)392-4422



CALL FOR PAPERS

ANNUAL MEETING of the St. Lawrence Section - ASEE

October 13 - 14, 1989

Thomas J. Watson School of Engineering, Applied Science, and Technology
STATE UNIVERSITY OF NEW YORK AT BINGHAMTON

THEME: SCIENCE, TECHNOLOGY and SOCIETY

KEYNOTE SPEAKER: John Truxal

- SUGGESTED TOPICS:
- Ethics & Professionalism
 - Impacts of Technology on Society
 - Women in Engineering & Technology
 - The Engineer & The Technologist
 - Teaching for Professionalism
 - Writing & Communication
 - Desktop Publishing

Your participation in the conference is invited. Papers are sought on these topics, as well as on other innovative educational ideas, instructional methods, or curricular/program concepts.

INFORMATION ON SUBMITTING PAPERS AND PROPOSALS

Abstracts of approximately 200 words should be typed single-spaced on 8.5x11 paper, and submitted by March 15, 1989 to:

Prof. Craig Bergman
Engineering Technology Department
The Watson School
SUNY-Binghamton
Binghamton, New York 13901
Phone: (607) 777-4329

- | | |
|----------------------|-------------------|
| ABSTRACTS DUE | - March 15, 1989 |
| AUTHOR NOTIFICATION | - April 20, 1989 |
| FINAL MANUSCRIPT DUE | - August 25, 1989 |



INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
SOCIETY ON SOCIAL IMPLICATIONS OF TECHNOLOGY
OTHER SOCIETY LIAISON

6624 Kirby Court,
Falls Church, VA
22043
March 4, 1989

Norman Balabanian,
President, SSIT, IEEE,
Electrical Engineering Dept.,
111 Link Hall,
Syracuse University,
Syracuse, NY
13210

Subject: Other Society Liaison

The following have been my contacts with societies other than SSIT since the Dec. 10, 1988 AdCom meeting:

National Association for Science, Technology and Society (NASTS):
On Feb. 3, 4 and 5, 1989 I attended the Fourth National Technological Literacy Conference which was held by the NASTS at the Crystal City Marriott Hotel in Arlington, VA. (although the brochures said Washington, D.C.) Through arrangements with the Special Services Center, Arlington, VA, our SSIT occupied Special Exhibit Area D12 in Salon D. I supplied my personal set of all twenty-four consecutive issues of the SSIT Technology and Society Magazine and only seven were left over. Ann Hartfiel, the PACE Manager, provided a logo and title background and a pink sheet describing how one could join the SSIT and obtain copies of the Magazine. The cost of the exhibit space was \$60.00. At the suggestion of Miss Hartfiel I submitted through channels a Project Plan and Financing Request Form to cover the \$60.00 expense for the exhibit space plus my personal expenses which include my prepaid registration fee.

At the conference F. James Rutherford, Head of Science Education, American Association for the Advancement of Science (AAAS), the Keynote speaker for the opening session, made the statement: "Science, mathematics and technology must all be part of the educational mix, in relationship to each other, and all three must be seen in social context".

Congressman Don Ritter (R-PA) substituted for Congressman George E. Brown (D-CA) and gave an interesting presentation on allocating the \$64 billion annually invested in research and development. When he commented that the U.S. should emulate Japan's teamwork by forming industry/government R&D consortiums and Congress should enact tax legislation that provides incentives for business to take a long

OTHER SOCIETY LIAISON

-term perspective he met with sharp disagreement from Richard Greenwood, representing the International Association of Machinists. I found the presentation by Joseph F. Coates on "Technology Assessment: Anticipating the Long-term Consequences of Scientific and Technological Development" with the audience participating to be of interest. The final meeting on "The State of the World" by Lester Brown, President, World Watch Institute, was very impressive and well received.

Section X, Societal Impacts of Science and Engineering, American Association for the Advancement of Science (AAAS):
No recent activities have come to my attention. Note, however, the report of participation by F. James Rutherford, AAAS, discussed above. Incidentally, I am on the mailing list for the AAAS quarterly, "Professional Ethics ~~XXXX~~ Report".

Technology and Society Division, American Society of Mechanical Engineers:
No recent activities have come to my attention.

Washington Area Chapter, Computer Professionals for Professional Responsibility: No recent activities ~~to~~ have come to my attention. I maintain contact with the Chapter President, David Girard, (202) 658-6252.

Respectfully submitted,

Vernon E. Gardner

Vernon E. (Veg) Gardner
(703) 533-0999

cc: J. Malvern Benjamin,
Secretary, SSIT.

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
SOCIETY ON SOCIAL IMPLICATIONS OF TECHNOLOGY
CHAPTERS COMMITTEE

6624 Kirby Court,
Falls Church, VA
22043
March 4, 1989

Norman Balabanian,
President, SSIT, IEEE,
Electrical Engineering Dept.,
111 Link Hall,
Syracuse University,
Syracuse, NY
13210

Subject: Report of the SSIT Chapters Committee.

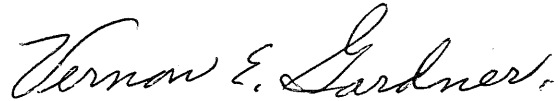
1. As for activities of the SSIT Chapters since the Dec. 10, 1988 AdCom meeting, the Chapter activities which have come to my attention are:
 - a. Northern Virginia/Baltimore/Washington Chapter:
 - (1) On Jan. 11, 1989 Dr. Michael B. Callaham, Sr. Analyst, International Security and Commerce Program, Congressional Office of Technology Assessment, and Associate Professor of Engineering and Public Policy, Carnegie-Mellon University, spoke to an audience of twenty-two on the subject, "Assessment of Advanced Space Transportation". This meeting was co-sponsored by the Washington/Northern ~~Baltimore~~ ^{VA} Chapter of the Reliability Society which was well represented.
 - (2) On Feb. 15, 1989 L. Douglas Ballard, recently retired as Licensing Officer, Capital Goods and Production, Materials Division, U. S. Department of Commerce, spoke to an audience of sixteen on the subject, "Exporting and Staying out of Jail". This meeting was co-sponsored by the Northern Virginia Section.

(The undersigned served as the Program Chairman for both the above two meetings.).
2. In Nov. 1987 I had an exchange of correspondence with Jefferson D. Bronfeld, Binghamton, NY, regarding the possibility of organizing a Chapter of SSIT. On learning that the annual meeting of the St. Lawrence Section of the American Society for Engineering Education was scheduled for Oct. 13-14, 1989 at the State University of New York at Binghamton on the theme, "Science, Technology and Society", I wrote to Mr. Bronfeld, by letter of Feb. 21, 1989, commenting that this may be an opportune time organize a Chapter of SSIT.

CHAPTERS COMMITTEE

3. In late 1988 I had an exchange of correspondence with Walter Zessner, Technology Dept., George Brown College, Toronto, regarding the possibility of establishing a Chapter of SSIT at Toronto.
4. In March 1987 I received a letter stating that there had been created a position of Society Chapters Coordinator for IEEE Technical Activities and that the position was based in IEEE Headquarters in New York. I had hopes that the Society Chapters Coordinator would be able to provide the names and addresses of the current Chairmen of the SSIT Chapters but so far this has not been the case.

Respectfully submitted,



Vernon E. (Veg) Gardner,
Chairman,
Chapters Committee.
(703) 533-0999

cc: J. Malvern Benjamin
and
Michael J. Whitelaw

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
SOCIETY ON SOCIAL IMPLICATIONS OF TECHNOLOGY
PROFESSIONAL ACTIVITIES COUNCIL FOR ENGINEERS

6624 Kirby Court,
Falls Church, VA
22043
March 4, 1989

Norman Balabanian,
President, SSIT, IEEE,
Electrical Engineering Dept.,
111 Link Hall,
Syracuse University,
Syracuse, NY
13210

Subject: Professional Activities Council for
Engineers (PACE); report of the PACE
Chairman for SSIT.

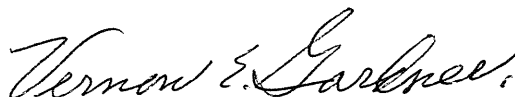
1. A meeting of the PACE Divisional Activities Committee is scheduled for March 4, 1989 at the Washington, D.C., IEEE-USA office. (This Committee supersedes the Divisional Professional Activities Task Force). The new Chairman of the Committee is James F. Strother of Alexandria, VA. The new Vice Chairman is Oscar N. Garcia of Bethesda, MD. I plan to attend the meeting as the PACE Chairman for SSIT.
2. Chairman Strother has identified the major functions of the Committee to be:
 - +Encourage each Society to establish a Society Professional Activities Committee (PACE) as a standing committee of the Society Administrative Committee.
 - +Request each Society to promote professional activities within its Chapters in the Sections by encouraging the Chapters to appoint Chapter Professional Activities Committee (PACE) Chairmen, who will represent the Chapters on Section PACE Committees.
 - +Develop a network for Society PACE response to and action on critical USAB issues, in coordination with the Technology Activities Council.
 - +Assist appropriate USAB committees to encourage executive and legislative actions on issues benefiting the engineer, engineering, and society at the local, state, and federal levels.

(cont.)

PACE

3. At present our SSIT Chapters are experiencing great difficulty in finding Chairmen, Program Chairmen, Secretaries and Treasurers who are not only willing to accept an office but can be depended upon to perform in office. (See report dated March 4, 1989, of the Chapters Committee). Therefore I am not at all optimistic about "encouraging the Chapters to appoint Chapter PACE Chairmen, who will represent the Chapters on Section PACE Committees" as far as SSIT is concerned.
4. Following discussions with the PACE Manager, Washington, D.C., office and Mr. Maston of Public Relations, Patent Office, Dept. of Commerce, Crystal City, Arlington, VA, it was learned that the Patent Office would be holding a conference in Crystal City on Feb. 11 and 12 and would appreciate three or four hundred copies of the Patent Issue of our Technology and Society Magazine. Four hundred copies were sent to Public Relations by courier on Feb. 10. Following the conference Mr. Maston reported to me that he was pleased with the Magazine as were the recipients and that he had gone ahead with the distribution and had a few copies to spare.

Respectfully submitted,



Vernon E. (Veg) Gardner,
PACE Chairman for SSIT.
(703) 533-0999

cc:
J. Malvern Benjamin,
Secretary, SSIT.

MEETING REPORT OF THE NASA INTERAGENCY EDUCATION SUBGROUP,
INTERNATIONAL SPACE YEAR (ISY)

by
Christine Specter

The purpose of this meeting on April 25, 1989, was to pull together information concerning ISY educational activities being planned by organizations and societies represented by the Subgroup. Nine reports were given. They are summarized below.

1. WQED (public television) will produce a series entitled Space Age. The National Academy of Sciences representative discussed the Academy's sponsorship of this activity as its contribution to ISY.
2. NOAA will continue activities to institutionalize the use data from environmental satellites in the classroom and to encourage related curriculum development.
3. The Rochester Museum & Science Center has initiated a project, "Space Arc, Earth Orbit Archives", that will store autobiographical sketches of children from the U.S. and abroad on optical discs that will be placed on a satellite in Earth orbit in 1992.
4. U.S. ISY, the private sector, nonprofit organization, will serve as an information clearinghouse on ISY and will publish an ISY newsletter. U.S. ISY will hold periodic conferences and seminars designed to carry the ISY message to the general public.
5. The Institute for Security and Cooperation in Outer Space was represented; however, no specific activities related to ISY were brought forward.
6. The Radio Amateur Satellite Corporation, representing amateur radio operators, does not have an ISY program planned.
7. The National Science Teachers' Association will encourage curriculum development related to ISY. ISY will be discussed at their regional and national meetings.
8. Frank Owens, Deputy Director of NASA Educational Affairs Division, and Chairperson of the Interagency Education Subgroup, gave a report on NASA's planned educational activities. (See Attachment I.) He compared the U.S. plans with those of the U.S.S.R. (See Attachment II.)
9. I gave a report on the activities planned by SSIT and GRS. (See Attachment III.) My mention of the IEEE ISY International Telecommunications Network raised considerable interest from NOAA. Both Jesse Rodriguez, International Affairs Officer, and Douglas Brown, Constituent Affairs Officer, expressed interest in NOAA participation.

Once again, I voiced my concern regarding the lack of developing countries' involvement in ISY. Frank Owens suggested that the United Nations International Meeting of Experts on the Development of Remote Sensing Skills and Knowledge, being planned for the end of June in Dundee, Scotland, would be the appropriate place to address such an issue. Fortunately, I have been invited to attend this meeting by Dr. Abiodun, Expert on Space Applications, UN Outer Space Affairs Division. (See Attachment IV.)

Dr. Richard Barnes, Director of International Affairs for NASA, dropped by to brief us on the activities of the Space Agency Forum for ISY (SAFISY), comprised of representatives of the national space agencies of 23 countries that have agreed to participate in ISY. Their next meeting would be held May 2-3 in Frascati, Italy. The U.S. delegation would be headed by Dr. Fletcher. His report to SAFISY would include the WQED series, the planned Air & Space Museum Exhibit on Space Travel/Voyages, two new IMAX films, a U.S. proposal to the UN to give three data sets to the UN GRID system, the application of the Galileo mission during an Earth swing by in 1990 and 1992 (during which time atmospheric instruments will be aimed at the Earth's atmosphere), and the U.S. ISY Association's work to stimulate the private sector.

He went on to say that one of the most substantive reports to SAFISY would be made by John McElroy, representing the Earth Sciences Panel of Experts. He would be suggesting 10 demonstration projects for ISY sponsorship that would use existing and near-term satellites, and would not require major new commitments of resources by SAFISY governments.

Attachment I

National Aeronautics and Space Administration Proposed ISY Educational Activities

1. The Space Age

The centerpiece of NASA's educational participation in ISY is the WQED/Pittsburgh production of The Space Age. This 8-part series is being produced in association with the National Academy of Sciences, Corporation for Public Broadcasting, NASA, and others, and will focus not only on what space means to the U.S., but to people all over the world. WQED is seeking direct cooperation with the space agencies of Europe, Japan, and the Soviet Union, with the hope of providing a unique, broad international perspective.

The series will explain how humans explore space; illustrate the dangers and benefits of exploration; wonder where the search might lead; and clarify and question why we want to explore. In addition to a high quality television program, the series will help produce a wide variety of educational resources.

2. Education Satellite Videoconference

Each year, NASA delivers 4 one-hour videoconferences to educators via satellite. These videoconferences feature program briefings by NASA project personnel and educational activities presented by specialists in aerospace education. During ISY, two special videoconferences will be produced: one with a Mission to Planet Earth theme and one with a solar system exploration theme.

3. Teacher Education Programs

NASA's teacher education programs include NEWEST and NEWMAST, workshops for elementary teachers and secondary math and science teachers, run in cooperation with NSTA. Each group spends two weeks in one of our NASA field centers working with scientists and engineers in subject areas that can be incorporated into classroom lessons. The workshops in the summer before ISY will provide teachers with resources to help introduce ISY themes into their classrooms.

4. University Programs

Two of our university programs will incorporate ISY themes into their operation during 1992.

The National Space Grant College and Fellowship Program is a new program designed to establish a network of universities around the country with capabilities in fields related to aerospace, and provide opportunities for support of both graduate and undergraduate students. Public service is a major component of this program and outreach activities will support ISY themes during this period.

The Advanced Design Program is aimed at senior engineering design students. These students work with NASA centers on projects that may be 20-30 years in the future. ISY themes will be incorporated into the design projects during 1991/92.

5. Aerospace Education Services Project

This program, often called "Spacemobile," consists of a corps of aerospace education specialists who drive NASA vans and conduct classroom lectures, school assemblies, teacher workshops, and urban community educational enrichment programs around the country. ISY will be discussed and themes introduced into workshops and student assemblies for 1992.

6. Educational Associations Briefing

Planned for the spring of 1990, major educational associations will be briefed on ISY and their participation will be solicited at a conference to be held in D.C.

7. Publications

Through our periodical, Report to Educators, NASA will disseminate information about ISY. We will also produce an educational publication and a commemorative poster.

Through Headquarters and the field centers, NASA manages over 160 educational programs, including the ones specifically mentioned above. All of these programs will take on an ISY slant in 1991 and 1992.



PRESS RELEASE

INTERNATIONAL SPACE YEAR

ISY Information Service
600 Maryland Avenue SW
Suite 600
Washington DC 20024

phone 202 863-1734
fax 202 863-5240
telex 910 250 8319

For Release

April 3, 1989

SOVIETS PROPOSE ISY PROJECTS

Washington, DC - Experiments by developing nations aboard the Soviet space station "Mir" and an international conference on the exploration of the sun are among a series of activities the Soviet Union is considering for the International Space Year (ISY) in 1992.

The Soviet ISY proposals were outlined in a report to the United Nations last month. They include:

"An international meeting of young cosmonauts, young scientists and specialists involved in questions of the exploration and use of outer space;

"A conference with the participation of foreign scientists and specialists on the subject: 'Outer Space and the global problems of mankind';

"An international symposium on medical research in outer space;

"An international exhibition of space art;

"An international symposium on the exploration of the sun;

"Photography by the Soviet Union of the territory of a number of developing countries and processing of the data obtained for subsequent transmittal to those countries in the form of a gift;

"The conduct on orbital station 'Mir' of a number of experiments which may be proposed by research workers (in particular, schoolchildren and students) from developing countries;

"The launching of an ecological module for conducting international experiments in order to monitor the state of the environment;

"The launching of the international biological satellite 'Bion 10'."

The biological satellite and ecological module had been under development, but not in an ISY context.

The Soviets reported they also are considering other unspecified activities for the International Space Year.

- more -

Attachment II (cont.)

The Soviets may offer details of their proposals at a meeting of the Space Agency Forum on ISY (SAFISY), in Frascati, Italy, May 2-3.

Senior officials from 23 space agencies or equivalent national bodies belong to SAFISY, including all the major powers.

The May SAFISY meeting will be hosted by the head of the European Space Agency (ESA), Dr. Reimar Luest.

SAFISY was established last year at a conference in New Hampshire organized by NASA.

SAFISY is chaired by Dr. Hubert Curien, French Minister of Research and Technology and former head of the French space agency.

#

Note: The ISY Information Service has bureaus serving different regions. This bureau is a division of the U.S. International Space Year Association (US-ISY) and serves the United States. A Paris bureau serves Europe and others are being formed. For further information, contact Harvey Meyerson at the above address.

Attachment III (cont.)

PROPOSED ACTIVITIES OF THE SOCIETY ON SOCIAL IMPLICATIONS OF TECHNOLOGY (SSIT)

SSIT has planned ISY-related activities in the three areas described below.

1. NEWSLETTER ARTICLES- The Society on Social Implications of Technology Newsletter plans to run a series of articles that will provide its members with information concerning ISY. Information about ISY first appeared in the June 1988 issue, under the "Meetings and Conferences" section.
2. SPECIAL ISSUES OF THE SSIT MAGAZINE- During the 1991 timeframe, the IEEE Technology and Society Magazine will run a special issue on inspection and verification for disarmament. The use of satellite technology for monitoring and assessment activities will be discussed. Also, the SSIT is considering another special issue dedicated to ISY during 1992-1994.
3. SESSIONS AT REGULARLY SCHEDULED CONVENTIONS AND CONFERENCES- SSIT will sponsor a session at the ELECTRO '90 Convention, called "Social Implications of Space Technologies." Also, a session dedicated to International Space Year has been proposed for the 1990 SSIT Annual Conference. More sessions will be added as we approach 1992.

UNITED NATIONS  NATIONS UNIES

POSTAL ADDRESS—ADRESSE POSTALE UNITED NATIONS, N.Y. 10017
CABLE ADDRESS—ADRESSE TELEGRAPHIQUE UNATIONS NEWYORK

REFERENCE SAP/89/L.50(0852P)

19 April 1989

Dear Dr. Specter,

Re: United Nations International Meeting of Experts on the Development of Remote Sensing Skills and Knowledge being organized in co-operation with the Government of the United Kingdom, and hosted by the University of Dundee, Dundee, 26-30 June 1989

One of the key efforts of the United Nations Space Applications Programme since the conclusion of UNISPACE-82 has been the development of indigenous capability, particularly at the local level. I am pleased to inform you that the United Nations General Assembly has approved (Resolution 43/56) the organization of the above meeting which we hope will contribute to the attainment of this goal. A copy each of the draft programme, of the information sheet and of the registration form in respect of this meeting are herewith enclosed for your attention and subsequent action. The background and the objective of this meeting are fully described in the information sheet. Please note that participation in this meeting is by invitation only.

On behalf of the co-sponsors of this meeting, it is my pleasure to extend this invitation to you to participate in and to contribute to the deliberations of the meeting. Your attention is hereby drawn to the programme of the meeting as well as to the topics to be addressed during the working group sessions. We are currently soliciting international support and funding for the implementation of the recommendations that will emanate from the Dundee meeting. Your contributions, in Dundee, to the evolution of a realistic, practical and achievable regional programme after Dundee will be fully appreciated. Such a regional programme (see enclosed copy of draft) will eventually be implemented for the benefit of Member States in the various economic regions of the world. I hope you can secure the necessary funds within your institution so that you can participate in the meeting.

The details of the meeting are as follows:

Date:	26 to 30 June 1989
Location:	University of Dundee, Dundee, United Kingdom
Contact person in Dundee:	Prof. Arthur P. Cracknell Carnegie Laboratory of Physics University of Dundee Dundee DD1 4HN, Scotland, U.K.
Telephone No.	(0382) 23181, Ext. 4549
Telex No.	76293 ULDUND G
FAX No.	(0382) 201604

Dr. Christine S. Specter
Dept. of Management and International Business
Florida International University
University Park
Miami, Florida 33199

UNITED NATIONS



NATIONS UNIES

-2-

Accommodation arrangements are shown under "Administrative matters" in para. 9, page 3 of the enclosed information sheet. Kindly communicate your hotel request and date of arrival in Dundee to Prof. Cracknell, and copy my office accordingly. Dundee can be reached directly by train from Edinburgh.

I look forward to seeing you in Dundee.

With kind regards and best wishes,

Yours sincerely,

A handwritten signature in dark ink, appearing to read "Adigun Ade Abiodun".

Adigun Ade Abiodun
Expert on Space Applications
Outer Space Affairs Division

117
Mar 4 1989

EMC/S Liaison Report

include these items
↓
The last meeting of the EMC Board of directors was held at the J.W. Marriott Hotel in Washington D.C. on Feb.18, 1989.

o Dick Ford gave the Treasurer's report. (attached) He has revised previous formats to extract meaningful information. Although the EMC/S has a net worth of about \$300k for 2822 members, the projected net worth appears to be going down.

o For those hams, EMC/S now has an ARRL liaison- Charlie Anderson.

o Ferdy Mayer is forming an EMC chapter in Paris.

o The EMC/S currently sends EMC Symposium records to Wroclaw, Poland, the IERE in the UK and the annual EMC Symposium in Zurich, Switzerland.

o The next EMC Symposium will be held at the Radisson Hotel in Denver, CO from May 23 through 25.

o The EMC/S has not had any success in starting a chapter in the State of Florida.

o EMC/S has started a distinguished lecturer program to help local chapters, etc..

o Information on growth will be obtained by geographical region. There are now 26 official and 4 unofficial chapters.

o One of the committee members just came back from China and the USSR, where he has presented proposals and specifications on shielded rooms for EMC metrology. The purpose of these EMC test facilities is to test Chinese and Soviet products, respectively, for export to other countries using accepted international standards.

o The new EMC engineer certification program, initiated by NAVAIR is an attempt to upgrade the position of EMC engineering, particularly with respect to the people who control the budgets.

o Al Mills is the new EMC/S PACE chairman. The purpose of this new position is to provide EMC/S visibility in PACE.

o A new technical committee(TC-8) has been formed. This will

emc/s report

Consumer
be a committee on product safety. A request for funds is attached.

o A request for \$200 to support an IEEE student book was approved.

o The committee on 1989 EMC/S goals has recommended the following:

o Prepare symposium guidelines

o Establish some "new" policy for the Society

o Establish short and long range plans

o Make the EMC/S more accessible to the membership

o Increase member participation- try to add 100 more people to the active committees

o Encourage more seminars and workshops

o Establish a networking of educators

o Improve the quality of Symposium papers

o Start wider recognition through awards and fellow nominations

o Encourage chapter development by starting a chapter officers bulletin

o Start a chapter of the year award

o Publicize "angel" and distinguished lecturers program

o Activate more students at chapter levels

o Set up a representative advisory committee

o Membership

o A motion to increase the dues from \$7 to \$10 to start in 1990, was approved

o Symposia

o Expecting \$30k profit from the 1989 Symposium

o The 1988 Symposium in Seattle yielded a \$7400. profit

emc/s report

- o TAB Report
- o A strategic plan was presented
- o IEEE proposed new international offices. EMC/S will vote against this proposal
- o EMC/S is requesting a 1 page financial summary of all IEEE societies and councils
- o Next meeting - May 22 in Denver

Respectfully Submitted

Rob
R.H. Brook

IEEE EMCS
TREASURER'S REPORT
FOR FEBRUARY 18, 1989 BOD MEETING

The following summary is based on a pre-audit TAB financial statement covering the period January 1, 1988 to DECEMBER 31, 1988. All figures are in \$1,000.

BUDGET ITEM	INCOME		EXPENSE		SURPLUS OR (DEFICIT)	1989 INCOME BUDGET	1989 EXPENSE BUDGET	1989 EXPENSE REVISED
	BUDGET	ACTUAL	BUDGET	ACTUAL				
MEMBER FEES	18.70	19.90			19.90	19.80		
INTEREST	18.30	4.90			4.90	21.00		
TRANSACTIONS	91.10	155.10	82.50	120.00	35.10	105.60	79.60	79.60
NEWSLETTER			22.70	20.10	(20.10)		24.70	24.70
SUBS-HANDLING			10.20	10.80	(10.80)		10.80	10.80
NON-PERIODICALS	5.50	5.00	13.70	34.10	(29.10)	5.60	18.00	18.00
MEETINGS	99.10	172.30	82.10	144.80	27.50	195.00	180.00	180.00
TOT HDQTRS ADMIN			12.40	10.70	(10.70)		11.00	11.00
PRES OFFICE			1.00	0.00	0.00		1.00	1.00
AD COMM			1.30	2.30	(2.30)		6.00	18.20
CHAPTERS			5.00	1.20	(1.20)		6.50	10.00
MEMBERSHIP					0.00		0.70	
AWARDS			2.50	2.40	(2.40)		3.50	
PROF SERVICES					0.00			8.00
COMM SERVICES					0.00			1.40
MISC	2.70	0.80	0.10	2.70	(1.90)	1.90	0.00	0.00
TOTALS	235.40	358.00	233.50	349.10	8.90	348.90	341.80	362.70

SURPLUS (DEFICIT) = 7.10 (13.80)

*incl. 2k-BOD rest suspension
Inhibitors, space etc.*

BALANCE STATEMENT & SUPPLEMENTAL DATA UNAVAILABLE AT THIS TIME

The 1989 official income and expense budgets are shown above along with what the budget would look like when it reflects the budgetary input from the EMCS planning meeting. Since in my opinion the \$7K surplus in the official budget is likely to be \$5K too high, our revised budget is deficit by nearly \$20K. THIS REVISED BUDGET POSES A SEVERE RISK TO OUR FINANCIAL RESERVES. Remember, as note on the expense pie chart our discretionary spending only composes about a 18 percent (\$60K) of our budget, and it is growing fast.

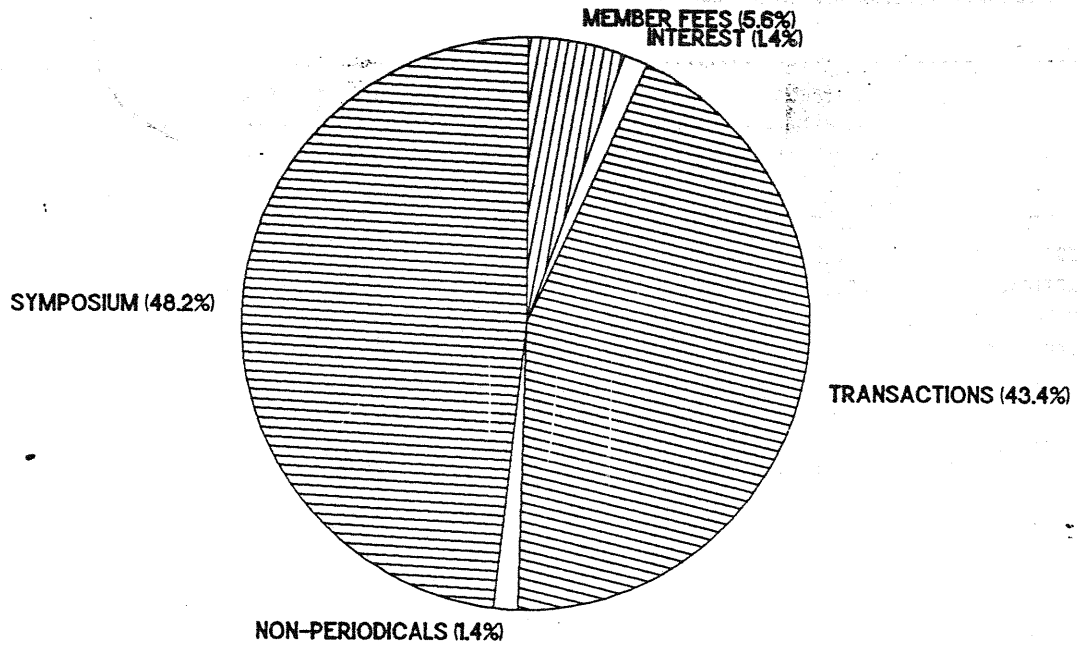
Attached are graphs of the investment analysis, cumulative net worth, 1988 expense and income pie charts and six year trend charts for income and expense.

Respectfully submitted,

Richard T. Ford
Richard T. Ford
Treasurer

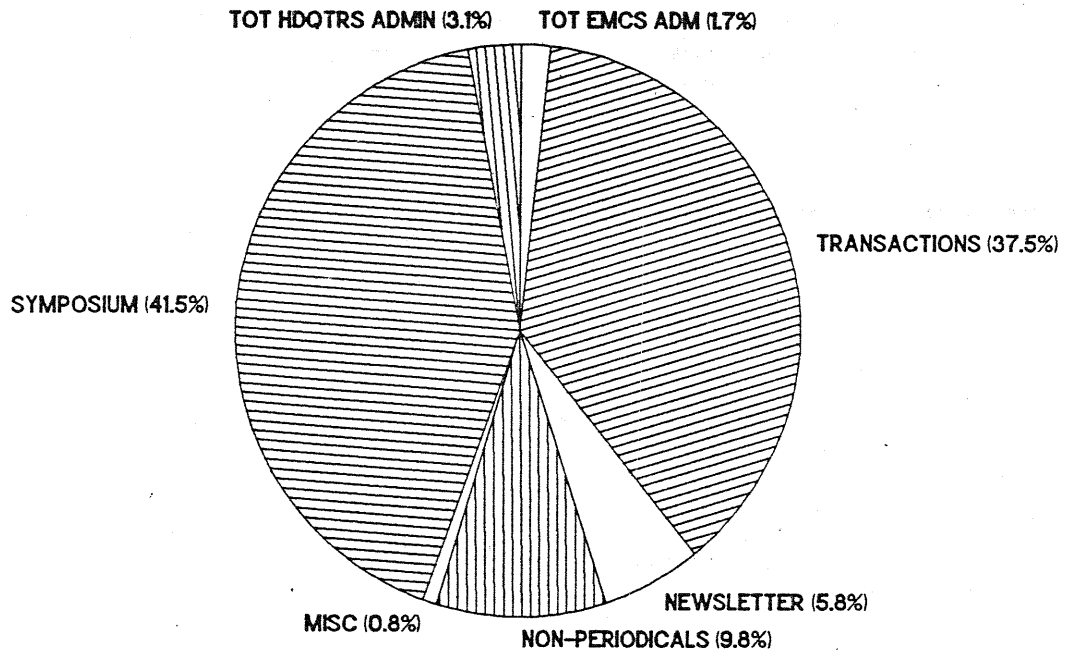
IEEE EMC SOCIETY

1988 INCOME \$358



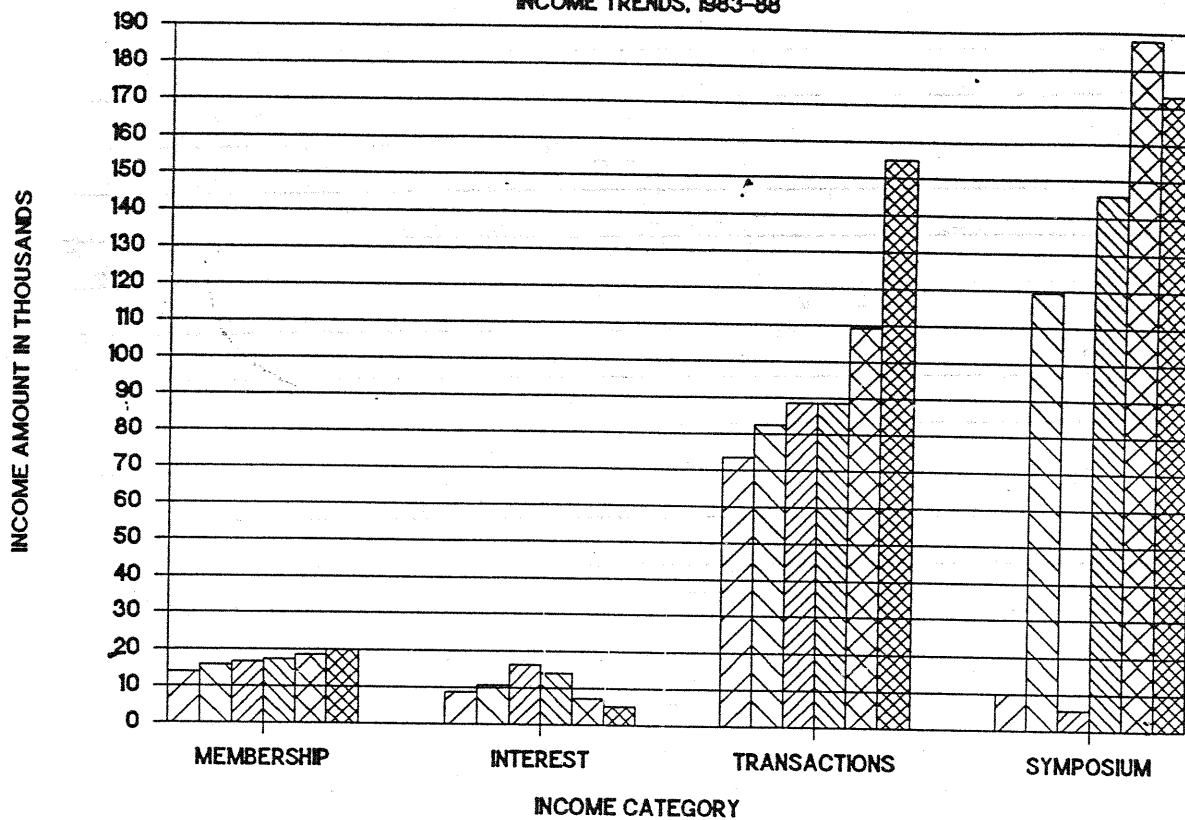
IEEE EMC SOCIETY

1988 EXPENSE \$358 349



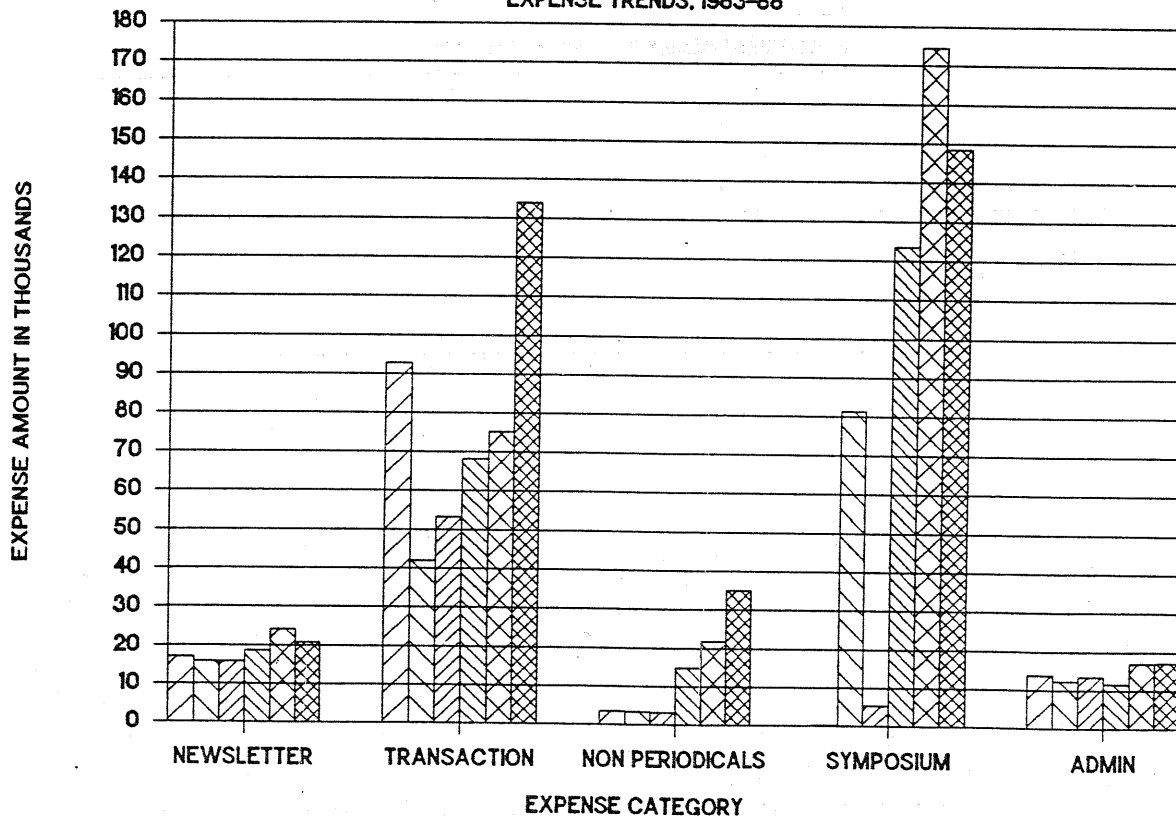
IEEE EMC SOCIETY

INCOME TRENDS, 1983-88



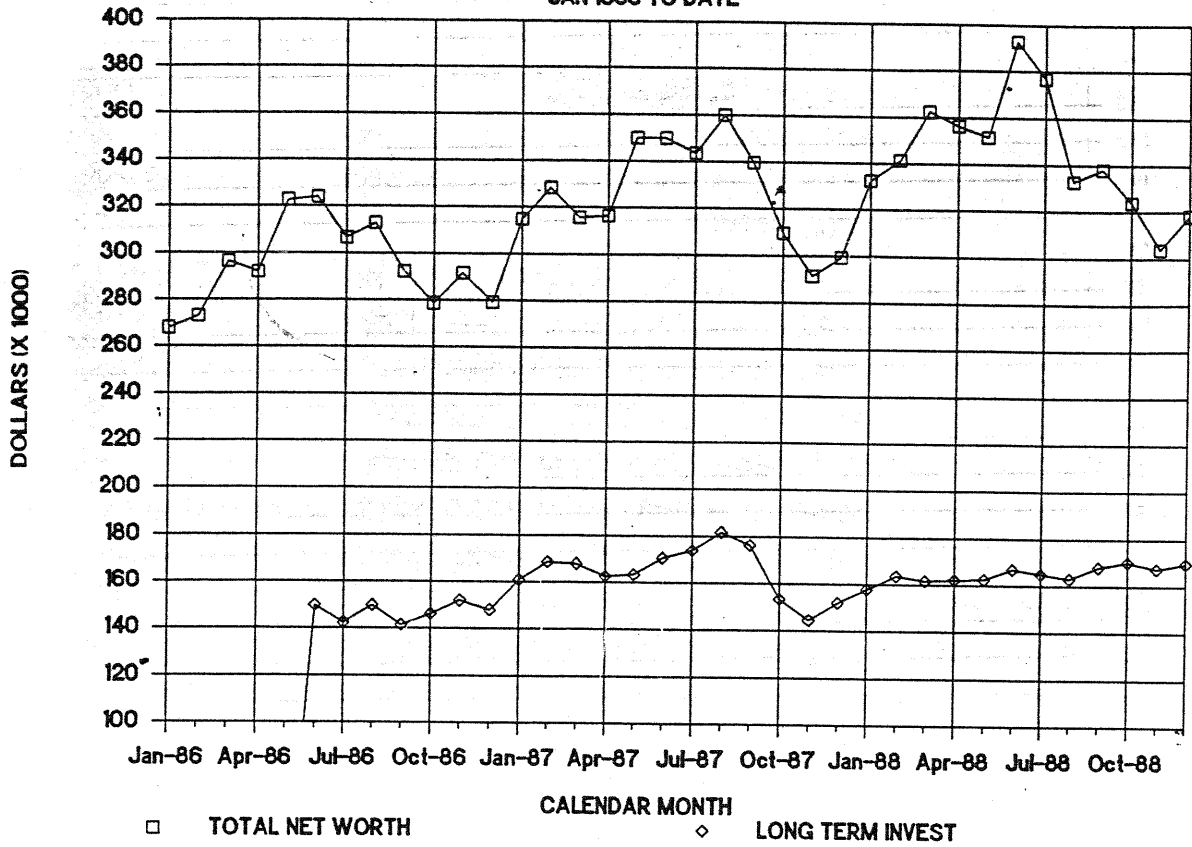
IEEE EMC SOCIETY

EXPENSE TRENDS, 1983-88



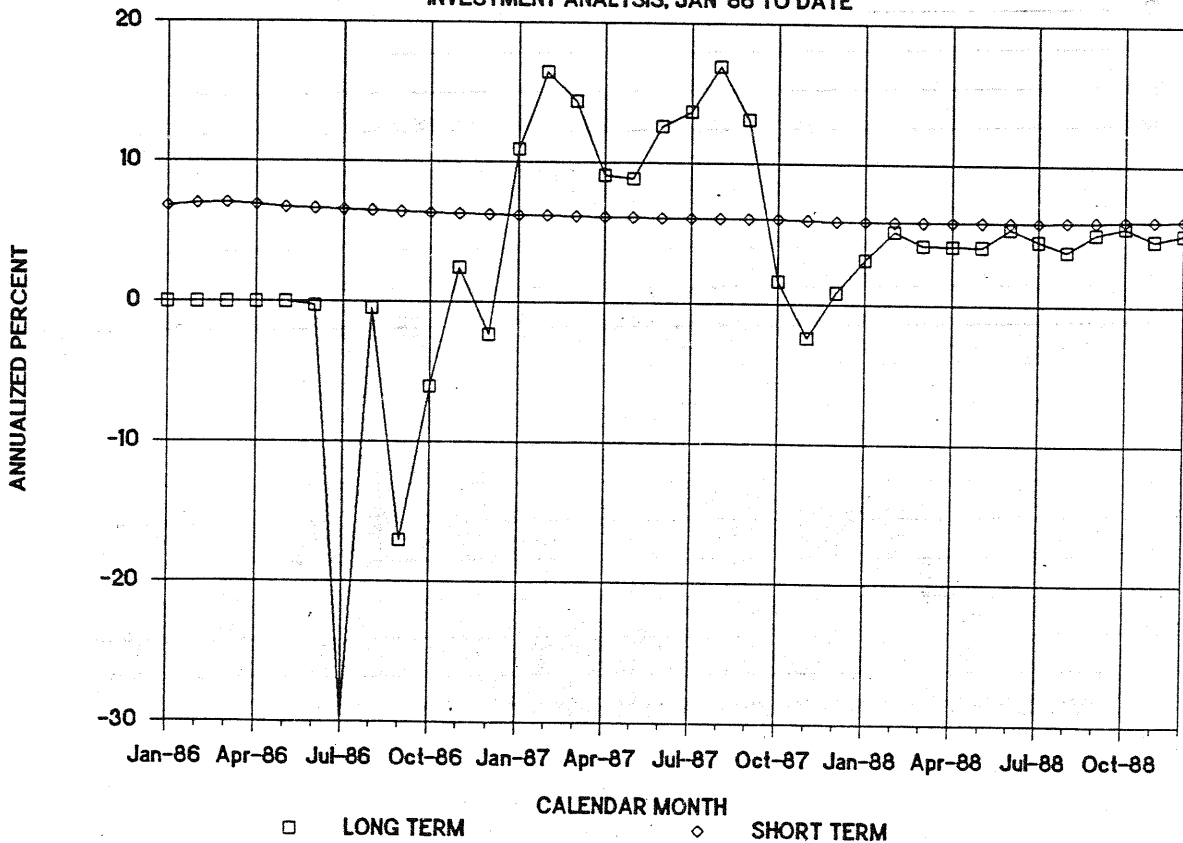
IEEE EMC SOCIETY

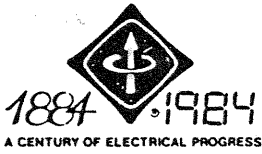
JAN 1986 TO DATE



IEEE EMC SOCIETY

INVESTMENT ANALYSIS, JAN '86 TO DATE





IEEE

ELECTROMAGNETIC COMPATIBILITY SOCIETY

143 Jumping Brook Rd.
Lincroft, NJ 07738
February 13, 1989

Subject: TC-8 Budget Request

In a letter to Wilf Lauber, TAC chairman, Rich Pescatore who is the chairman of TC-8 requested \$7400 of Society funds to pay for his Product Safety Society (PSS) Newsletter.

Wilf, Rich and myself have reviewed the request in further detail. As a result of those discussions, it is suggested that the following be considered in setting the amount to be paid out of Society funds to support the PSS Newsletter:

1. The expense borne by the EMCS should be based on the percentage of the Product Safety Society who are EMC Society members.
2. The PSS should actively seek "institutional listings" to offset the publication costs.
3. Further use of corporate backing and other funding solutions should be continued.
4. A complete accounting of the use of EMC Society funding must be prepared for the Board of Directors via the EMCS Treasurer for each Board meeting.
5. The PSS editorial policy should be reviewed with the editor of the EMC Society Newsletter to be assured that IEEE publication policy is adhered to.

While it is estimated that 20 to 25% of the PSS Newsletter reaches EMC Society Membership (approximately 150 people), the other 75 to 80% does not. That ratio would lead to \$1850.00 (out of the \$7400) of EMC Society funding for 1989 based on circulation. Rich Pescatore in his letter of 2/8/89 to Don Heirman has revised his budget and now has lowered his estimate to \$3500.00. What is still missing is real data on EMC Society membership/mailings for the PSS or more correctly the TC-8.

In light of the above, it is suggested that the EMC Society fund the \$1850 and a one time startup fee of \$1150 for a total of \$3000 to offset the cost of TC-8's 1989 Newsletters. As more data is derived to answer the 5 points at the start of this letter, the TAC chairman will work with the undersigned in requesting any changes to the above funding.

Don Heirman

D. N. Heirman, Director
Technical Services

to change

Copy to
D. E. Clark
R. Ford
W. Lauber
R. Pescatore

INSTITUTE OF ELECTRIC AND ELECTRONICS ENGINEERS
PROFESSIONAL ENGINEERS AND SCIENTISTS

March 3, 1989

NRX

Norman Balabanian
and
J. Malvern Benjamin ←

This concerns my report, dated March 4, 1989,
Subject: Report of the SSIT Chapters Committee:

Will you please make pen and ink changes in par. 1a(1)
as shown below:

s. Northern Virginia/Baltimore/Washington Chapter:

(1) On Jan. 11, 1989 Dr. Michael B. Callahan, ~~Senior~~ *Senior*
Analyst, International Security and Commerce
Program, Congressional Office of Technology
~~Assessment~~ Assessment, and Associate Professor of
Engineering and Public Policy, Carnegie-
Mellon University, spoke to an audience of
twenty-two on the subject, "Assessment of
Advanced Space Transportation". This
meeting was co-sponsored by the Washington/*Northern*
Virginia ~~Baltimore~~ Chapter of the Reliability Society
which was well represented.

Much obliged. I will be more careful with my proof reading
now and forever more.

Veg Gardner
Vernon E. (Veg) Gardner
Chairman,
Chapters Committee
(703) 533-0999



Florida International University

The State University of Florida at Miami

Department of Management and International Business

April 9, 1989

Prof. Derek Paul
Department of Physics
University of Toronto
Toronto, Ontario M5S 1A7

Dear Prof. Paul:

I am writing to you on behalf of the IEEE Society on Social Implications of Technology (SSIT). As Dr. Raney may have told you, SSIT has a membership in excess of 2000 drawn from a wide variety of specialties in the engineering profession. The mandate of SSIT includes as particular areas of interest: ethical behavior of the profession, public policy issues, and peace technology. We are planning a special issue of Technology and Society on Inspection and Verification for Disarmament. The range of topics that could be considered for inclusion are on site visits, seismic monitoring, satellite verification, as well as an overview of political realities.

There is no question that remotely sensed data from satellites provide information concerning traditional and nuclear arsenals, particularly changes in those arsenals. Seismic monitoring is being used to provide information on underground nuclear explosions, while on site inspections are particularly useful for investigations of small or mobile weapons. The objective of these activities is to apply current technology to monitoring and assessment processes; the underlying premise is that increased knowledge leads to increased global security. Yet numerous questions remain unanswered. Some of these questions relate to the technical capabilities of the systems and system configuration, and how best to integrate information from numerous sources. Beyond these more technical issues, political realities and opportunities must be considered. The purpose of this special issue is to address these concerns.

As you know, we had hoped to create a joint issue with the IEEE Geoscience and Remote Sensing Society (GRS) and were disappointed to hear that GRS would not be joining us on this effort. At our Administrative Committee meeting in March, it was decided that we would go ahead with the project, provided that we could prevail upon you to accept the role of guest editor of the issue, along with Norman Jacobson, of the American Nuclear Society. We feel that if you would be willing to take on this responsibility, the issue would be in very capable hands. The balance, coverage, and nominated authors would be determined through your joint efforts.

While the negative side of the loss of a joint publication includes reduced distribution and lower page count, this does mean that what we are asking of you in terms of time and effort is also reduced. Technology and Society appears four times a year, running four or five articles (approximately 30 pages) per issue. If you determined that the number of quality articles submitted for the special issue exceeded the number of pages allotted for one issue, the additional articles could appear later. (I am including a 1987 copy for your perusal.) The nominal schedule for the special issue would lead to publication in mid- to late-1990, assuming i) 6 months for paper solicitation, composition, and submission; ii) 6 months for paper peer review and revision; and iii) 4 months for publication preparation at IEEE headquarters.

College of Business Administration
University Park, Miami, Florida 33199
(305) 554-2791

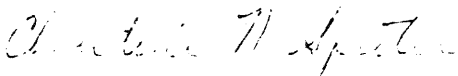
Attachment III (cont.)

Prof. Derek Paul
April 9, 1989
Page 2

Mr. Jacobson will attend the Canadian Nuclear Society meeting in June, representing the American Nuclear Society. He told me that he might be able to arrange travel through Toronto to meet with you in order to discuss the process in more detail, or perhaps you are travelling to the meeting as well, and the two of you could arrange to meet there.

Our Society would be very appreciative if you would consider our request to serve as guest editor. I realize you may have questions which I have not answered in this letter. I would be happy to address any concerns that you may have. Please write to me at the address above, or feel free to call me at my home: (305) 255-2841.

Sincerely,



Christine N. Specter
Assistant Professor

CNS/rc

cc: Prof. Norman Balabanian, President
SSIT

Dr. R. Keith Raney, President
GRS

Mr. Norman Jacobson, Former Editor
American Nuclear Society

NEWS, NOTES, AND COMMENTS

INSPECTION AND VERIFICATION FOR DISARMAMENT: ALMOST A CALL FOR PAPERS

For some months, the SSIT AdCom has been working with Christine Specter to determine the best way to assemble a document on the topic of Inspection and Verification for Disarmament. One possible mechanism is a special issue of *T&S* on the subject, but other means are being explored as well.

As we go to press, no decision has been made on which approach to pursue. Regardless of what the decision is, Ms. Specter will need help. If you are interested in the areas of:

- Satellite Verification
 - Seismic Monitoring
 - On Site Visits
 - Political Realities and Opportunities
- and are willing to help organize a document on these issues, please contact:

Christine Specter

Department of Management
and International Business

Florida International University
Miami, Florida 33199

Phone: (305) 554-2791 (Business)
(305) 255-2841 (Home)

AWARD FOR OUTSTANDING SERVICE IN THE PUBLIC INTEREST PRESENTED TO BENJAMIN LINDER (1959-1987)

IEEE's Society on Social Implications of Technology (SSIT) presented its Award for Outstanding Service in the Public Interest posthumously to Benjamin Linder at the University of Washington, Seattle, October 6th 1988. Linder, a 1983 engineering graduate of the University, devoted his professional life to the direct service of human welfare. He was murdered by contras in Nicaragua while setting up a low-power hydroelectric plant for the benefit of a village community in that country.

The award ceremony was hosted by a group of engineering faculty members who had taught Ben Linder as an undergraduate and had created the Benjamin Linder Engineering Scholarship in his memory. One of them, Professor Philip Bereano, opened the meeting and spoke briefly of Ben. Carl Barus, SSIT Awards Chair, read a message from SSIT Past-President Anthony Robbi who was unable to attend. In expressing his admiration of Ben Linder, Robbi noted that accepting personal risk is a criterion for

the award and that in fact all previous awardees had lost their jobs or careers as a result of their ethical behavior; Linder tragically had lost his life.

Barus explained the aim of the award and why Linder was chosen. It is given from time to time "in recognition of courageous action to promote or protect the public health, safety or welfare despite risk to professional career . . . The action recognized must be within the scope of IEEE's interest and in the spirit of the IEEE Code of Ethics." Ben Linder planned from the outset to devote his career to human service without thought of personal risk or personal gain. His contribution was not to find fault with technology—as in "whistle-blowing"—but to bring appropriate technology to people whose burdens could thus be lightened. Moreover, in setting up hydroelectric systems, he worked with the local people who would use them and he taught them as they went along. These people would become independent of outside sources of fuel and maintenance. Linder was a man of high principles, strong social convictions and ethical concerns. These qualities guided his professional and personal life. He held a genuine concern for others as individuals; his wit and kindly humor endeared him to all.

Norman Balabanian, SSIT President, discussed the award itself and its history, [see "Remarks by Norman Balabanian . . ."]. He presented the award certificate to Dr. David Linder, Ben's father, and read the citation thereon:

Benjamin E. Linder chose a career in engineering with a distinct purpose in mind: to bring needed technology to the rural poor of the third world. Pursuit of that goal took him to northern Nicaragua where he led a team of volunteers and local people in developing small hydroelectric stations to supply peasant villages. This activity exposed him to great personal danger, and he was killed while carrying out one of his projects.

Linder's courageous and altruistic efforts to create human good by applying his technical abilities have brought credit not only to himself but to the engineering profession. His work has set a high moral standard of professional conduct and will inspire others to follow his idealism.

At Dr. Linder's request the \$750 honorarium accompanying the award was

presented to the University of Washington in care of Prof. Bereano for the Benjamin Linder Engineering Scholarship fund.

Dr. Linder responded to the presentation, describing various aspects of his son's work and showing slides of the countryside and people and Ben's projects. He discussed the circumstances of his son's death. In the end Dr. Linder asserted his conviction that Ben had been murdered simply because he was improving the lot of the villagers.

Two of Ben's former coworkers who were present, Ingrid Baur and Chuck Lare, a Seattle IEEE member, showed additional slides. In all there were some 40 people present, including University faculty members and students, friends of Ben, SSIT members and members of the Seattle IEEE Section. In a related event that same evening, the first holder of the Benjamin Linder Engineering Scholarship, Oswaldo Chavez, a Nicaraguan graduate student, took part in a panel discussion on Appropriate Technology in the Third World.

Carl Barus
SSIT Awards Chair

IEEE TOPS 300,000 MARK IN TOTAL MEMBERSHIP

The Institute of Electrical and Electronics Engineers, Inc. (IEEE) has surpassed the 300,000 member mark. According to IEEE 1988 President Dr. Russell C. Drew, the Institute's membership as of December 9, 1988 stood at 300,226—more than twice the size of the next largest engineering society.

"Surpassing the 300,000 level in total membership marks a major milestone for the IEEE," said Dr. Drew. "Since the formation of the IEEE in 1963 from the merger of the American Institute of Electrical Engineers and the Institute of Radio Engineers, IEEE membership has grown from 154,500 to the present level, effectively doubling during the past 25 years. During this time, the Institute has added almost 146,000 new members to its rolls, a figure surpassing the size of the next largest professional engineering society. This growth underscores the vitality of the organization and the success we have achieved in serving our profession and in meeting the needs of our individual members."

Of its approximately 300,000 members, some 252,000 hold higher grade memberships while 48,000 are students who attend some 600 educational institutions throughout the world. Reflecting its transnational nature, 63,000 IEEE members reside outside of the United States.

Attachment V

Session 24 Enhancing Global Security Through Information Sharing

Session Organizers and Chairmen

James A. Lippke
Broadband Information Services Inc.
Huntington, NY

Harold Chestnut
General Electric
Schenectady, NY

24/0 Enhancing Global Security Through Information Sharing — An Overview

James A. Lippke
Broadband Information Services Inc.
Huntington, NY

24/1 Rethinking National and Global Security: And the Role of Spaced-Based Observations

Robert J. Mrazek
Member of Congress
3rd District, NY

24/2 The Case for ENVIROSAT

John L. McLucas and Paul M. Maughan
Questech Inc.
Maclean, VA

24/3 The Need for a National Treaty Verification Research Program

Milo D. Nordyke
Lawrence Livermore National Laboratory
Livermore, CA

24/4 The Uses of On-Site Inspection for Arms Control Verification

Valerie Thomas
Carnegie Mellon University
Pittsburgh, PA

24/5 PAXSAT Space-Based Remote Sensing for Arms Control Verification

Freleigh J. F. Osborne
Spar Aerospace Limited
Ste-Anne-de-Bellevue, Quebec, Canada

CALL FOR PAPERS

IEEE TECHNOLOGY AND SOCIETY MAGAZINE - SPECIAL ISSUE:

Inspection and Verification for Disarmament

Our goal is to assemble a resource document sponsored by established professional Societies examining the topic of inspection and verification for disarmament. There is no question that remotely sensed data from satellites provide information concerning traditional and nuclear arsenals, particularly changes in those arsenals- build ups or reductions. Seismic monitoring is being used to provide information on underground nuclear explosions, while on site inspections are particularly useful for investigations of small or mobile weapons.

The objective of these activities is to apply current technology to monitoring/assessment processes; the underlying premise is that increased knowledge leads to increased global security. Yet numerous questions remain unanswered. Some of these questions relate to the technical capabilities of the systems and system configuration, and how best to integrate information from numerous sources. Beyond these more technical issues, political realities and opportunities must be considered. This special issue will address these concerns. We invite papers under the following broad themes:

- Satellite Verification
- Seismic Monitoring
- On Site Visits
- Political Realities and Opportunities

We envisage a ^{an} jointly-sponsored issue ^{ing} to appear in the mid 1990-1991 time frame, with guest editors to be drawn from the American Nuclear Society and Science for Peace. Names of the guest editors, details concerning deadlines and submission requirements will be announced in the next issue of *Technology and Society*. In the meantime, please direct your inquiries, as well as suggestions for additional themes to:

Christine Specter
Department of Management and International Business
Florida International University
Miami, Florida 33199
(305) 554-2791; (305) 255-2841