

spark

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march 1971



c. s. r. e.

channeling

unemployment

tax resistance

david packard ??

i.e.e.e. critique

charles proteus steinmetz

new engineering conference

norbert wiener's statement

ibm, bell labs, brookhaven

on seymour melman's pentagon capitalism

\$0.50

SPARK would like to encourage communication between otherwise isolated individuals and groups and indeed to encourage the formation of groups throughout the country. If anything is happening out your way, let us know, your experience may be of use to others. SPARK is particularly interested in news of layoffs, job actions, military or other interesting contracts your company is handling, suppression or misuse of scientific and technical information, and discontent among technical workers.

Any individual, group, group, tendency, or faction is invited to send us news items, full articles (news or analysis). There are three categories of reader solicited material;

1) News Items

Send us the raw information and tell us how to get in touch with you. We do the writing and check with you for clarification if necessary.

2) Essays

Submit typewritten double spaced manuscripts on 8 1/2 by 11 paper.

3) Columns

For a nominal fee (payable in subscriptions or otherwise) we will print your articles under your logo. Send us 8 1/2 by 11 paste-ups. Nothing will be changed but articles are not protected against rebuttal, contradiction or contentious objection.

Columns and articles reflect the opinions of the originating individuals or groups who are not necessarily in mutual philosophical accord.

Let the sparks fly!

Published by THE COMMITTEE FOR

SOCIAL RESPONSIBILITY IN ENGINEERING

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

THE COMMITTEE FOR SOCIAL RESPONSIBILITY IN ENGINEERING

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

STATEMENT OF PURPOSE

Engineers face today increasing unemployment and job insecurity, conditions that stem from misguided national priorities. Thousands of engineers feel that their engineering talents are misused in both civilian and military projects, and believe that the constant development of weapons technology spells ultimate disaster for mankind. The COMMITTEE FOR SOCIAL RESPONSIBILITY IN ENGINEERING seeks to challenge the present orientation of engineering and to explore ways in which engineering skills can be used to solve the obvious and growing ills of our society. It is essential that we end unemployment and pollution and provide adequate medical care, housing, education, transportation and communication systems for all people. We invite you to explore these matters with us.

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IN ENGINEERING

137a West 14th St.
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Vol. 1 No. 1

March 22, 1971

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INVITES YOU TO PARTICIPATE IN THE

NEW ENGINEERING CONFERENCE

DURING THE

IEEE CONVENTION

MARCH 22-24, 1971

NO REGISTRATION FEE

OPEN DISCUSSION SESSIONS:

- 1. THE ECONOMIC CRISIS IN ENGINEERING:**
Unemployment, government policies, conversion to a peacetime economy; effects on the engineer.
(Mon. Mar. 22, 2:00pm)
- 2. INDIVIDUAL FREEDOM AND RESPONSIBILITY IN ENGINEERING:**
Personal responsibility for the consequences of one's work. Your influence on the direction of your work; alternate employment choices. Code of Ethics; prestige of the profession.
(Tues. Mar. 23, 2:00 pm)
- 3. ENGINEERING ORGANIZATIONS — WHAT COULD THEY DO FOR YOU?**
Critique of the IEEE. Other professional societies (AMA, etc.). Engineering Unions. New organizational forms.
(Wed. Mar. 24, 7:30 pm)

AUDIENCE PARTICIPATION WILL BE EMPHASIZED!

Partial List of Participants:

Harold Ammond
Michael Averko
J. Malvern Benjamin
Frank Collins
Barry Commoner
William Davidon

John Haynes
Hon. Ed. Koch
Georges London
Samuel Mason
Seymour Melman
Victor Paschkis

Anthony Robbi
Harvey Rubin
John Ullmann
Stephen Unger

Sessions held at: Ethical Culture Society Hall
2 West 64th St. (at Central Park West)
(4 short blocks north of Coliseum)

The next issue of SPARK will contain full coverage of the proceedings of the New Engineering Conference.

THE COMMITTEE FOR SOCIAL RESPONSIBILITY IN ENGINEERING

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For those people who did not attend the I.E.E.E. Convention, C.S.R.E. circulated the following petition at the Convention.

As stated in Article XIV of the Constitution, "Amendments to this Constitution...may be proposed by the Board of Directors or by petition." "A petition must be signed by at least one-third percent of the total number of voting membership."

It is the hope of C.S.R.E. to get much more than the required one-third percent. If you and/or your co-workers did not sign, use the following petition and mail to C.S.R.E.

A PETITION TO THE BOARD OF DIRECTORS OF THE IEEE

The undersigned members of the IEEE herewith propose to change Article I, Section 2 of the Constitution of the Institute of Electrical and Electronic Engineers to read:

"Its purposes are primarily scientific and educational, and it shall strive to enhance the quality of life for all people and to promote the welfare of the engineers it represents. The IEEE shall direct its efforts toward the advancement of the theory and practice of electrical engineering, electronics and the related arts and sciences, and toward an understanding of the impact of these advances on society. Means to these ends are the holding of meetings for the reading and discussion of professional papers, the publication and circulation of works of literature, science and art pertaining thereto and any other activities necessary, suitable and proper for the fulfillment of these objectives."

(The words underlined are the proposed addition; parts of the existing first sentence of the Section are deleted.)

Our intention in elaborating and extending the purposes of the IEEE is twofold. First, the engineer should become more aware of the social consequences of his work and his special responsibility in preventing the misapplication of scientific knowledge. Second, the current IEEE concerns with the welfare of its members, such as the IEEE Insurance Program and the recent concern shown for engineering unemployment, are magnified and made more legitimate. (Some letters in Spectrum have pointed out many practical ways in which the IEEE could better insure the treatment of its members as professionals.)

NAME

ADDRESS

THE COMMITTEE FOR SOCIAL RESPONSIBILITY IN ENGINEERING

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

The Structure of the IEEE

The IEEE makes no pretense that it is a model of democracy, and recent changes in its Bylaws make it even less so. The IEEE is run by 27 men called the Board of Directors working within the framework of a Constitution and a Bylaws. These documents are available on request from IEEE Headquarters. The mechanisms for changing the Constitution, Bylaws, and Board composition are summarized below ("VM" is voting member, i.e. grade of Member or higher).

Constitution Amendments: petition signed by 1/3 of one percent of all VM, then approved by 2/3 vote of Board of Directors, then approved by 2/3 of VM who respond with mail ballot (can also be initiated by 2/3 vote of Board)

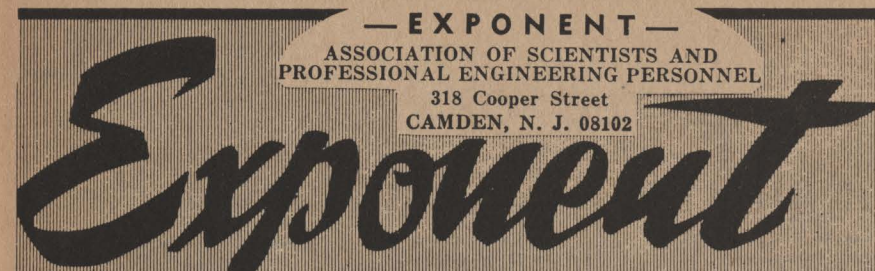
Changes in Bylaws: 2/3 vote of Board of Directors

Board of Directors: total 27 - A) elected by VM: President, Vice President, nine Regional Directors, six Technical Division or at-large Directors; B) holdovers: two most recent Past Presidents; C) appointed by Annual Assembly (A and B above): eight at-large Directors. To nominate by petition for Directors in categories A and B above requires the signatures of at least 2% of the VM eligible to vote for the particular office. Terms of the elected Directors are generally 2 years. Thus in any one year approximately eight Directors are elected by the VM

In Addition: 1) The Board of Directors defines the geographic Regions to be represented by a Director. 2) The Annual Assembly and Board meetings are closed.

It should be clear the substantive changes in the mechanisms of the IEEE and in the composition of the Board of Directors are impossible without approval of the Board. The IEEE will not change until it feels substantial pressure from its membership. The membership's source of ultimate power is its freedom to resign.

Anthony Robbi
Member C.S.R.E.
Working Committee



CESO Holds Second Annual Convention

The Council of Engineers and Scientists Organizations (CESO) has completed its first full year of operation. Conceived in November of 1968 at a historic meeting in Bal Harbor, Florida, CESO was officially born at the First Annual Convention of March 1969, in San Francisco. In the past year, a number of organizations have applied for membership, aligning themselves with the ten Charter Members who originally ratified the CESO "Rules of Procedure". The Second Annual Convention of March 1970, in Washington, D. C., found CESO expanded, strengthened and ready to provide effective representation of working engineers and scientists in the U.S.A. and Canada.

The founding organizations of CESO were:

1. Southern California Professional Engineers Association (SCPEA): McDonnell Douglas, Inglewood, California, and The Southern California Gas and Electric Company.
2. Engineers and Architects Association, Civic Center Chapter (EAA): City of Los Angeles.
3. Engineers and Scientists Guild, Lockheed Section (ESG): Lockheed, Burbank, California.
4. Seattle Professional Engineering Employees Association (SPEEA): Boeing, Seattle.
5. Wichita Engineers Association (WEA): Boeing, Wichita.
6. Association of Scientists and Professional Engineering Personnel (ASPEP).
7. Faculty Association: RCA Service Company schools, New York City.
8. Westinghouse Engineers Association, National (WEAN): Westinghouse at five locations: Newark, Bloomfield, Jersey City, N. J.; Buffalo, N. Y.; and Mansfield, Ohio.
9. TVA Engineers Association.
10. Salaried Employees Association: Marconi Company, Montreal, Quebec, Canada.

Organizations which joined CESO during the past year were:

1. Seaway Engineers Association: Montreal, Quebec, Canada.
2. Society of Ontario Hydro Profession-

al Engineers and Associates: Ontario, Canada.

3. Council of Northern Electric Engineers Association: Montreal, Quebec, Canada.

4. RCA Engineers and Scientists Association: Montreal, Quebec, Canada.

5. Westinghouse Salaried Employees Association: Lester, Pa.

6. Nashville Electric-Service Employees Association: Nashville, Tenn.

Many other organizations have expressed an interest in CESO. The following are those who sent observers to at least one CESO meeting:

1. Conference of Professional and Technical Personnel, Inc.: Bell Labs.
2. Pittsfield General Electric Engineers Association.
3. Schenectady General Electric Engineers Association.
4. Association of Engineers of Canadian National Railways: Montreal, Quebec, Canada.
5. Association of Polish Engineers: Montreal, Quebec, Canada.
6. Canadian Council of Professional Engineers: Ottawa, Ontario, Canada.
7. Professional Syndicate of Northern Electric Engineers: Montreal, Quebec, Canada.

The officers during CESO's first year were:

Chairman: Charles M. Brindley.

Secretary-Treasurer: Rex Hijman, who was also Chairman of the SPEEA Executive Committee.

During the year, contacts were made with all members of the U. S. Congress, and with the Deans of the top 200 Engineering Schools in the U.S.A. The letters informed the addressees of the formation of CESO and that CESO claims the exclusive right to speak for industrially employed engineers and scientists. The letters offered to provide speakers to testify on Congressional Legislation affecting engineers and scientists, and to address Technical Society Chapter meetings.

Congressional contacts led to opportunities to influence legislation. For example, it was discovered that a proposed Amendment to the Immigration Act would make it easier for alien engineers and scientists

1945-1970 9

ASPEP'S 25TH YEAR OF REPRESENTING SCIENTISTS AND PROFESSIONAL ENGINEERING PERSONNEL



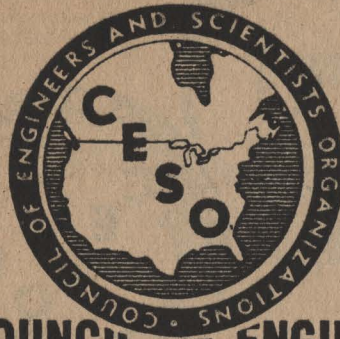
to enter the U.S.A. The CESO Chairman wrote to the appropriate Congressional Committee suggesting that Congress would be better advised to show proper concern for the thousands of U. S. citizen engineers on layoff. Individual CESO units were also asked to contact their local Congressmen and Senators.

On the other hand, CESO has exerted its influence in favor of beneficial legislation. Two Bills are of particular importance to engineers. One establishes a National Pension System so that engineers can move from one company to another without losing retirement rights. This Bill is still being studied in Committee, and CESO will be able to exert influence during its formative period.

A second Bill establishes the rights of an employed engineer to ownership of inventions not connected with his employer's activity. It also establishes the engineer's right to equitable compensation for an invention even when the company has the right to ownership. The new CESO Chairman has been invited to appear before the Committee to testify in favor of this Bill.

It may be hoped that passage of this legislation will represent the first of many steps toward greatly improved conditions of employment for working engineers. CESO, of course, will invite the cooperation of all organizations claiming to have some concern for working engineers in the continuing search for improved conditions. It is not impossible that NSPE, EJC and the technical societies, despite their bias toward the management point of view, may be willing to ally themselves with CESO on some issues.

In summary, CESO is now one year old. It has become truly international with the establishment of CESO-Canada. It has grown and is continuing to grow. It has already made itself felt on legislation affecting engineers and scientists, and will continue and expand this thrust. It represents the best hope for a general improvement of working conditions for employed professionals, and deserves all possible support from every engineer and engineering organization.



COUNCIL OF ENGINEERS AND SCIENTISTS ORGANIZATIONS

CESO—East
318 Cooper Street
Camden, New Jersey 08102
609-964-1552

REGIONAL OFFICES
CESO—Canada
c/o SEA (M)
2442 Trenton Avenue,
Montreal 301, Quebec, Canada
(514) 343-3411

CESO—West
3214 West Burbank Boulevard
Burbank, California 91505
213-848-4441

March 4, 1971

ADMINISTRATION CONCERNED ABOUT UNEMPLOYMENT AFFECTING ENGINEERS AND SCIENTISTS IN THE UNITED STATES

PRESIDENT CALLED A NATIONAL MEETING

Mr. Gerald Sklarsky, National Chairman of the Council of Engineers and Scientists Organizations (CESO) and President of the Engineers & Scientists Guild, Lockheed Section, Burbank, California, attended this special meeting Wednesday, March 3, 1971 in Washington, D. C. In attendance at this meeting were the Presidents of about 50 Professional and Technical Societies. Among those attending were Donald E. Marlowe, ASME President, James H. Mulligan, IEEE President, Floyd Thompson, AIAA President and J. Caldwell Wilson, NSPE President.

The meeting, entitled "A Working Conference on Employment Problems of Scientists and Engineers", was chaired by Dr. Edward E. David, Jr., Science Advisor to the President. The opening remarks and the objectives of the meeting were made by Secretary of Labor Mr. James Hodgson.

Administration representatives made the following points:

- a. Administrative planning to do more to alleviate unemployment among Engineers and Scientists.
- b. Administration recognizes Engineers and Scientists are an exceptional national resource and asset.

However, Administration officials stated:

- a. Defense budget will not reach level of spending of the 1960's.
- b. Engineers should return to traditional segments of the economy, government, private industries and schools.
- c. Administration encourages relocation and re-training.
- d. Administrative officials continue to predict long term high demand for Engineers and Scientists.

- over -

REPRESENTING OVER 125,000 ENGINEERS AND SCIENTISTS EMPLOYED IN THE UNITED STATES AND CANADA

- 2 -

March 4, 1971

Various representatives of the Professional Societies suggested:

- a. Tax credit for employers who hire unemployed Engineers and Scientists.
- b. Federal government should reduce the work week, establish a four day work week, and reduce wages by 20%.
- c. Additional Research and Development money.

In representing the 125,000 members of CESO, Mr. Sklarsky commented that:

- a. CESO representatives have attended similar meetings in the last two years, but there have been no constructive results to date.
- b. Political representation is required for all Engineers and Scientists.
- c. The immediate establishment of a NASA type federal agency charged with the responsibility and sufficiently funded to seek solutions to such national problems as pollution, needed mass transportation, crime, nutrition, health care and social alienation. Engineers with the needed skills and knowledge required are available to solve these problems today.

IUE NEWS

1,400 Sperry Rand Engineers Choose IUE in Record Vote

LAKE SUCCESS, N.Y.—For the second time in seven months, a record sized engineering unit voted for IUE representation as 1,400 Sperry Rand engineers chose our union by an 827-492 margin in an NLRB election here July 2.

The local, known as the Engineers Union, is the largest unit of engineers ever to vote for an AFL-CIO union. The winning total also was the highest vote ever given an engineers' union in an NLRB election.

In picking IUE over "no union" by a wide margin, the Sperry Rand professionals gave a strong vote of confidence to the steering committee headed by Nick Fabijanec which carried the ball during the organizing campaign.

They also provided a clear decision in a fight that goes back to 1960 when the independent Engineers Association at Sperry voted to affiliate with IUE.

A subsequent vote to decertify was overturned by the NLRB because of company interference. In 1962 however, the unit was divided and the technical employees voted for IUE and the engineers chose no union.

In the years that followed the technical employees—IUE Local 445—made substantial salary gains, maintained their cost of living protection and negotiated a guaranteed annual merit kitty.

Salaries for the engineers remained static, they received no C-o-L gains and their merit increases were cut.

In addition, the company decided to eliminate a pension annuity and replace it with a risk-oriented investment program.

The committee stressed these points in its campaign, which was conducted almost entirely on a person-to-person basis.

Fabijanec's steering committee cochair-



HAYNES FABIJANEC ZYLLA

man was Local 445 President Henry Zylla, also an engineer.

They were aided by a founders' committee of 100 engineers, and by District 3 Community Action Director John Haynes, formerly executive secretary of the Engineers Association.

IUE President Paul Jennings noted that the victory followed last December's vote for IUE by over 700 engineers and engineering assistants at Western Electric, Kearny, N.J. He called the two wins "part of a growing trend involving professional workers."

"This trend will continue," Jennings said, "because representation through international unions has paid off and will continue to do so. We are proud these two groups have chosen IUE."

As a further boost to the trend, the Engineers Union has petitioned for a group of 150 additional engineers. When this unit votes for IUE, all professional, engineering and scientific employees at Sperry will be in the Engineers Union.

Bargaining has started for the 1,400-member unit. The goals include union shop, guaranteed merit kitty, C-o-L adjustment and a general increase.

The steering committee consisted of Fabijanec, Zylla, Ed Benson, Harold Block, Al Blumenstock, Bud Carlson, Dom Corigliano, Joe Greeley, Bill Keneally, Charles Richardson, Bob Sattler, Ted Shisko, Al Tramosch, Ed Weigand and Bill Wilkes.

For further information contact Nick Fabijanec, President of the Engineers Union, 193 Hillside Ave. Williston Park, N.Y. 11596. (516-PI1-6325).

THE STATE WITHIN A STATE

By Robert Heilbroner

(The excerpts which follow were published in the July 23 issue of *The New York Review of Books*. Professor Heilbroner is a member of the National Board of SANE.)

Pentagon Capitalism: The Political Economy of War by Seymour Melman. McGraw-Hill, 290 pp., \$8.50.

The thesis of Seymour Melman's terrifying book can be briefly stated. There exists within the democratic capitalist political economy of the United States a second political economy that is neither capitalist nor democratic. Technically subordinate to the larger entity, this second political economy has in fact become the acknowledged master of the industrial core of the primary economic system, and the silent master of crucial areas of its political life. Each year the directorship of this inner state, through appeals of mixed fear and patriotism, renews its control over the richest portion of the nation's resources, which it then disburses to its industrial satrapies.

In the process of rewarding its vassals, the central management casts an indulgent eye on the excesses of its supporters, and takes care to shore up weaker members lest by their disappearance the boundaries of the inner state shrink. Finally, and most important, the state within a state has a double significance for the society in which it is entrenched. Presumptively the inner state serves as a mighty striking force whose purpose is to make invincible the nation's will. In fact, however, the inner state is the Achilles' heel of the outer, not only robbing it of energies and creativity that cannot be pried loose from the insatiable demands of the military, but threatening by its very presence to invite the total destruction that even its immense striking force cannot prevent . . .

Terrifying Experience

I fear that this condensation does scant justice to the power of Melman's book. No doubt many of the individual facts are familiar enough, at any rate to those concerned with the problem, but they are here assembled in a stunning way. The relentless adumbration of the means of Pentagon control over industry, university, Congress (the Pentagon has a lobbying force of 339 men, or about one for every two members of Congress); the fictions and science-fictions of "defense"; the wearisome account of DOD opposition to all moves that would lessen its influence; and above all the detailed exposition of the "opportunity costs" of the defense system—that is, of the improvements that cannot be undertaken because the war machine has pre-empted men, materials, and money—all these make reading this book, as I have stated at the outset, a terrifying experience.

Yet this is not, in my view, the most important contribution of the study. For Professor Melman's intention is not merely to rally opinion against the para-state, but to propose a new theory of the relation of the military establishment to the larger society.

Two Main Theories

There are today two such main theories of the American military structure. The first, which is espoused by the DOD itself, as well as by the majority of political scientists or polit-

ical spokesmen, is that the military establishment is nothing more than the traditional, constitutionally ordained, military arm of the civil state. The fact that it is larger and more powerful than in the past is blamed not on the activities of the military establishment itself, but on external events, political and technological, to which the military system constitutes only a measured response. In defense of this thesis, the DOD or the traditional spokesmen stress the ultimate civilian directorship of military affairs, the continuing indoctrination of the military as the servant of the civil government, the scrupulously observed domestic political neutrality of the military, etc.

A second theory is that of Marxism, or neo-Marxism, which views the military structure in a different light. From this vantage point, the military para-state serves two purposes. The first is the aggressive promotion of the interests of the capitalist order against the revolutionary forces, actual or potential, of the third world. The second is the creation, with the implicit blessing of the business community, of an area of production that is totally non-competitive with the normal economy, allowing capitalism to find an expansive salient without which the system would suffer from glut, falling profits, and inner crises.

A Third Possibility

Different as they are, these theories have a common base. Both assert the predominance of the civilian interests over the military. In the conventional view, it is "the people"; in the Marxian view, "the capitalists" who call the tune, and in both explanations of the military presence, it is the military who obey.

Professor Melman suggests a third possibility. It is that the military establishment has constituted itself as a self-contained entity, capable of impressing its views and imposing its will not only on the civil establishment to which it pays a ritual obeisance, but over a section of the economy in which the language of private enterprise is merely a fiction to hide its absolute authority. Moreover, that authority is no longer the loose coordination of businesses characteristic of the "military-industrial complex" of President Eisenhower's day. What has emerged today, Melman maintains, is a new form of "state-management" in which "the federal government does not serve business or regulate business. . . . Government is business."

It is true, of course, that the topmost figures in command of the DOD are civilians, and moreover either direct emissaries from the business world or men whose business sympathies are explicit. That explains the extraordinary solicitude the DOD shows for levels of performance that would never be tolerated within a genuine business enterprise. Yet, as Melman points out, "the crucial factor is the institution's nature, not the style of clothing worn by its top directors. The overwhelmingly military character of the state-management dominates the institution, not the personal-professional identity of its chiefs."

Power and Excitement

There is, in other words, within the closed system of the military establishment and its coordinate political world view, a compelling logic that transforms the mere businessman, sad-

THE STATE WITHIN A STATE

dled with his hopelessly bourgeois ideas of rational economic conduct, into the *imperator* for whom the ultimate rationale is now something larger than common business pursuits. Melman quotes Tom J. Farer, a former aide to McNamara, on the motivating spirit at the Pentagon.

"When I worked there, during the Kennedy era, the office of the Secretary of Defense seemed to be . . . an island. We were zestful, moved by controlled excitement, occasionally even euphoric, not with any crass sense of power, but with vistas of the elimination of nuclear terror by means of the systematic application of human reason. We were true believers and McNamara was our prophet."

Let these words remind those who sometimes write as if the drive for profits were the primal source of human aggression that profits are a calculus capable of indicating that some actions are contrary to the interests of the profit-seeker. For those whose rewards are the *frissons* of "controlled excitement" and the sense of beatitude that comes from applying human reason to the affairs of men, there are no such negative indicators. From such motives are built not businesses, but empires.

Can It Be Reversed?

Is the military establishment—the state within a state—in fact independent of its economic and political host? The issue is of surpassing importance, but I confess myself unable to determine how it is to be answered before history answers it for us. . . .

In the disillusion of the Vietnam war, the growth of that garrison state has now been checked. But I suspect that the question whether there will be a peaceful capitalism or a resumption of the hegemony of military state-capitalism will not be finally resolved until the Vietnam war at last peters out and the American economy is faced with the challenge of converting to a peacetime basis.

That huge and potentially life-saving transformation will require national planning on a vast scale, for which we have made no preparations, and before the prospect of which our latent conservatism may rise up to impose insuperable obstacles. In that event, our economy will falter, and the appeal of a return to the arms of the DOD will be very great. I do not know how to estimate the chances of our successful economic reorientation. I can only say that if we fail, the general prospect outlined by Seymour Melman seems the most likely course for the American nation to take, an eventuality that should make all men despair.

Other Books By Seymour Melman

Our Depleted Society
Decision-making and Productivity
The Peace Race
Inspection for Disarmament (Editor)
In the Name of America (Editor)
Conversion of Industry from a Military
to a Civilian Economy: A Series (Editor)

Copies of Pentagon Capitalism are
available from CSRE for \$3. (paperback)

S.E.S.P.A. IS NAUSEATED TO PRESENT ITS SECOND* ANNUAL DR. STRANGELOVE AWARD TO EDWARD TELLER

in recognition of his ceaseless efforts to follow in the footsteps of the great Peter Sellers. Dr. Teller, not content to rest on his laurels as "Father of the H-Bomb", has ceaselessly promoted the rapid development of all feasible systems of nuclear destruction.

He has argued for the indefinite continuation of atmospheric nuclear tests.

He has fought for the development and production of the ABM and MIRV weapons systems.

He has consistently espoused the practical use of nuclear weapons, most strikingly in his contention that "we must prepare for limited warfare—limited in scope, limited in objectives, but not limited in weapons. A localized limited nuclear war."

He has sought to create an atmosphere in which nuclear war would be possible by publicly belittling the effects of such weapons, as for example, in his statement, "The great majority of our citizens could survive a nuclear attack."

The name Edward Teller is recognized everywhere as a symbol of science in the service of warmakers. Nothing better exemplifies the absurdity of a "disinterested search for truth" funded by the DoD than his own philosophy:

The duty of scientists, specifically, is to explore and to explain. This duty led to the invention of the principles that made the hydrogen bomb a practical reality. In the whole development I claim credit in one respect only: I believed in the possibility of developing the thermonuclear bomb. My scientific duty demanded exploration of that possibility.

*NOTE: presentation of First Annual Award to M. M. May of Livermore is reported in "Report from Berkeley SESPA," *Science for the People* vol. II, No. 2, Aug. 1970, p. 12.

One direction for Social Responsibility in Engineering was recently shown by Ralph Nader. He is setting up a group called "Clearinghouse for Professional Responsibility". The Clearinghouse will accept information on a confidential basis from corporate and governmental professionals about employers' policies or practices that they consider harmful to the public (consumer) interest.

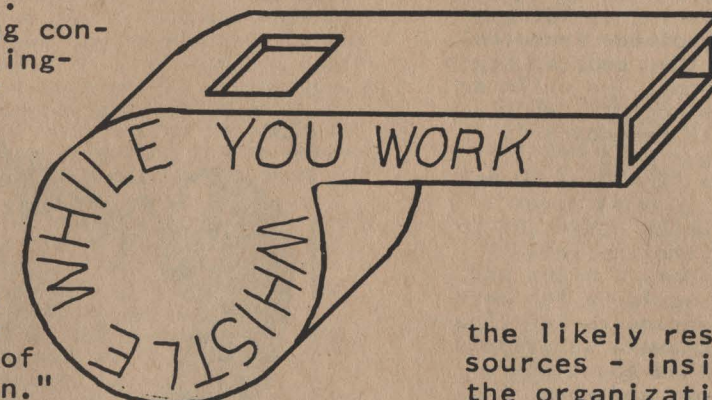
In a New York Times article (Jan. 27, 1971), Mr. Nader was quoted as saying "Employed professionals are too often the silent instruments of private and public interest, destroying the environment and consumer. Those professionals who have spoken out, within and beyond their organizations, have too often been demoted, ostracized, discharged or suppressed, when in fact they may be heroic figures".

At a daylong conference at Washington's Mayflower Hotel, Nader stated that "Repudiation of myopic or negligent leadership in an organization is not the same as repudiation of the organization."

Nader also suggested that professionals should band together to gain strength in numbers. He believes that professionals should organize to force management to adapt due process procedures and that professional societies should defend their colleagues when they are punished for invoking professional ethics against the organization that employs them. "Most of the established professional societies or associations never challenge corporate or government treat-

ment of lawyers, engineers and scientists.

In an article in *Science*, Vol. 171, Feb. 12, 1971, Nader suggested the following questions be used as guidelines. "Is my knowledge of the matter accurate? What are the objectionable organizational practices and what public interest do they harm? How far should I go inside the organization with my concern or objection? Are any rules being violated by contacting external parties? What is the best way to blow the whistle anonymously, overtly, by resignation prior to speaking out, or by some other alternative? What is expected to be achieved by whistle-blowing the particular issue? What is



the likely response from various sources - inside and outside the organization - to the whistle-blowing action? For those who have asked themselves these questions and determined that they must, in good conscience, blow the whistle... (write) Clearinghouse for Professional Responsibility; P.O. Box 486; Washington, D.C. 20044."

The Editor
"Spectrum"
345 E. 47th St.
New York, N.Y. 10017

Dear Sir,

Even if I overlook the condescending language of the write-up in the IEEE Convention booklet, my reaction to the "goodies" in store for the engineers' wives in the Ladies' Program is less than enthusiastic.

What brings women together at the IEEE Convention? Largely, the fact that our husbands are engineers. We depend on the engineering industries for the jobs which feed, house and clothe our families - and right now these industries are putting many engineers out of work. The war in Vietnam and the resultant inflation, and the recession which is an attempt to control this symptom rather than the cause, concern us all. Why no session on unemployment in the industry, and what we can do about it, for both men and their wives?

We travel on antiquated mass transit systems in decaying cities, or we move to the suburbs where our cars add to the pollution produced by the industries we depend on. What are the engineers doing about these problems? - wives would love to learn.

Which of us can be happy when maintaining our living standard depends on our husbands developing more sophisticated ways to rain death on war-weary people in Asia?

The technology enmeshing us loses sight of the people involved- technical considerations rather than peoples needs dictate what will be done. The children on whom we impose this society, whom we educate according to technology's needs, may turn to drugs - so IEEE offers us a lecture on "The Drug Scene".

A more useful and relevant women's program would be one which attempted to talk about the social implications of technological change, and, I might add, the entire conference would be far more useful to society if engineers left their semiconductors and microwave subsystems for three days and talked about where our technology is going, and why.

As women, we can't evade the despoiled environments we must breathe the same air and depend on the same transportation and communications networks as men. We don't wish to be shunted off with fashion shows or a "peek" at Greenwich Village, but need a public forum at the IEEE Convention to say that technology must serve the people, and people, men and women, must stop being its servants. We must give technology a human focus, for the greater good of a greater number of people.

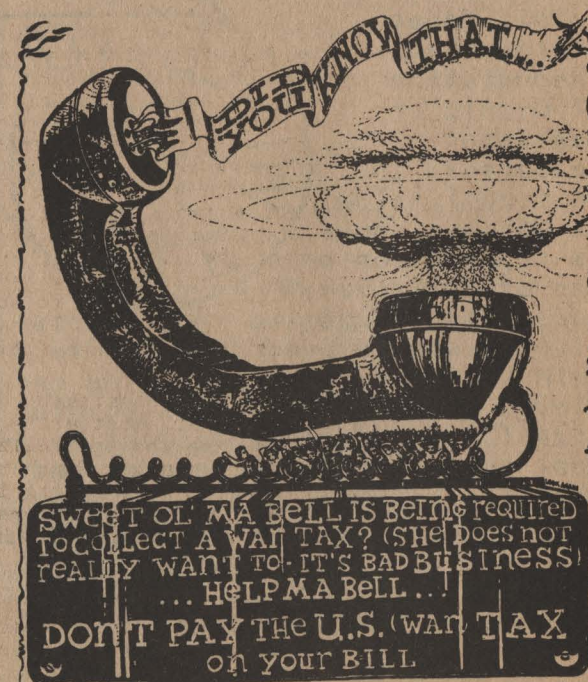
Barbara Marsh
New York, N.Y.

JOBSEEKERS

On March 14, St. Louis labor leaders and rank-and-file participated in a meeting called by JOBSEEKERS, a group of employed and laid off blue and white collar workers from McDonnell-Douglas, Emerson, and Monsanto. Leaders and rank-and-file from the following unions were invited to participate; International Union of Electrical Workers; Oil, Chemical and Atomic Workers; the United Auto Workers; Communication Workers of America; and the Aluminum Workers of America. The discussion at the meeting centered around the effects upon the American economy of the Indochina war and a documentary film about scientists and engineers in the defense industry in California, "The Schizophrenia of Working for War".

JOBSEEKERS' purpose is to help to create the conditions that will generate the thousands of jobs needed to constructively employ those workers laid off by large St. Louis corporations. JOBSEEKERS' program emphasizes that stable jobs in a stable America can be created only by conversion to non-military production-- production that will be geared to solving America's social problems.

JOBSEEKERS
1035 Central Parkway
Florissant, Missouri
Mrs. William McClammer



ADDITIONAL ROLES FOR IEEE

Many people believe that the IEEE must respond to a changing social environment or lose the support of a large number of electrical engineers. The Institute functioned well in its originally chartered role, but pressures now exist for a change in that charter (see proposed charter amendment in this issue). It is up to us as members of the profession and of the IEEE to make our views known and support a full program for modernizing the Institute.

The IEEE recognizes the need for change, and is attempting to determine a course of action. The Board of Directors has established the ad hoc Committee on the Professional Concerns of Young Engineers (COPCYE) to classify members and to suggest solutions which will enable the Institute to better serve all its members.

COPCYE was formed in June, 1970 and consists of eleven electrical engineers, most of whom are in their early thirties. The "Spectral Lines" column of the October, 1970 issue of the IEEE Spectrum contains a list of committee members.

Many IEEE students do not maintain their membership after graduation. It is important to attract these engineers back to the organization. To do so, COPCYE is trying to answer two basic questions. First, what are the concerns of young engineers that IEEE does not currently satisfy? Secondly, what are the ways in which IEEE can satisfy these concerns?

The present employment situation is of importance to engineers of all ages. Some people feel that the employment problems we have today are a direct result of government policies; during the 1960's, DOD and NASA grew so powerful that these agencies accounted for the support of a majority of electrical engineering manpower in this country. In essence, a free market in engineering talent ceased to exist, and people were channeled into disciplines. It seems clear now that the government, through its support of certain areas such as radar research, created a reserve pool of experts who were not immediately needed, while other areas such as transportation received relatively little support with a resultant shortage of manpower. One idea set forth by COPCYE is that the IEEE gather and publish statistics relating to job openings and short and long term government priorities which affect the employment of electrical engineers. Such information may prove invaluable to someone planning an education in electrical engineering or to someone wishing to change fields within the profession.

The IEEE exists mainly to disseminate technical information. However, most articles in IEEE publications are too specialized for the general engineering reader. Furthermore, those who are interested in the articles can acquire them without purchasing membership. There is a real question as to the value that IEEE membership has for young engineers. COPCYE has several suggestions which might make that membership more valuable. Technical publications could seek more applications-oriented work which would be useful to younger engineers in carrying out their job assignments. (This is not to detract from the importance

of publishing new work of a research nature.) In addition, a larger differential between member and non-member cost of publications should be implemented.

An attempt must be made to involve more young engineers in IEEE activities. An effort might be made to place young engineers on some of the committees which help plan IEEE functions and establish IEEE policies. One way of involving student members in IEEE activities is through a so-called Summer Task Force Program. Students would spend a summer investigating a local, regional, or national problem of concern to the electrical engineering profession. The results of their work might be published in Spectrum or the Student Journal.

The opportunity for continuing education and for retraining is of importance to all engineers. High quality educational programs provided by IEEE could give membership a significance which would endure throughout one's career. The IEEE might also undertake to license or give accreditation to engineers. Such recognition would be subject to periodic renewal based upon professional performance, examination, or educational courses completed. This kind of program may tend to enhance the professional recognition granted to engineers.

The IEEE is prohibited by its restrictive charter from taking an active part influencing legislation that affects engineers. Furthermore, there exists no independent group of engineers that can provide legislators with unbiased testimony on the feasibility and social utility of new technology. In the May, 1970 issue of Spectrum, R. M. Wilmette has dealt with the problem of engineering truth in an adversary environment. Many times Congress has had to rely on the testimony of scientists in a position to benefit monetarily from Congressional decisions. If the Institute cannot become more active in representing its members before the nation's legislators, COPCYE hopes that an affiliated organization can perform that function. At least, IEEE could publicize Senator Kennedy's Conversion, Research,

Education and Assistance Act (see footnote). This bill, which would affect all engineers and scientists, is to "provide for a three-year authorization of \$450 million to redirect the vast reservoir of talent of our scientific and technical community to the deep, besetting problems of our Nation - unemployment, crime, racism, pollution, nutrition, housing, health care, transportation, and education."

By establishing the COPCYE committee, the Board of Directors of the IEEE has shown an interest in revitalizing the Institute. COPCYE has begun to investigate new courses of action, but it is not sufficient to let matters rest with the IEEE hierarchy or with the new committee. As members of the IEEE, we should help the organization to move boldly into the new decade.

Harvey Rubin
CSR working committee

Footnote: The quote in this article is from S. 4241-Introduction of the Conversion, Research Education and Assistance Act of 1970; Senator Kennedy, The Congressional Record, Vol. 116 No. 141 August 14, 1970

Copies of this bill, and also S. 4430 - Introduction of the National Economic Conversion Act; Senator McGovern, are available from C.S.R.E.

WIENER'S NONCOMPLICITY LETTER

The following letter, reprinted in its entirety from the *Atlantic Monthly* for January, 1947, was written by Norbert Wiener to a research scientist of a leading aircraft corporation who had asked Dr. Wiener for information about missile research he had conducted during the Second World War.

SIR:

I have received from you a note in which you state that you are engaged in a project concerning controlled missiles, and in which you request a copy of a paper which I wrote for the National Defense Research Committee during the war.

As the paper is the property of a government organization, you are of course at complete liberty to turn to that government organization for such information as I could give you. If it is out of print as you say, and they desire to make it available for you, there are doubtless proper avenues of approach to them.

When, however, you turn to me for information concerning controlled missiles, there are several considerations which determine my reply. In the past, the comity of scholars has made it a custom to furnish scientific information to any person seriously seeking it. However, we must face these facts: The policy of the government itself during and after the war, say in the bombing of Hiroshima and Nagasaki, has made it clear that to provide scientific information is not a necessarily innocent act, and may entail the gravest consequences. One therefore cannot escape reconsidering the established custom of the scientist to give information to every person who may inquire of him. The interchange of ideas which is one of the great traditions of science must of course receive certain limitations when the scientist becomes an arbiter of life and death.

For the sake, however, of the scientist and the public, these limitations should be as intelligent as possible. The measures taken during the war by our military agencies, in restricting the free intercourse among scientists on related projects or even on the same project, have gone so far that it is clear that if continued in time of peace this policy will lead to the total irresponsibility of the scientist, and ultimately to the death of science. Both of these are disastrous for our civilization, and entail grave and immediate peril for the public.

I realize, of course, that I am acting as the censor of my own ideas, and it may sound arbitrary, but I will not accept a censorship in which I do not participate. The experience of the scientists who have worked on the atomic bomb has indicated that in any investigation of this kind the scientist ends by putting unlimited powers in the hands of the people whom he is least inclined to trust with their use. It is perfectly clear also that to disseminate information about a weapon in the present state of our civilization is to make it practically certain that the weapon will be used. In that respect the controlled missile represents the still imperfect supplement to the atom bomb and to bacterial warfare.

The practical use of guided missiles can only be to kill foreign civilians indiscriminately, and it furnishes no protection whatsoever to civilians in this country. I cannot conceive a situation in which such weapons can produce any effect other than extending the kamikaze way of fighting to whole nations. Their possession can do nothing but endanger us by encouraging the tragic insolence of the military mind.

If therefore I do not desire to participate in the bombing or poisoning of defenseless peoples - and I most certainly do not - I must take a serious responsibility as to those to whom I disclose my scientific ideas. Since it is obvious that with sufficient effort you can obtain my material, even though it is out of print, I can only protest pro forma in refusing to give you any information concerning my past work. However, I rejoice at the fact that my material is not readily available, inasmuch as it gives me the opportunity to raise this serious moral issue. I do not expect to publish any future work of mine which may do damage in the hands of irresponsible militarists.

I am taking the liberty of calling this letter to the attention of other people in scientific work. I believe it is only proper that they should know of it in order to make their own independent decisions, if similar situations should confront them.

NORBERT WIENER

The Moral Responsibility of Scientists

American scientists who concern themselves with the ultimate goals of science and the value of its contributions to mankind today find themselves in a moral dilemma of increasing proportions as science and technology appear to have become foundation stones for militarism throughout the world.

The universal rationalization for the diversion of science from the disinterested search for knowledge is fear of the destructive capabilities of other nations. Because of this diversion, there is an increasingly pathological trend in science and technology even as they rise to higher levels of spectacular achievement. It is a world wide malaise although most apparent in the more technologically advanced nations such as the United States. It is not solely a sickness of the capitalist part of the world. It also affects the nations of the communist bloc as shown by the military pre-occupation of their scientific establishments, as exemplified by those of the U.S.S.R. and China. Nor is it a phenomenon confined to the technologically advanced world. India, a newly developing country, spends the major part of its relatively small research and development budget on military projects.

The world public is becoming aware that something is wrong. The U.S.A. and the U.S.S.R. demonstrate their superb technical capabilities by dispatching space probes to Venus and landing men on the moon but seem incapable of, or at least uninterested in, solving the urgent technical problems of the industrial age afflicting their peoples here on earth. Outside of improved medicine, few of the spectacular advances of science in the past decade have led to significant improvement in daily life. The deterioration and pollution if the environment continues unabated, and the ills of the congested metropolis grow more grave as thousands of agrarian workers migrate to the urban centers of the world following their displacement from the farms by technological developments in agriculture.

It is difficult to arrive at an approximate figure for the fraction of fundamental research in the U.S. which is supported by the military. This figure strongly depends on the debatable questions of 1) the definition of funda-

mental as opposed to applied research and 2) of the fractions of space and atomic research which should be regarded as military. But by any set of definitions, it can not be disputed that a large fraction of fundamental research has had direct support of military agencies.

In the past several years, research spending by most government agencies has been cut back because of the costs of the Vietnam war. This includes particularly military spending for long range projects such as fundamental research. The Mansfield amendment which requires military research expenditures to be "mission-oriented" has accentuated the cut-backs in the funding of fundamental research. Nevertheless, a large fraction of fundamental research can still be regarded as background for "mission-oriented" development and the participation of the military in the funding of research remains large.

It is not to be supposed that the Department of Defense distributes research monies in the unbiased manner of the National Science Foundation. The latter seeks to encourage the balanced growth of all fields of fundamental science. The obvious purpose of military research expenditures is to advance military technology. Where this requires the support of certain background areas of fundamental science, the necessary monies are made available. To the extent therefore that the military participates in the support of fundamental research, it promotes the preferential growth of selected areas of science of particular military interest. It follows that other fields necessarily become of secondary interest because of lack of funds.

In this situation, science as a whole begins to play a detrimental role in the overall development of the welfare of man. The scientific-technological complex functions largely as an adjunct to the military establishment, with its contributions to the betterment of human life arising as mere "spin-offs" from its main directions. No section of the scientific community can be completely isolated from military research in the present highly interrelated and interwoven world of scientific advance. This is the position in which conscientious scientists find themselves today.

While political activism may be growing among younger scientists, it still may be asked why there is so little question emanating from the general scientific community concerning the present debasement of science. There are several reasons for this lack of responsible concern with the militarist character of science today and with the influence of the military in determining its future trends. Let us now examine these.

In the first place, there are many scientists who regard science and the acquisition of knowledge as *an end justified in itself*. To be sure, there was general revulsion among scientists against the inhuman medical experiments of the Nazis. But there is still no general agreement that moral criteria are relevant in the choice of the directions of science and that certain areas are inadmissible because they are anti-human. There is no generally accepted guiding principle which points out to the scientist the areas of research most worthy of exploration in terms of contribution to human society. Refuge is taken in the notion of the moral neutrality of science, where the need to attack an infinitude of still-unanswered scientific questions precludes the weighing of moral content. The single goal of scientific research then becomes the maximum yield of information.

While the above may be true with respect to really fundamental research, the argument loses its validity when extended to research which is taken with applications in mind. Here the human values of the research must be reckoned in terms of the proposed applications although, even here, there may be other incidental "spin-offs" of value to civilian society. But the research must still be judged in terms of its primary purposes. For example, the development of a military communication system is essentially military even though some aspects of it may have civilian value. In any event, its civilian uses would be more speedily developed if the peaceful aspects of the research and development were undertaken directly instead of being mere low priority incidentals connected with high priority military research projects. There is no substance to the argument that the specific applications of any piece

of research are immaterial as humanity will inevitably benefit in the end. This rationalization certainly is not valid with respect to studies of the relative effectiveness of various polymeric materials incorporated in napalm B.

The predominance of science and technology is the most significant aspect of the times in which we live. Our every-day lives are bound up with the developments of the science of the past. It seems clear that the directions of the science of today are shaping the kind of world in which we and our posterity will live tomorrow. Far more than in any other area of human effort, research and development get results. Then what are the conclusions to be drawn from today's gigantic military research expenditures? We must conclude that all existing weapons will be vastly improved and that new weapons and new military techniques will be perfected. Whatever exists in military technology which is horrible and barbarous today will become dramatically more horrible and barbarous tomorrow.

The relation between science and society is a reciprocal one. While science and technology are shaping the world of tomorrow, the orientations of science are determined by the conditions of the world today. In

short, we are confronted by a vicious cycle whereby science magnifies into tomorrow the pathology of today. It is the task of our generation to break this cycle if civilization is to survive.

When we inquire as to the moral responsibility of scientists in this situation, it is only too easy to pass the responsibility along to others; to the governmental leaders and the statesmen of the world. Scientists, it is said, bear no responsibility beyond that of ordinary citizens. But this will not do. In varying degrees, scientists and technologists are the prime creators of the threatening complex of destructive potential.

Yet when the content of this moral responsibility is examined more specifically many scientists find that it is ambiguous. If we agree that the build-up for technological warfare is necessary for defense against similarly-armed enemies, then perhaps our responsibility as scientists may call on us to improve this build-up. Criticisms of particular weapons systems need not be at variance with approval of the general policy. For example, recent criticism of the antiballistic missile (ABM) system was confined to whether it would work, its effect on total military strategy, and its relation to other national priorities.

The moral responsibility of scientists

goes far beyond criticism of particular weapons systems and particular wars. The disastrous progress of military technological innovation has made suicidal continuation of international relations ultimately based on force. The new weapons systems have made us more, not *less*, vulnerable. "Mutual deterrence" has placed the whole world in mortal danger and the most imperiled are the nations which possess the nuclear missiles which are trained on each other.

Scientists have a special role and a special responsibility in the reorientation of a science-dominated society. Collectively, scientists have responsibility for the social consequences of their work. It is they who must make clear to the public the detailed implications of the present directions of science. Little time has been devoted to this assessment and warning. There have been numerous speculative projections of possible specific advances of science and technology such as space travel and the synthesis of living beings. But the crucial question is neglected; that is, whether civilization, and the science which depends upon it, will continue to exist. □

Frank Collins, CSRE
Condensed from Fellowship

TALK

You're a brave man they tell me.

I'm not.

Courage has never been my quality.
Only I thought it disproportionate
so to degrade myself as others did.
No foundations trembled. My voice
no more than laughed at pompous falsity;
I did no more than write, never denounced,
I left out nothing I had thought about,
defended who deserved it, put a brand
on the untalented, the ersatz writers
(doing what had anyhow to be done).

And now they press to tell me that I'm brave.
How sharply our children will be ashamed
taking at last their vengeance for these horrors
remembering how in so strange a time
common integrity could look like courage.

YEVTUSHENKO



"Charles P. Steinmetz, master technician, who ever thought in terms of human values." - Harry Laidler.

CHARLES PROTEUS STEINMETZ

(father of electrical engineering and social activist)

- 1882 entered Univ. of Breslau and joined student socialist club.
 - 1885 became temporary editor of the PEOPLE'S VOICE, the local student socialist newspaper.
 - 1888 fled Germany to escape imprisonment for his political beliefs.
 - 1889 sought refuge in America.
 - 1892 gave paper at AIEE on 'Law of Hysterisis', which established his technical reputation.
 - 1893 became consulting engineer for General Electric.
 - 1897 published first book, Theory and Calculation of AC Phenomenon.
 - 1901 President of AIEE.
 - 1911 Appointed to Board of Education by George R. Lunn, first socialist mayor of Schenectady.
 - 1912 Elected President of Board of Education.
 - 1913 Lund and Steinmetz run for mayor and President of the Schenectady Common Council on Socialist ticket. Both lose.
 - 1915 Same as 1913, this time Lund and Steinmetz win.
 - 1916 published 'America and the New Epoch' in which he wrote:

"As a socialist, I took an active part in the 10 years political war of the German Social Democrats against Bismark, succeeded in escaping to Switzerland when the Government tried to arrest me, and after continuing my studies there, came to America.

I have always retained my interest in public welfare and politics, have held and am holding political office in my home town and am still a dues paying member of the socialist party."
 - 1922 proposes state-owned hydro-electric project at Niagra Falls.
 - 1923 Steinmetz dies, schools close for his burial, Schenectady flies its flags at half mast.
- Future issues of SPARK will include additional commentary on Charles Proteus Steinmetz.



Join the march on
WASHINGTON
APRIL 24

Bring all the GI's home now!
End the draft now!

ASSEMBLE: The Ellipse 11:00 am

MARCH: Down Pennsylvania Avenue Noon

RALLY: On the front steps of the Capitol 1:00 pm

NATIONAL PEACE ACTION COALITION

For Local Information:

Mail to NPAC 1029 Vermont Ave., N.W., Wash., D.C. 20005 8th floor

- ☐ Enclosed is a donation of \$_____ to help build the spring antiwar activities. FUNDS URGENTLY NEEDED!
- ☐ Please add me to the mailing list.
- ☐ Please send me _____ April 24 buttons (30¢ ea.) and _____ April 24 posters (50¢ ea.) _____ Apr. 24 Bumper Stickers (50¢ ea.)
- ☐ Please send me a literature order form for bulk price discounts.
- ☐ I am interested in local peace activities in my area. Please contact me.
- ☐ My organization endorses the spring antiwar activities.

Name _____

Address _____

Phone _____

Organization _____

Zip _____

200 SCIENTISTS AND ENGINEERS DESCEND UPON WASHINGTON

People who go to Washington to speak up against the war? Of course they are all unwashed long-haired hippie freaks and student types who are so affluent that they cross state lines to make panty raids.

Well, on June 4, over 200 of them from N. Y. and N. J. donned short-haired wigs, the dignified looks of the over-thirty generation and the obligatory gray flannel suits as well as IBM, General Electric Research, RCA, Xerox, Kodak, and Brookhaven badges. And in these way-out get-ups they went to Washington to visit their Congressmen.

They were obviously not recognized as hippies because they got to speak to the President's Science Advisor, Lee DuBrigge, who is apparently even straighter than his boss (if that's possible) because he was described as "a well-prepared out-and-out apologist for the President." (1) They also made it into the almost inner sanctum of the Pentagon where they spoke to Deputy Secretary of War, David Packard. He appeared to them as "an old-fashioned businessman with old-fashioned ideas" (1) but he obviously was hip enough to tell them that the administration also very much wants peace in Vietnam. They are busy working toward it, he said, through eliminating herbicides and having the defense budget cut by lower appropriations and inflation. (1) (That might be called passive action, and a DoW invention.) The group also met with some twenty

senators and forty representatives whom they urged to pass the amendment to cut off funds for the war altogether.

Since they got to meet so many dignitaries we have to reconsider. Perhaps they were not hippies after all. Perhaps they were just well-paid suburban familymen; scientists and engineers "who are deeply troubled," who "see our nation frustrated in its drive toward social justice and general economic well-being" and who "shudder at the atmosphere of hysteria and anti-intellectualism that the war and its byproducts are engendering." (2) For many of them this trip to Washington was their first involvement in politics. It is remarkable indeed that some of the country's most highly educated and emulated men are shedding their traditionally apolitical role. One of them said, "We have nothing new to say—we are merely taking our turns at the barricades." (2) Different political groups may be perceiving the barricades differently, but it is important to realize that in the arena in which blacks and students first began to struggle the spectators of yesteryear are now getting in on the act

(1) "Scientists Report on Washington Mission" by Dr. Richard Orgass in *Yorktown*, June 18, 1970

(2) "Dissent Spreads to Nobelists, Industrial Scientists" by Philip M. Boffey in *Science*, June 12, 1970

B. F.

TECHNOLOGY AND SCIENCE COMMITTEE (TASC)

TASC is a group of people centered in Palo Alto, "working to harmonize the effects of our current technologies with our hopes for American society". TASC began in early 1968 when a group of local scientists got together to discuss how their government's involvement in Southeast Asia impinged upon their professional lives. The group now numbers about 300 people whose concerns range over a broad area. Projects include studying ways scientists and engineers can influence political and economic decision making, alleviating sources of local racial tension, and researching the impact of technology upon the local environment. Any group of members (a TASC force) can work together to explore a topic of common interest.

Contact: TASC P.O. Box 952, Palo Alto
California 94302

Looking for a chance to use your Science for the People? SIGN UP FOR TAP (Technical Assistance Project)

If you want to work on Sound Systems, Automobiles, Communications Equipment, Chemical Analysis, Self-Defense Mechanisms write: *Science for the People*, Box 59, Arlington Heights, Mass. 02175, or call 'Scot' 491-8725 or 491-1850 ext. 305. Theoretically trained? We'll help you learn practical skills!

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-RECYCLE IT-

When you are finished reading this paper, pass it on to one of your friends. If you don't want to part with it, make copies and distribute those. Should you be one of those few who want to discard the paper, don't throw it away - recycle it. For a complete list of recycling centers (for all types of reusable material) write the Earth Action Council at UCLA, P.O. Box 24390, Los Angeles 90049. Requests must be accompanied by a business size, self-addressed envelope with 12 cents postage.

From the people who brought you Vietnam:



The anti ballistic missile system.

They're mad.
They're absolutely mad.
Everyone can see that things at home are getting worse all the time, and that little or nothing is being done about it.

The last thing in the world we need is to spend six or seven thousand million dollars for the down payment on an anti ballistic missile system.

But what can you expect from the type of mind that got us into Vietnam in the first place, and that keeps plunging us back in for one last victory-try every time it looks as though we might finally extricate ourselves.

Mr. Nixon and Secretary Laird and their advisors in the Pentagon seem to have lost touch with reality.

There are bombs going off in our cities, but they're not coming from China or the U.S.S.R.

The air we breathe is being poisoned, but it's not being done by enemy agents.

Many Americans no longer believe what the Government tells them, but it's not because they listen to Radio Moscow.

The gold in Fort Knox is, for all practical purposes, no longer our own—but the job wasn't done by Goldfinger or Smersh.

The war and weapons people have become so obsessed with International Communism, they fail to see that they themselves are laying the groundwork for a state of home-grown anarchy.

A few observations on the A.B.M.
The figure they use is six or seven billion dollars. But this is just the well-known foot in the door.

Experience with Pentagon procurement in the past indicates that actual costs run two or three times the original estimate.

Furthermore, there is every likelihood that the "light" A.B.M. system will get heavier and heavier as it goes along, and would ultimately cost over fifty thousand million dollars.

All this for a "Magnet Line in the Sky" (as the N.Y. Times described it in a recent editorial), that would most likely be obsolete by the time it is operative, and wind up as surplus electronic junk on Canal Street.

Meanwhile, back in the U.S.S.R. do you think "their" hawks would be standing still for this?

What can we do about it?
Unfortunately, the Pentagon doesn't seem to be able to learn from experience, but we wouldn't give up hope for the U.S. Senate.

There are a lot of Senators—including conservative Republicans—who feel they were "had" by the infamous Gulf of Tonkin resolution, and this time they don't seem to be buying the Pentagon's big public relations campaign on the A.B.M.

This thing can be stopped in the Senate. But it will take the kind of grass roots' effort that did so much to change the political climate on Vietnam last year.

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McCracken's Anti-ballistic Missal

If the System 360 Operating System had 5,000 mistakes after it was fully tested by IBM and released to costumers-- how is it possible to expect the antiballistic missile (ABM) computer system to have no mistakes at all?

This is the question asked by Daniel D. McCracken, chairman of Computer Professionals Against the ABM, who has begun his second annual campaign to convince the Senate that the ABM computers won't work.

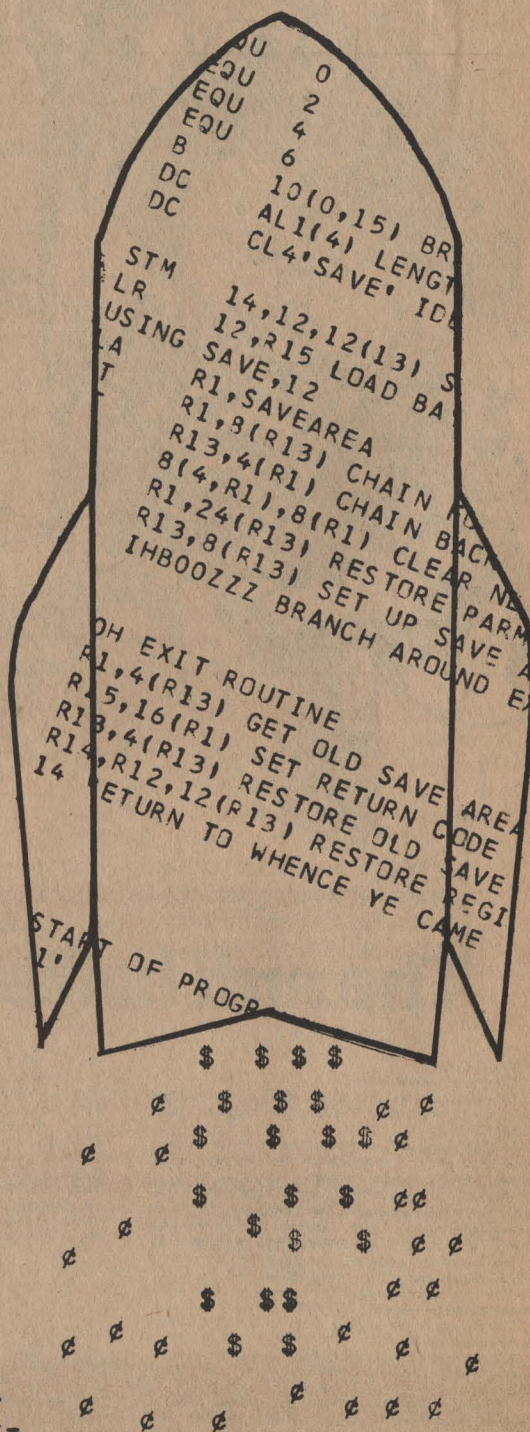
Learning from his lack of success last year, McCracken has turned the campaign into a fulltime job--speaking to professional societies in states with uncommitted senators and buttonholing the senators themselves.

This year he has more help. A public relations firm has volunteered aid, and the members of the organization's executive committee are taking a more active role.

Members of the executive committee are: Paul Armer of the Harvard Program on Technology and Society; Joseph Weizchbaum, Professor of Computer Science at MIT; and Gregory P. Williams, a computer technologist in Phoenix, Ariz. The committee itself reports that it has over 500 members from the computer profession.

McCracken cites three reasons why he believes the ABM computers won't work.

- 1) Realistic testing is impossible because it would require nuclear explosions in the atmosphere.
- 2) The precise nature of the computing task can never be defined because the enemy is always improving its countermeasures.
- 3) "Evolutionary development critical to the success of every known successful computer system is out of the question. The Safeguard computer would never be given a second chance."



F. A. S. NEWSLETTER

FEDERATION OF AMERICAN SCIENTISTS—Founded 1946—
A national organization of natural and social scientists and
engineers concerned with problems of science and society.

Vol. 24, No. 3
March, 1971

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Membership: \$15.00
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Herbert F. York, Chairman
Marvin L. Goldberger, Vice Chairman
Jeremy J. Stone, Director

AMERICA AND THE USE OF FORCE

The Federation of American Scientists is a quarter century old this month. Twenty-five years ago, its founding members were startled into political activity by the moral and social problems posed by nuclear weapons. American military technology, and American willingness to use that technology on Hiroshima and Nagasaki, produced FAS. Again today in Vietnam, American technology, and its willingness to use that technology in war, are posing important moral and social problems.

In recent weeks, a wealth of new material has appeared bearing on three relevant science and society questions. Is America committing war-crimes in Vietnam with a weapons technology that is necessarily indiscriminate in its destructive capacity? Can the civilian leadership of industrial-bureaucratic states be trusted with the use of such force as science can provide? Is the military establishment a threat to American society?

WAR CRIMES IN VIETNAM?

"If certain acts in violation of treaties are crimes, they are crimes whether the United States does them or whether Germany does them, and we are not prepared to lay down a rule of criminal conduct against others which we would be unwilling to have invoked against us."

Justice Robert Jackson
Chief U.S. Prosecutor at Nuremberg

No one has a better right to raise the question of American war crimes in Vietnam than General Telford Taylor, the American Chief Counsel at the post-war Nuremberg war-crimes trials. His book "Nuremberg and Vietnam: An American Tragedy" raises questions that no American can lightly dismiss.* Taylor concedes that a judicial determination of the legality of American participation in the war would present "enormous difficulties" to any court and especially to a domestic court. But he has acknowledged that General Westmoreland "might" be convicted if world war II war crime standards were applied. Every citizen should read this book and judge for himself whether he could consider American military tactics to be war crimes if, for example, they were pursued by some other country.

Both sides engaged in strategic bombing of cities in World War II and as a result this issue was not raised at Nuremberg. But in Vietnam, it appears that hamlets and villages have been bombed or shelled simply because a shot was fired from them at Allied aircraft or a mine found nearby. Taylor points out that a U.S. Marine Corp leaflet declared "The U.S. marines will

not hesitate to destroy immediately any village or hamlet harboring the Vietcong". Reprisals of this kind are certainly not permissible. When the Germans shot French hostages for the loss of German soldiers to nearby ambushes, we did consider it criminal.

Taylor points to the "free-fire" (artillery) or "free-strike" (air) zones. Here mass evacuations precede ground rules that permit firing at anything that moves.

But these evacuations are inevitably incomplete, in the conditions prevailing in South Vietnam, considering the degree of control of Saigon and the degree of literacy, and responsiveness to Government, of the population. Americans have turned prisoners of war over to South Vietnamese where torture is frequent. It is a violation of Article 12 of the Geneva Convention to turn prisoners over to powers that are not observing the requirements of the Convention.

Taylor's book is going to pose a problem for the Administration. It triggers the sensibilities of the young and forces the Administration to come to grips with those emerging moral attitudes that refuse to suppress an awareness of what it is we are doing. As the Administration concedes that the war should be terminated promptly the public will wonder at the pointlessness of U.S. military actions. And in a cooler atmosphere, serious retrospective questions will be raised. No involved public official can now ignore the possibility that he is implicated in some way in war crimes.

Specific evidence of alleged war crimes is also available now through the investigations of the National Committee for a Citizens Commission of Inquiry on U.S. War Crimes in Vietnam. Hearings at which veterans have testified have occurred in 13 cities during the last year. Testimony has focused on four separate areas:

- (1) Ground combat operations (search and destroy, free-fire zones, "Zippo squads", etc.)
- (2) Treatment of civilians and/or prisoners by U.S. forces (interrogation and torture, detention centers, civilian prisons, etc.)
- (3) The air war (saturation and pattern bombing of civilian centers use of cluster bomb units, napalm, white phosphorous, helicopter gun ships, defoliation program, general destruction of croplands, forests, rivers/watershed, etc.)
- (4) Pacification and resettlement of civilian population/refugees (destruction of "New Life" hamlets, barbed-wire concentration camps, civilian prisons similar to Con Son).

*Nuremberg and Vietnam: An American Tragedy, Telford Taylor, New York Times book, \$1.95

THIS IS THE FIRST PAGE OF A SIX PAGE NEWSLETTER OF FAS. THE ARTICLE WAS SIGNED BY
THE DIRECTOR OF FAS. FAS IS ACTIVELY SEEKING NEW MEMBERS TO SUPPORT IS REJUVENATION.

HANG UP ON WAR!



Join With Thousands Who Do Not Pay the 10% Federal Telephone "War" Tax

In April of 1966, as the government was escalating the Vietnam war, Congress passed a law raising the Federal tax on telephone service to 10%. "It is clear," said Rep. Wilbur Mills, Chairman of the House Ways and Means Committee, "that Vietnam and only the Vietnam operation makes this bill necessary." (*Congressional Record*, February 23, 1966)

One effective way of saying NO to the endless loss of lives in what is now the longest war in U.S. history, of resisting a government that is ignoring serious social deterioration and becoming more repressive at home, is by joining the thousands of Americans who are refusing to pay that "war" tax.

WHY BOYCOTT THIS TAX?


A tax boycott demonstrates to the government that you are opposed to the Vietnam war and are acting conscientiously on your belief. This act of refusing to pay the tax concretely affirms the position that individuals must not comply with immoral actions of governments. It results in a direct confrontation between citizen and government, and creates just one more problem the government has to contend with so long as it pursues its current policies. In addition, the fact that people are willing to resist the war to the point of breaking the law compels others to examine more carefully the depth and nature of their own opposition to that war, and to begin to act themselves. Finally, the monthly refusal of a small amount of money creates a thorny collection problem for the Internal Revenue Service.

WHAT HAPPENS TO TELEPHONE TAX REFUSERS?

Many thousands of people — in all parts of the country — are deducting this "war" tax from their telephone bills. In virtually every case telephone companies have assured the refusers that their telephone service will not be interrupted. The phone companies usually treat refusal as a matter between the individual and the government. In some cases they have even called to remind a customer that on the bill he has just paid he has forgotten to refuse the tax.

The telephone companies report to the Internal Revenue Service that the tax is not being paid. The IRS eventually sends the tax refuser several written demands for the unpaid amount and usually pays him a visit. When these measures fail to get him to pay up, the IRS finally attempts to seek out a bank account or salary check from which to deduct the unpaid amount plus up to 6% interest.

WAR TAX RESISTANCE
339 Lafayette Street, New York, N.Y. 10012



New York Telephone
Part of the Nationwide Bell System

Thank You!

See the front pages of your telephone directory for information on:

- Charges for calls
- Your Business Office phone number
- Payment locations

WAR TAX RESISTANCE
339 LAFAYETTE ST
NEW YORK N Y 10012

AREA CODE
212 477 2970
811
JAN 04 70

MONTHLY CHARGE FOR SERVICE • Message units covered 75	STATE TAX AND ANY LOCAL TAX	FEDERAL EXCISE TAX	AMOUNT INCL. TAX
ADDITIONAL MESSAGE UNITS • Includes HOME ECON-O-CALL Where Calls and Telegrams • Applicable 104	34	56	650
OTHER CHARGES OR CREDITS • Explanation enclosed 14	31	52	603
	14	268	2962
BALANCE FROM LAST BILL • Please disregard this amount if paid 0104R SDP			167
			4382
			TOTAL

TAX REFUSAL AND THE LAW

Imposition of the telephone tax is covered by Section 4251 (a) of the Internal Revenue Code, which reads, "The taxes imposed by this section shall be paid by the person paying for the services."

This provision is amplified in the Internal Revenue Regulations, Section 49.4251-2 (c) **LIABILITY FOR, AND RETURN OF TAX:** The taxes imposed by Section 5251 are payable by the person paying for the service rendered, and shall be paid to the person rendering the services, who is required to collect the tax and return and pay over the tax in accordance with the applicable provisions of the regulations contained in Subparts F and G.

According to the Commerce Clearing House 1966 Excise Tax Guide, Paragraph 2235 on Collection of Tax by Another Person, "Certain miscellaneous taxes are imposed on the person making the payment but are required to be collected by the person receiving the payment. All taxes collected in this manner are held by the collecting agent in trust for the United States until paid over to the district director of internal revenue. If the person from whom the tax is required to be collected refuses to pay it or if for any other reason it is impossible for the collecting agency to collect the tax from such person, the collecting agency is required to report the facts to the district director of internal revenue and the tax will then be collected by district assessment against the person failing or refusing to pay the tax to the collecting agent." Exactly the same language appears in Prentice

Hall Federal Taxes, Excise Volume, Paragraph 189.514-A, with a reference to Statement of Procedural Rules CB 1955-2, Page 977, Section 601.493 (c) (2).

This indicates that the ultimate responsibility for paying, or refusing, the tax lies with the telephone user, not with the phone company, and that if the user refuses to pay the tax as billed, the issue will be settled directly between him and the Internal Revenue Service, through its standard collection procedures, rather than by termination of telephone service. This also agrees with informal opinions given by representatives of Illinois Bell Telephone Co. and the Chicago District office of IRS.

Having dealt with the question of tax liability, and collection procedures, it might be well, for the record, to mention the subject of criminal penalties for tax refusal. One who "wilfully fails to pay" the phone tax could possibly be charged with a misdemeanor, under Section 7203 of the Internal Revenue Code, and be imprisoned for a period up to one year and fined an amount up to \$10,000. It is also possible that one could be charged with attempt to "evade or defeat" the phone tax, under a section carrying a stiffer penalty.

However, experiences of objectors to other federal war taxes during the past several years indicate that the government would not be interested in pressing criminal charges, but that it would instead try here or there to collect the tax (with interest).

Don't pay this tax.

Send a letter of explanation with your check to the phone company (we have cards you can use instead of a letter).

Inform your Senators and Congressmen that you are not paying the phone tax.

Let us know that you are not paying it, too.

Because of American military action in Vietnam I am deducting the Federal tax from my telephone bill payments.

Signed _____ Date _____
☐ You may make my name public as a participant in this action. ☐ Please send more copies of this leaflet. Price: \$1.50/100; \$10/1000.
☐ Please send 12 cards explaining my position to the telephone company (suitable for enclosure with bill payments). Price: 25¢.
☐ Please send the HANDBOOK ON NONPAYMENT OF WAR TAXES (essential reading for tax resisters). Price: 50¢.
☐ Enclosed is my contribution of \$_____ for the work of WTR.

Return this War Tax Resistance coupon to: 339 Lafayette Street New York, N.Y. 10012

(212) 477 2970
777 5560

EMPLOYMENT CLEARING HOUSE

A Non-Profit Organization Placing Scientists and Engineers In Non Defense-Oriented Jobs

200 California Avenue, Palo Alto, California 94304

(415) 327-8427

Director: BEN TIPTON

Employment Clearing House - a non-profit organization placing scientists and engineers in non-defense oriented jobs.

WHAT: There is a growing concern among many scientists and engineers that their talents and energies are devoted to defense work which too often results in the destruction of other human beings and valuable resources. At the same time society is faced with pressing social and ecological problems. The Employment Clearing House has been formed to do something positive about this situation: to help scientists and engineers currently working for defense oriented firms to find employment in non-defense oriented companies, preferably those with positive social goals.

HOW: The Employment Clearing House receives resumes from competent scientists and engineers seeking non-defense oriented work. These are well qualified and highly motivated individuals. Employment Clearing House staff, with the assistance of a panel of knowledgeable scientists and engineers, review resumes and arrange employment interviews with companies which the staff have previously contacted and which have employment opportunities in the area of the employee's interests and skills. The Employment Clearing House also maintains files with background information on companies for the use of job applicants.

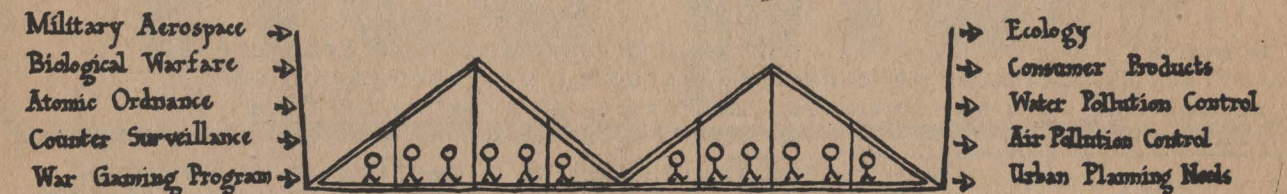
FEES: There are no fees for the job applicant for the services of the Employment Clearing House. All fees are paid by the companies.

DIRECTOR: Ben Tipton, the Director of the Employment Clearing House, has extensive experience in personnel work with scientists and engineers. Previously he administered the Employee Education Program while with the Stanford Research Institute, and was in personnel with the Arabian American Oil Company, and with the Southern Pacific Company.

SCIENTISTS AND ENGINEERS seeking other employment should send a resume to the Employment Clearing House and phone Mr. Tipton for an interview.

COMPANIES wishing further information about the Employment Clearing House or having positions available should call Mr. Tipton.

EMPLOYMENT CLEARING HOUSE



A Non-Profit Organization Placing Scientists and Engineers In Non Defense-Oriented Jobs

The Employment Clearing House is a bridge by which scientists and engineers may cross from the environment of the defense industry in which they have been working to one that is non-defense oriented and relevant to the critical needs of the world today and of the future.

It is our view that a massive movement of talented scientists and engineers from occupations involving overkill and weaponry to life-affirming and socially constructive employment is one of the necessary changes that must take place if we are to move our technology in socially beneficial directions.

The Employment Clearing House is an outgrowth of the Technology and Society Committee (TASC) in Palo Alto, and the TASCforce for Constructive Alternatives. TASC is an organization of scientists and engineers working to harmonize the uses to which technology is put with our hopes for American society.

The Employment Clearing House has an immediate and pressing need for funds if it is to survive and carry out its work. ECH need \$10,000 starting capital for this purpose, which we are trying to raise as either tax-deductible contributions, or as 2-year interest free loans.

Your help is urgently required now in order to move ECH from the planning phase to a real and constructive force for social change, here and now in the Bay Area.

May we have your help?

☐ Tax-deductible contribution

OR

☐ Interest-free, two year loan

☐ \$1,000 Patron

☐ \$500 Benefactor

☐ \$100 Contributor

☐ Other-specify

Mail your contribution to:

Employment Clearing House
200 California Avenue
Palo Alto, Calif. 94304

name _____

address _____

date _____

underground papers

"Whatever they're called, underground newspapers or free press, the unofficial journals have become a present day phenomenon on high school and college campuses, and are beginning to surface in industry."

from invitation to a meeting on underground papers, held by the LONG ISLAND COMMUNICATORS ASSOCIATION. (An association of company house organs.)

N.Y. Times, Sunday, Feb. 28, 1971
Business and Finance, Page 3

BUSINESS LETTER

"The Challengers"

The recent proliferation of various groups dedicated to changing practices of the business world in one way or another has left many businessmen confused as to who is attacking them and why.

The Public Affairs Council a Washington-based association of corporate public affairs and urban affairs officers, has sought to answer some of the questions by preparing a booklet directory of these organizations, which range from the Sierra Club to the Black Panthers.

The booklet is called "The Challengers: Organizations Dedicated to Changing the Private Sector of America" and was prepared by Roger

E. Celler. It lists groups interested in such causes as civil rights, peace, consumerism and ecology. It also includes public interest law firms and organizations as well as "militant and terrorist groups."

In addition to the names and addresses of the various organizations, the booklet also lists their key personnel and gives capsule descriptions of their aims and operating procedures.

"Corporate confrontations are just beginning," warns Mr. Celler. "The executive who has traditionally conducted business behind the closed door of his office or board room is being pressured into the public arena, and he had better learn how to function in that arena."

"The organized interests and subsequent pressures are not a fad, not a temporary phenomenon destined to disappear by being ignored. Today, the pressures are only moderate. Tomorrow they will intensify."

Mr. Celler notes that most of these groups are comprised of "sincere, zealous people dedicated to working within the system," are relatively new and sporadically financed and are often formed around a single person, such as Ralph Nader. They are becoming "increasingly sophisticated," he adds, particularly in the use of laws and lawyers.

"While these groups may be underfinanced and seemingly loosely organized," Mr. Celler declares, "they are

learning. They are learning how to use the laws, the media, public opinion and other pressures. They are for the most part, young, energetic, well educated, sophisticated—and effective."

Copies of the booklet are available from the Public Affairs Council at 1601 18th Street, N.W., Washington, D.C. 20009.

The above two items are only a few of the signs that the unrest in this country is not exclusively limited to students.

The Brookhaven Free Press is now a year old. We have had ten issues during the course of the past year. Each issue has been 4 pages photo-offset. We have printed 3000 copies of each issue so that each of the 3000 workers at Brookhaven gets a copy free. We are reprinting here the front page of our first two issues. The Statement of Purpose from issue #1 explains our method of operating. TO DISPEL MISTRUST is a reply to the mixed reception of our first issue. Subsequent issues have been generally well received.

We are willing to help any group that would like to start its own paper where they work. For further information please contact the Brookhaven Free Press, PO BOX 395, Upton, N.Y. 11973.

THE BROOKHAVEN free press

Statement of Purpose

The function of the FREE PRESS is to provide a free press; to publish information concerning the Brookhaven community such as union activities, civil rights actions, etc; to provide a forum for any discussion concerning the community such as the pension plan, local pollution issues, etc; to provide an outlet for grievances of general interest in an open and non-paternalistic fashion.

The aim of the FREE PRESS is to have a free and open forum. All written contributions (articles, jokes, excerpts) and cartoons will be published on a first come basis provided they are signed, typewritten and within the size limit. Any article by a non-lab member must be sponsored by a lab member. All names will be printed. The newspaper will expand to fill the demand. Any articles not published due to lack of space will be included in the subsequent issue. There will be no more than one free article per person per issue as long as there are any other available.

There will be no editorial board and no editing. The staff is completely open. All are welcome and encouraged to help. Defamation, personal abuse and general lack of decorum are strongly discouraged.

The FREE PRESS will be financed by contributions, subscriptions mailed to the home, and paid advertisements. There will be no charge for any written contribution. The distribution will be lab-wide.

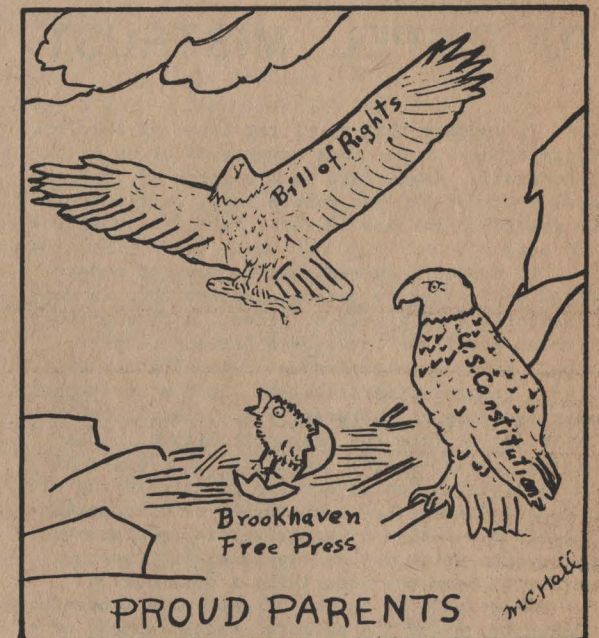
All contributions must be typewritten in columns 4 inches wide and no more than 10 inches long (a maximum of 375 words, single spaced). Since we use photo-offset, the copy must be immediately photographable. Each copy must be signed and a telephone extension given for verification.

The written and monetary contributions are to be sent to the Brookhaven FREE PRESS, P.O. Box 395, Upton, L.I. Subscriptions costing \$1 per three issues are obtainable at the same address. Paid advertisements are charged at four times the printing cost, or \$2 per column-inch. Checks are payable to the Brookhaven FREE PRESS.

Volunteers are encouraged and solicited for the distribution and the work in general. They should write to the above address.

Support your local FREE PRESS through written and financial contributions.

We need each other.



Union News

During late 1969 and early 1970, Local 8-652, G.C.A.W. attempted to impress the management of Brookhaven National Laboratory with the necessity for having a forum to discuss the effectiveness of its current retirement plan. We solicited the assistance; by open letter, of all interested employees, in order to indicate to management that this was not a case of the 'tail wagging the dog', but a matter of deep concern with a majority of Brookhaven employees. You responded by giving us 1200 affirmative replies suggesting many proposals for changes in the system.

The Laboratory responded by refusing to create or assist in the creation, or joining in any discussion on any level, other than; the small group captive audience establishment-type meeting. They have said that they do not wish to create a rule by referendum at the Laboratory. They further indicated that they were satisfied with this paternalistic fiduciary method and had no immediate intention of changing it, regardless of how many people objected to it.

After four months of negotiations with the Laboratory, Local 8-652 broke off negotiations with management without ratifying a new contract. After having been threatened with lockout and the possibility of lay off, at their discretion and not by seniority, the Union requested, and received a stay of execution and now functions under the 1967 contract; temporarily.

Cont d

THE BROOKHAVEN Free press

TO DISPEL MISTRUST

It appears that the first issue of the Free Press aroused suspicions among some of us at the Laboratory. Maybe this is a symptom of the general mistrust between people here, particularly in regard to matters of race, religion, politics and sex.

To dispel such mistrust we have to understand each other as persons, rather than as representatives of groups or sides. A free press--without an editor interposed between people--should enhance interpersonal communication and foster greater understanding. Such a newspaper also benefits the Laboratory Administration by relieving it from the responsibility of publicizing "controversial" material. No longer will the Administration be accused of interfering with the self-expression of employees or of suppressing the discussion of controversial matters--discussion which may be essential for the resolution of tensions underlying a controversy.

This leads us to the concept of a Laboratory community beyond the official establishment of a place to work. For the Lab is also a place where we see people and interact with them. For many of us it is the most important area of interpersonal life that we have, aside from our families. In order to preserve our humanity, we need to broaden our view of the Laboratory so that it is more than a strictly mechanical institution for work.

In general we seem very reluctant to expose our thoughts to others. This stems, perhaps, from the complexity of our society, in which so many people are thrown together without really getting to know and respect each other. In place of respect we seek shelter in privacy. However, the crowding together offers us an unusual opportunity to broaden our understanding of others. In the long run increased interpersonal communication may be essential to the maintenance of harmony in a complex society.

As long as the Free Press holds to its avowed aim of providing a forum for the expression of personal opinion regardless of point-of-view, it merits support by all of us who want to dispel the mistrust that hinders our appreciation of each other as human beings.

--Sanford Lacks

thestaffforthisissueiscomposedofthefollowing:audreybiitnermaryhalltomkitchensjoshkoppssandylacksgeorgeslondonmarksakitternieurvaterterdwernitz

May 1970



NORG FUN AND GAMES

I object to the special treatment given to the Naval Officers Reserve Group which is, or should be considered, a non-official group with strong political connotations, and thus presumably covered by the Director's directive of 12 November, 1969. A NORG has nothing to do with the function of this laboratory and is probably inimical to the spirit of free inquiry necessary at the lab. In particular, I object to the inclusion of the meeting notice of only this group in the Weekly Bulletin calendar. I object to the showing of films in Berkner Hall, which other groups have been denied. I object to the frequent co-sponsoring of lectures by the lab and NORG.

This special treatment is consistent with the fringe benefits to which officers are accustomed such as enlisted men acting as their private orderlies, their chauffeurs, their gardeners, their cooks, etc. This should not at least continue into civilian life.

There is something pathetic and probably pathological in "mature" men

Cont'd

SIGNAL NOISE

A NEWSPAPER BY AND FOR THE EMPLOYEES OF BBN

VOL. 1 NO. 1

MAY, 1970

EDITORIAL

This newspaper was conceived by a diverse group of BBN'ers who feel that all is not well—at BBN, in the U.S., and in the world. We do not all agree on what the problems are, much less on how to solve them. We do agree on one thing, though—that no real changes can occur until people begin to talk to each other about what is wrong and what can be done to right it.

BBN's internal communications system—such as it exists at all—has proven itself entirely inadequate. The recently aborted merger episode made this obvious. The merger connoted changes which could have had significant effects on all of us, yet we were not consulted. No one even bothered to tell us what was happening, let alone ask us what we thought about it. Then, suddenly, the merger plans were cancelled. Beyond a brief memo to this effect, there was no communication at all from the few who knew what had happened. *Intercom*, of course, virtually ignored the whole thing.

This episode shocked us into awareness --

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HERBERT L. FOX

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THE SECRET SALARY: SEPARATED AND UNEQUAL

Unequal pay for equal work is one of the many inequities of our society. It is an inequity that exists here at BBN. That it exists here is a reflection of the situation of the society at large; BBN did not create or invent the problem. But it is an inequity that should not be fostered; rather it should and can be eliminated. An effort to eliminate unfair differences in pay is being made through a program of collection and dissemination of information on the problem, as a first step, and it is toward that end that this article is directed

(Continued on p. 5)

EVOLUTION OF THE BBN UNDERGROUND

Study, reading, talk, action—all of these have characterized the discussion group during its history. To begin with, a small group formed in the winter of 1968-69 for the purpose of reading, studying, and discussing Marcuse's book *One Dimensional Man*. Before long, the group had grown and the discussions had shifted emphasis from a detailed study of Marcuse to a general critique of society and of the life and work of technical workers

(Continued on p. 5)

This is the first page of a twelve page newsletter. For further information contact Herb Fox.

The REAL LAB NEWS

Produced by employees of LRL, Berkeley

Number 1

March 30, 1970

 * This informal newspaper is being written *
 * and circulated by and for Rad Lab employees. *
 * It was born out of the need for open commun- *
 * ication among the many Lab members - on the *
 * scientific, technical and support staffs - *
 * who are concerned about the turbulent issues *
 * of the 1970's and their relation to the Lab. *

REPORT OF THE ZACKAY COMMITTEE : NO FREE SPEECH AT THE RAD LAB

Background: During last fall's Vietnam Moratorium a group of Rad Lab employees asked to have a noon meeting in the Building 50 auditorium to hear from some local speakers and to have a discussion of war-related issues. The Lab Director refused permission. Another group handed out leaflets inviting scientists and engineers to join the November 15 march in San Francisco, until the Director halted this activity as well. Although both of these activities were planned so as not to interfere with normal Lab functions the Director felt that they could not be allowed; and in response to complaints about this restrictive attitude he appointed a committee, under Professor Zackay, to study the whole question and to make recommendations on policy regarding the use of Lab facilities. After four months of hearings and deliberations we now have new rules which say:

1. Lab facilities can be used only for technical discussions and for other programs required by the AEC.
 2. Notices of other, off-site, meetings may be posted on designated bulletin boards, and no other forms of posting or distribution are allowed.
- In summary, no "free speech" or "free assembly" is permitted.

Alternatives: The most popular alternative to this restrictive ruling is simply: let the Lab be open to free discussion subject only to rules regarding time, place and manner - this is the mode on university campuses. A more specific proposal was the following, which was submitted to the Zackay committee by four members of the Lab.

(over)

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WHAT DOES SIPI DO?

The Scientists' Institute for Public Information, SIPI, enlists and supports scientists, physicians, engineers and other specialists in providing public information on a variety of environmental and other social issues.

Since 1963, SIPI has served as the national coordinator for science information committees around the country. SIPI seeks to stimulate and integrate their work and to assist concerned scientists and other citizens in organizing science information groups in their communities.

WHAT ARE SOME OF SIPI'S RECENT ACTIVITIES?

In addition to organizing and coordinating science information committees, SIPI has initiated the following three projects in the last year:

WORKBOOKS: SIPI recently assembled information prepared by scientists in several of its affiliated groups and produced eight workbooks on environmental topics: *Air Pollution*; *Environmental Cost of Electric Power*; *Environmental Education, 1970*; *Environmental Effects of Weapons Technology*; *Hunger*; *Nuclear Explosives in Peacetime*; *Pesticides*; and *Water Pollution*. These workbooks are being sold at cost to the public.

TASK FORCES: SIPI has organized task forces of scientists from both within and outside its affiliated groups, who are preparing two reports: the *Pesticide Reevaluation Report* and the *Electric Power and the Environment Report*. The power report is jointly sponsored by the American Association for the Advancement of Science. In addition, a national survey of mercury in the environment has been initiated recently by SIPI.

FREE ENVIRONMENTAL LIBRARY: The SIPI library, located at SIPI headquarters in Manhattan, contains numerous books and publications and an extensive clipping file on the interaction of science and society, particularly the effects of technology on man and his environment. It is open to the public without charge.

ENVIRONMENT magazine, edited and published by the St. Louis Committee for Environmental Information, is an official publication of SIPI.

SIPI REPORT: This is the quarterly newsletter of the Institute, and presents news of SIPI and its affiliated committees.

SCPI

NEW YORK
**Scientists' Committee for
Public Information, Inc.**

30 East 68th Street, New York, New York 10021

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WHAT IS SCPI?

The New York Scientists' Committee for Public Information, SCPI, is one of the oldest science information organizations in the country, having been organized thirteen years ago. It is affiliated with the Scientists' Institute for Public Information.

WHAT DOES SCPI DO?

The purpose of SCPI is to provide objective technical information to any interested individual, organization or agency. SCPI activities are carried out by its various subcommittees, composed of volunteer scientists, physicians, engineers and others. The SCPI office provides support and coordination for these activities.

The topics covered by SCPI subcommittees are: air pollution; biological effects of radiation; biology and sociology of race; chemical and biological warfare; drug use and drug abuse; electric power needs and the environment; lead poisoning in children; nuclear power reactors; population; scientific knowledge on intergroup conflict and war; water pollution; noise and pesticides.

WHAT ARE SOME OF SCPI'S RECENT ACTIVITIES?

Recent projects include: sponsoring two informational gatherings for members of Congress on chemical and biological warfare and on lead poisoning in children; preparing testimony on the environmental effects of electric power and its production, given to city and state administrative and legislative bodies; developing a handbook on the legal and technical aspects of water pollution.

WHAT ARE SOME OF SCPI'S ON-GOING ACTIVITIES?

At present, SCPI is providing technical information to Citizens for Clean Air and the staffs of legislative committees at the city, state and federal levels; providing background information for national and local TV, radio and major newspapers and magazines; providing speakers to local and national groups on request. SCPI also prepares a monthly radio program on environmental affairs over WBAI-FM and publishes a monthly newsletter. One of its members also presents a weekly radio commentary on environmental matters.

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News of the groups referred to in the following pages has been included, not as an endorsement of these groups by CSRE, but as an indication that many groups throughout the country exist and are DOING things. The activities of these groups are rarely reported in the regular communications media, making it difficult therefore to learn of their existence

We have included material on these groups in such profusion to help convince you that just because you do not hear about such things on the eleven o'clock news does not mean that they do not happen or that they have no impact.

They do.

LABOR - UNIVERSITY ALLIANCE

We believe that the time has come to open a means whereby progressive elements in the universities, among both faculty and students, can begin to work together with progressive elements in the labor movement to achieve common social and political objectives. Such cooperation offers many and crucial mutual advantages. It would give the academic community what it now most lacks: a base in the outside community. It would make more available to the labor movement the universities' resources of disinterested research, expertise and instruction on problems that most concern it.

The most urgent concerns of Americans workers---among them peace, racial justice, job security, decent environments in which to work and live, adequate medical care and social security, housing, schools, stable prices---all represent equally the needs of students and faculty members. These objectives are as important to the welfare of the university community as to the welfare of the labor movement.

We wish, therefore, to encourage initiatives and programs directed toward increasing the cooperation between labor organizations and the university community to foster our common interests and in this way to promote the political health and social and economic welfare of our nation.

Alliance Members

LABOR UNIONS-Leonard Woodcock, United Auto Workers, (Ind.); Nat Weinberg, United Auto Workers, Dir. of Special Projects; Harold Gibbons, Teamsters, (Ind.); Howard Samuel, Amalgamated Clothing Workers, (AFL-CIO); James Matles, United Electrical Workers, (Ind.); John Hein, Ass't. to Pres. American Federation of State, County and Municipal Workers, (AFL-CIO); C. Robinson and R. Worrell, Distributive Workers of America, (Ind.); A. Feinglass, Amalgamated Meat Cutters and Butcher Workers (AFL-CIO)
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In these times when so many of our problems are the result of technology, we must search for new directions to apply our effort to directly benefit all people as individuals.

A few product areas which suggest themselves as beneficial to large numbers of people are:

- / small personal electrically propelled vehicles
- / independent electric supplies for domestic use
- / wind and solar powered electric power sources
- / machines to extend the skills of those people who are retired, or unable to find work for various reasons
- / agricultural equipment of use to the small farmer

Perhaps you know of other potentially useful products or are already engaged in activities oriented in the direction of the common good. We, of Pacifica Engineering, would like to assist you in these efforts or offer you suggestions in the considerations of new products. Our skills include electrical and mechanical engineering, design, drafting, precision machining and production of electronic or electro-mechanical prototypes.

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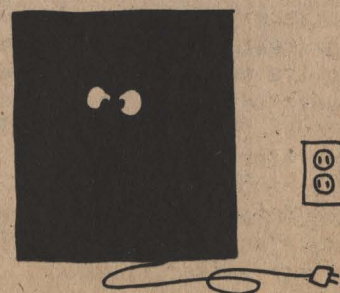
In November 1970, J. V. N. Granger, then president of the IEEE, published an article in the IEEE Spectrum in which he indicated that, in the opinion of its Board of Directors, to put the IEEE in the role of a "pressure group" would be morally repugnant to most, if not all, of its membership.

That this conclusion represented a gross distortion of the attitudes of IEEE members was evidenced by the flood of protesting letters received by the IEEE (see Spectrum, Jan. 1971). Further evidence was provided by the results of a survey recently conducted by the Conference of Professional Technical Personnel, Inc., an association of technical employees of Bell Telephone Laboratories. In response to the question "Do you favor a strong professional organization (such as the American Medical Association)?", 65% of the respondents said "YES".

Without regard to the merits, or demerits, of the AMA, it should be amply clear that there is a strong sentiment for a professional organization to represent the valid interests of engineers. At this juncture, the IEEE should be defining those interests and deciding how best to represent its members rather than taking the position that it should not represent them at all.

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allow me to sell you
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A. FRIEDES CSRE WORKING COMMITTEE

RETRAINING: WHAT'S NEEDED? WHAT'S PLANNED?

Federal and state governments are beginning to respond to the mass unemployment of scientific and technical professionals; one aspect of this response is the planning and funding of retraining programs. In California, a pilot program of this type funded by the National Science Foundation has started in the Palo Alto area

The present employment situation seems to be more of a byproduct of Nixon's economic policies rather than a planned change in the industrial-government relationship. This is one reason why almost no study has been made of the needed forms of retraining. Both government and industry have been caught with their pants down and are hastily trying to formulate plans. Some AEROSPACED comments on this situation follow.

A first thought is that what's needed is not retraining, but jobs. Many persons in aerospace do have sufficiently broad backgrounds to work on commercial and civil projects or to teach. A strong governmental commitment to solving the problems of transportation, pollution, health care, etc., would employ many without extensive retraining.

Planning for actual retraining has stressed broadening of technical skills. An aspect which has received very little discussion concerns the position of the professional in our society, and, especially for us in science and engineering, our isolation

from the uses of our work. The projects usually discussed as job alternatives have political and social implications as penetrating as does working for the War. For example, transportation (will Detroit find an alternative to the automobile? public transportation in all city areas?), data banks (expansion of "subversive" files? private use of census data?), and pollution control (will industries use the technical solutions?).

Further, professionals who received high salaries working on government projects and then receive additional government funds for retraining are denying this money to the poor who are faced not just with a year or two of unemployment, but a lifetime. (Nine million dollars has been allocated to the State of California for retraining, 5.4 million of the total to LA and Orange counties.) Criticism of federally financed retraining projects has already been raised by poverty groups.

Technical retraining alone will not resolve these issues; if we are to control our own products a reorientation to new modes of working together and relating to our communities are required as well. For example, a lawyer's commune has formed in Los Angeles with the purpose of providing free or at cost legal service to peace and community groups. This organization intends to work as part of the community rather than in a removed "professional" role. AEROSPACED would like to encourage thoughts (and actions) about similar approaches for technical and scientific work. Any comments?

CPP/AEROSPACED
PO BOX 24134
Los Angeles, Calif. 90049



American Society of Mechanical
Engineers

Metropolitan Section

Congratulations to CSRE on the publication of its first issue of "SPARK".

We commend you for providing a "literary" forum for engineers and engineering groups. We hope that very soon some of your spokesmen will use the oral forum of ASME to widen your membership and to widen the view of the typical Mechanical Engineer toward his profession and his expectations and his responsibilities in its practice.

A centralizing committee such as yours has been needed for a long time. We wish you success and pledge to encourage you in every feasible way.

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it presented and for what we learned. We learned how
essential the given structures are to the maintenance of
the uncritical thinking in which our brother and sister
scientific workers (and ourselves) are imprisoned; we
shall never again permit such structures to constrain us.
We learned that moralistic *ad hominem* attacks are self-
defeating; we must do our homework and analyze the in-
stitutional framework of science and the dynamics of in-
tegration and submission of scientists into capitalism.
The enemy is the system, the complex interlocking soc-
ial, economic and political structure that, having evolved,
is reproduced, extended and adapted every day by most
of us. This is the general schizophrenia: that we are ex-
tremely discontent in the very system in which we must
participate to survive and to whose functioning we con-
tribute by participating. Such a widespread self-hatred and
cynicism or by a serious commitment to revolution. As
revolutionary scientific workers we can empathize with
our brothers and sisters standing confused in the wilder-
ness. All of us can and must become aware through col-
lective struggles of the contradictions of a system that
breeds competition and hatred and which suppresses so
much of the potential of the human mind.



The Military Industrial Scientific Complex has come
to dominate many facilities of the University of Cal-
ifornia at Berkeley. The Lawrence Radiation Labor-
atory there has been instrumental in the development
of nuclear arms as well as the ABM and MIRV. Re-
pressive measures have been taken against Cal scien-
tists who voice criticism, most recently against those
who have expressed concern over the dangerously
high levels of radiation to which the AEC is expos-
ing America.

SESPA has been active in the heart of the beast at
Berkeley. The SESPA group there has just publish-
ed a pamphlet detailing the ugly history of military
and nuclear "science" at Cal. Called U. C. Science
At War, it can be obtained by writing: SESPA, Box
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SCIENCE FOR VIETNAM

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The help of both scientists and nonscientists
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LET YOUR SCIENCE SERVE THE PEOPLE

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35 SCIENZA PER IL

36 STATISTICS FOR THE PEOPLE

37 WHO ARE THE MAD BOMBERS?



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OF SCIENTISTS AND ENGINEERS
ACTION · SESPA

CHANNELING

"Channeling" is one of ten documents in an "Orientation Kit" put out by the Selective Service. It was issued in July 1965 and has recently been withdrawn. The following are excerpts from that document.

One of the major products of the Selective Service classification process is the channeling of manpower into many endeavors, occupations and activities that are in the national interest. . . .

The line dividing the primary function of armed forces manpower procurement from the process of channeling manpower into civilian support is often finely drawn. The process of channeling by not taking men from certain activities who are otherwise liable for service, or by giving deferment to qualified men in certain occupations, is actual procurement by inducement of manpower for civilian activities which are manifestly in the national interest.

While the best known purpose of Selective Service is to procure manpower for the armed forces, a variety of related processes take place outside delivery of manpower to the active armed forces. Many of these may be put under the heading of "channeling manpower." Many young men would not have pursued a higher education if there had not been a program of student deferment. Many young scientists, engineers, tool and die makers, and other possessors of scarce skills would not remain in their jobs in the defense effort if it were not for a program of occupational deferments. Even though the salary of a teacher has historically been meager, many young men remain in that job, seeking the reward of a deferment. The process of channeling manpower by deferment is entitled to much credit for the large number of graduate students in technical fields and for the fact that there is not a greater shortage of teachers, engineers and other scientists working in activities which are essential to the national interest. . . .

The System has also induced needed people to remain in these professions and in industry engaged in defense activities or in the support of national health, safety or interest. . . .

This was coupled with a growing public recognition that the complexities of future wars would diminish further the distinction between what constitutes military service in uniform and a comparable contribution to the national interest out of uniform. Wars have always been conducted in various ways, but appreciation of this fact and its relationship to preparation for war has never been so sharp in the public mind as it is now becoming. The meaning of the word "service," with its former restricted application to the armed forces, is certain to become widened much more in the future. This brings with it the ever increasing problem of how to control effectively the service of individuals who are not in the armed forces.

In the Selective Service System the term "deferment" has been used millions of times to describe the method and means used to attract to the kind of service considered to be most important, the individuals who were not compelled to do it. The club of induction has been used to drive out of areas considered to be less important to the areas of greater importance in which deferments were given, the individuals who did not or could not participate in activities which were considered essential to the defense of the Nation. The Selective Service System anticipates further evolution in this area. . . .

No group deferments are permitted. Deferments are granted, however, in a realistic atmosphere so that the fullest effect of channel-

ing will be felt, rather than be terminated by military service at too early a time.

Registrants and their employers are encouraged and required to make available to the classifying authorities detailed evidence as to the occupations and activities in which the registrants are engaged. . . . Since occupational deferments are granted for no more than one year at a time, a process of periodically receiving current information and repeated review assures that every deferred registrant continues to contribute to the overall national good. This reminds him of the basis for his deferment. . . .

Patriotism is defined as "devotion to the welfare of one's country." It has been interpreted to mean many different things. Men have always been exhorted to do their duty. But what that duty is depends upon a variety of variables, most important being the nature of the threat to national welfare and the capacity and opportunity of the individual. Take, for example, the boy who saved the Netherlands by plugging the dike with his finger.

At the time of the American Revolution the patriot was the so-called "embattled farmer" who joined General Washington to fight the British. The concept that patriotism is best exemplified by service in uniform has always been under some degree of challenge, but never to the extent that it is today. In today's complicated warfare, when the man in uniform may be suffering far less than the civilians at home, patriotism must be interpreted far more broadly than ever before.

This is not a new thought, but it has new emphasis since the development of nuclear and rocket warfare. Educators, scientists, engineers and their professional organizations, during the last ten years particularly, have been convincing the American public that for the mentally qualified man there is a special order of patriotism other than service in uniform—that for the man having the capacity, dedicated service as a civilian in such fields as engineering, the sciences and teaching constitute the ultimate in their expression of patriotism. A large segment of the American public has been convinced that this is true.

It is in this atmosphere that the young man registers at age 18 and pressure begins to force his choice. He does not have the inhibitions that a philosophy of universal service in uniform would engender. The door is open for him as a student if capable in a skill badly needed by his nation. He has many choices and he is prodded to make a decision.

The psychological effect of this circumstantial climate depends upon the individual, his sense of good citizenship, his love of country and its way of life. He can obtain a sense of well-being and satisfaction that he is doing as a civilian what will help his country most. This process encourages him to put forth his best effort and removes to some degree the stigma that has been attached to being out of uniform.

In the less patriotic and more selfish individual it engenders a sense of fear, uncertainty and dissatisfaction which motivates him, nevertheless, in the same direction. He complains of the uncertainty which he must endure; he would like to be able to do as he pleases; he would appreciate a certain future with no prospect of military service or civilian contribution, but he complies. . . .

Throughout his career as a student, the pressure—the threat of

loss of deferment—continues. It continues with equal intensity after graduation. His local board requires periodic reports to find out what he is up to. He is impelled to pursue his skill rather than embark upon some less important enterprise and is encouraged to apply his skill in an essential activity in the national interest. The loss of deferred status is the consequence for the individual who has acquired the skill and either does not use it or uses it in a nonessential activity.

The psychology of granting wide choice under pressure to take action is the American or indirect way of achieving what is done by direction in foreign countries where choice is not permitted. Here, choice is limited but not denied, and it is fundamental that an individual generally applies himself better to something he has decided to do rather than something he has been told to do.

The effects of channeling are manifested among student physicians. They are deferred to complete their education through school and internship. This permits them to serve in the armed forces in their skills rather than in an unskilled capacity as enlisted men.

The device of pressurized guidance, or channeling, is employed on Standby Reservists of which more than 2 1/2 million have been referred by all services for availability determinations. The appeal to the Reservist who knows he is subject to recall to active duty unless he is determined to be unavailable is virtually identical to that extended to other registrants.

The psychological impact of being rejected for service in uniform is severe. The earlier this occurs in a young man's life, the sooner the beneficial effects of pressured motivation by the Selective Service System are lost. He is labeled unwanted. His patriotism is not desired. Once the label of "rejectee" is upon him all efforts at guidance by persuasion are futile. If he attempts to enlist at 17 or 18 and is rejected, then he receives virtually none of the impulsion the System is capable of giving him. If he makes no effort to enlist and as a result is not rejected until delivered for examination by the Selective Service System at about age 23, he has felt some of the pressure but thereafter is a free agent.

This contributed to establishment of a new classification of I-Y (registrant qualified for military service only in time of war or national emergency). That classification reminds the registrant of his ultimate qualification to serve and preserves some of the benefit of what we call channeling. Without it or any other similar method of categorizing men in degrees of acceptability, men rejected for military service would be left with the understanding that they are unfit to defend their country, even in wartime.

An unprejudiced choice between alternative routes in civilian skills can be offered only by an agency which is not a user of manpower and is, therefore, not a competitor. In the absence of such an agency, bright young men would be importuned with bounties and pirated

like potential college football players until eventually a system of arbitration would have to be established.

From the individual's viewpoint, he is standing in a room which has been made uncomfortably warm. Several doors are open, but they lead to various forms of recognized, patriotic service to the Nation. Some accept the alternatives gladly—some with reluctance. The consequence is approximately the same.

The so-called Doctor Draft was set up during the Korean episode to insure sufficient physicians, dentists and veterinarians in the armed forces as officers. The objective of that law was to exert sufficient pressure to furnish an incentive for application for commission. However, the indirect effect was to induce many physicians, dentists and veterinarians to specialize in areas of medical personnel shortages and to seek outlets for their skills in areas of greatest demand and national need rather than of greatest financial return.

Selective Service processes do not compel people by edict as in foreign systems to enter pursuits having to do with essentiality and progress. They go because they know that by going they will be deferred.

The application of direct methods to effect the policy of every man doing his duty in support of national interest involves considerably more capacity than the current use of indirection as a method of allocation of personnel. The problem, however, of what is every man's duty when each individual case is approached is not simple. The question of whether he can do one duty better than another is a problem of considerable proportions and the complications of logistics in attempting to control parts of an operation without controlling all of it (in other words, to control allocation of personnel without controlling where people eat, where they live and how they are to be transported), adds to the administrative difficulties of direct administration. The organization necessary to make the decisions, even poor decisions, would, of necessity, extract a large segment of population from productive work. If the members of the organization are conceived to be reasonably qualified to exercise judgment and control over skilled personnel, the impact of their withdrawal from war production work would be severe. The number of decisions would extend into billions.

Deciding what people should do, rather than letting them do something of national importance of their own choosing, introduces many problems that are at least partially avoided when indirect methods, the kind currently invoked by the Selective Service System, are used.

Delivery of manpower for induction, the process of providing a few thousand men with transportation to a reception center, is not much of an administrative or financial challenge. It is in dealing with the other millions of registrants that the System is heavily occupied, developing more effective human beings in the national interest. If there is to be any survival after disaster, it will take people, and not machines, to restore the Nation. July, 1965

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The true story of a weapons engineer's dilemma to either give up his well paying job or to continue to work for death in order to live.

the schizophrenia of working for war

40 minutes

Three life stories of three weaponsmakers who each oppose the war. One quits, another continues to rationalize his work for the war and the third is fired for his public denunciation of the war.

who me and his friends

Dwight David Eisenhower, the 34th President of the United States of America said:

This conjunction of an immense military establishment and a large arms industry is new in the American experience. The total influence- economic, political, even spiritual- is felt in every city, every statehouse, every office of the Federal Government. We recognize the imperative need for this development. Yet we must not fail to comprehend its grave implications. Our toil, resources and livelihood are all involved; so too is the very structure of our society.

We must never let the weight of this combination endanger our liberties or democratic processes.

Technology was invented to serve man and yet everywhere his needs are at a crisis.

A spiritual crisis over the fact that efforts at providing adequate medical care, housing, education, and transportation are dwarfed by expenditures for irrelevant super-sophisticated weaponry and a race to the moon spurred on by national vanity.

An economic crisis in engineering where men who have spent lifetimes acquiring knowledge are jobless because it is now expedient to eliminate federal programs with no desire to enlist these people in the service of solving the sundry social problems that face this nation.

And most importantly, an ethical crisis over the proper aims of this nation. Do we and the IEEE honor a man who in his personal career has placed human needs over war, public well-being over corporate profits, a hope in the future over the morass of the past? What sort of example do we set?

David Packard, Assistant Secretary of War, still 30% owner of Hewlett-Packard which is a prime DOD contractor, member of the boards of General Dynamics, US steel, Pacific Gas and Electric etc. may be a dedicated, sincere hard-working man, but when the needs of the country cry for rebuilding our cities rather than for ARM, for restoring confidence in democratic rather than aristocratic traditions, and for public honesty rather than 30 million dollar trust funds; how can we, in good conscience, choose him as the IEEE's symbol for 1971?

The IEEE should honor those who have directly fought to serve the best interests of all our people and not the select club of corporate executives and cynical generals.

We believe that the current misuse of our technology can be turned around to meet our social problems but not if we set up David Packard and others like him as our examples. We suggest that while you listen to Mr. Packard you think of

his past and current decisions to choose necrophilic projects over humane ones. And if you doubt that our society does have more pressing technosocial problems than those enumerated by Mr. Packard we kindly suggest that you take a ride on the New York Subway.



DAVID PACKARD

David Packard is 59 years old, 6 feet 4 inches and weighs 250 pounds and since 1959 has been Deputy Secretary of Defense. Prior to moving to the Defense Department, Packard had been on the board of Directors of the General Dynamics Corp., U.S. Steel, Stanford Research Institute, the Equitable Life Insurance Co., Hewlett-Packard, Stanford Univ., National Airlines, System Development Corp. (SCS), the Crocker-Citizens National Bank, the American Management Association, Huggins Laboratory, and the Varian Corp. He was also director of the International Advisory Committee of the Chase Manhattan Bank and was on the Advisory Board of the Hoover Institute of War, Revolution, and Peace.

When news of his move to the Defense Department was announced, former Ass't Secretary to Defense Adam Yarmolinsky, worried about blatant "conflict of attitude" was quoted in the Washington Post (Jan. 24, 1969) as saying that "Men who have made a career in the defense industry are likely to be less sensitive to controlling the expansionist tendencies of the establishment."

Packard, chairman of the Board and Chief Operating Office of the Hewlett-Packard Co., owned 30% of the stock of this company that does \$100 million business with the government each year. Packard arranged for his 30% stock interest in Hewlett-Packard to be put in a trust managed by the Bank of America during his term as Deputy Secretary of Defense. He claimed that since the dividends and capital appreciation of the stock would go to charity, the basic \$300 million value of his share of Hewlett-Packard would have no influence on his decision making process. Sen. Gore's reaction to the trust arrangement was that "public confidence (would) be shaken".

source Current Biography (1969)
Con't. on next page Who's Who 1958-1969

whose friend ?

While serving on the Board of Directors of the General Dynamics, Packard worked with former Ass't Sec. of the Air Force and current president and Chairman of the Board Roger Lewis. Packard and Lewis met not only at General Dynamics meetings but also at the meeting of the Stanford Univ. Trustees.

George S. Moore, Chairman of the Board of the First National City Bank, and on the Board of W.R. Grace, Chubb, United Airlines, Borg-Warner and Mercantile Stores, worked with Packard on the board of U.S. Steel.

L.D. Welch and George Metcalf are two of Moore's fellow directors at First National City. Welch is Chairman of the Board of Comsat and former Chairman of Stanford Oil of New Jersey. Metcalf is Chairman of the Sears & Roebuck Co. While Moore and Metcalf worked with Packard on the Board of U.S. Steel, Welch was with him on the Board of General Dynamics.

John M. Meyer, Jr., Chairman of the Board of Morgan Guarantee Trust Co., was a fellow director with Packard at U.S. Steel. The President of Morgan Guarantee Trust is Thomas S. Gates, former Secretary of Defense. Henry S. Wingate is also on the Board of Morgan Guarantee Trust, the J.P. Morgan Co., was a fellow director with Packard at U.S. Steel. Wingate is Chairman of the Board and Chief Executive Officer of the International Nickel Co.

William C. Bolenius, on the Board of International Nickel with Wingate, former Vice-Chairman of AT&T, and on the boards of the Pullman Co., Ingersoll-Rand, was on the board of General Dynamics with Packard, while Wingate and Packard were on the board of U.S. Steel.

Another interesting pair are Roger Blough and Stuart Saunders, both on the Board of Chase Manhattan Bank with David Rockefeller, while Packard was director of Chase Manhattan's International Advisory Committee.

Saunders is the Chairman of Penn Central, while Blough was Chairman of U.S. Steel till 1969. Both saw Packard at board meetings of U.S. Steel and the Equitable Life Insurance Company.

W.A. Haas and C.F. Wentz and Packard were on the Board of Pacific Gas and Electric which serves most of Northern and Central California. Both are also on the Board of the Bank of America which operates the "trust" Packard established for his Hewlett-Packard stock while he was Deputy Secretary of Defense.

On June 17, 1969 Deputy Defence Secretary David Packard was asked what did the president mean when he said that his goal was simply a "sufficiency of arms"?

Mr. Packard shrugged his shoulders and replied, "It means that it's a good word to use in a speech. Beyond that, it doesn't mean a God-damned thing."

Charles E. Wilson sold his \$2.7 million of General Motors stock when he entered the Pentagon.

Robert S.(?) McNamara sold his \$1.5 million of Ford stock when he entered the Pentagon.

Arthur Goldberg even divested himself of rights to future pension earned when he was counsel to the steel workers union.

In Feb. 1969 on a television debate produced in San Francisco, Edward Teller gave his assessment of U.S.-Soviet relations and spoke strongly in favor of the Safeguard program. When Professor anofsky pointed out that the system was poorly designed and could not be expected to work, Teller replied that we would gain valuable industrial experience even in one year of work on the project.

For Fiscal 1972, Packard's "milestone"(?) concept will go into effect. That is, the government will accept the development-cost risks of a contract, but once the development cycle has been completed, the contractor will be able to produce the product at a profit. Under this plan, there are no development costs stated at the outset. Thus there are never any cost overruns. And as stated in Aviation Week and Space Technology (March 8, 1971) "The result (of cost overruns) has been an intensification of the public suspicion of the military-industrial complex."

"America has become a militaristic and aggressive nation. Our massive and swift invasion of the Dominican Republic in 1965, concurrent with the rapid build-up of U.S. military power in Vietnam, constituted an impressive demonstration of America's readiness to execute military solutions to problems of political disorder and potential Communist threats in the areas of our interest."

General D.M. Shoup Ret.
Former Commandant U.S. Marines

If you like this man write to us for his article "The New American Militarism"

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Computer People for Peace plans a multi-issue series of actions, meetings and demonstrations during the SJCC. SJCC is being held in Convention Hall in Atlantic City, N.J., May 18-20.

New York SESPA has been leafletting the Riverside Research Institute (RRI) every Wed. morning and Fri. evening for over a year now. RRI is New York City's largest weapons think-tank.

BALTIMORE SUN, November 19, 1970

800 U.S. Scientists Attack Defense-Plant Security Bill

Washington, Nov. 18 (AP)—A bill which its backers claim, is needed to keep subversives away from classified information and sensitive jobs at defense facilities was attacked today by scientists who termed it "not only unnecessary but unconstitutional."

More than 800 American scientists signed petitions, and the 1,500-member nonpartisan Federation of American Scientists sent letters urging senators to kill the measure, which the House passed by 274 to 65 earlier this year. ♦♦♦♦♦

Letter To Lawmakers
Dr. Jeremy Stone, national director of the Federation of American Scientists, said in letters to Senator Kennedy and to Senator Birch Bayh, (D., Ind.) and Senator Hugh Scott, (R., Pa):

"We feel that an extension of the existing personnel security program should be legislated only if it fulfills a deeply felt national need, only if it has clear prospects of being effective, and only if it is evidently constitutional. (The bill) fails all these tests."

"We do not oppose the existing system of screening personnel for access to classified information," he added, "but the main purpose of this bill is to set up another less workable personnel-screening program..."

YOU THE SUPPLY ARE IN DEMAND

50

We worked, studied and got ahead. After graduating from a demanding technical program, we were off to a good job at high pay and, who knows, maybe a shot at middle management. Before us flowered the prospect of a professional career, status, upward mobility and exciting technical work pushing forward the 'state of the art', not to mention an occupational deferment. This was the optimistic hope, but circumstance, it seemed, would not have it so.

Propaganda about the attractiveness and necessity of engineering, backed up by federal funds because after all money talks; channeled an increasing number of students into the reserve army of supernumerary technical workers. With defense spending high and plenty of pork to go around each potential contractor stocked up engineering graduates so as to be able to demonstrate 'capability' and participate in the 'rich mans dole', to pad the bill in cost plus contracts.

With the coming of tight money and more critical public accounting, some firms felt the necessity to trim the fat, meaning us. Engineers whose skills were being withheld from socially useful employment are now being deprived of employment period.

With engineering unemployment estimated as between 50-80k engineers, these same engineers, traditionally the hard working stable people not known for participating by and large in volatile political organizations turn with greater or lesser enthusiasm to see what the duly constituted authorities will provide.

The IEEE in the face of serious unemployment is offering seminars in resume preparation, counselling in effect a war of all against all, struggling as individuals for the diminishing number of jobs in which we will be in exactly the same boat as before, except with less company. The Long Island Association of Commerce and Industry is soliciting funds for a \$2 1/2 million pilot program to 'retrain' 300 engineers for jobs in a number of categories such as waste water control, secondary school teaching, transportation and so on. The number of employment slots guaranteed through the program is zero.

The scientific and technical worker today finds himself in a position familiar to other categories of workers throughout the land. A reserve army of unemployed tends to depress salaries or wages, encourages competition between workers and inhibits the organized opposition to a wasteful and unjust system which harnesses the power of scientific endeavor to the cause of profit to the disregard of the real needs of the people. There will be no satisfactory resolution of the present problems until all science and industry is geared to the satisfaction of wants, under the direct control of the people.



SPARK

This is the first issue of Spark. CSRE is only 3 months old (the name is even younger). As this is being written we have very few members (only the working committee). We hope people will join us at the new york ieee convention. The working committee feels that both the organization and the magazine must serve the needs of its supporters. If you like what we are trying to do please help us with both your ideas on how we should proceed and with financial support so that we can proceed. If you are in general agreement with us and consider yourself a member, fine. If you have doubts, but want to maintain contact, fine also. In any case please send us the following:

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