F. A. S. NEWSLETTER

FEDERATION OF AMERICAN SCIENTISTS Jules Halpern, Chairman

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CONGRESS and EDUCATION

The conflict between Congress' right freely to investigate and educators' right freely to inquire has been given prominent and daily attention in the press. Few have questioned the legitimacy or need for Congressional investigative activity, but many question the wisdom of some investigators and the suitability of their methods. The increasingly vocal critics seemed to wonder whether Congressmen, any more than educators, have the right to operate in an "ivory tower" without reference to the values and aspirations of other important elements of society.

PROBES ARE THE MODE

Emphasis on the names of the committee chairmen tended to obscure the intensity of investigative zeal in the present Congress. It is ru-

mored that 185 of the 221 Republicans in the House requested to be named to the Un-American Activities Committee. Senate expenditures for investigations have climbed from about \$210,500 in 1942 to \$1,719,000 in 1952. Expenses for investigations this year are running 70% over those of the 82nd Congress. By mid-February some 125 proposals for investigations had been submitted in the House and Senate.

Adverse comments, ranging from critical to bitter, have come in recent weeks from the presidents of Columbia, Vassar, Hunter, CCNY, Sarah Lawrence, State University of N.Y., Howard; also from George B. Kennan, James B. Carey, Mrs. F. D. Roosevelt, Dean Rusk, Dean Gildersleeve, Agnes E. Meyer, Elmer Davis, Walter Reuther, prominent Washington clergymen A. Powell Davies and Francis B. Sayre, Roger Baldwin, Robert LaFollette, Methodist Bishop Oxnam, Reps. Holifield and Eberharter. Organizations which have been vocal include the National Education Association, Conference on Higher Education, National Council of Churches of Christ in the US, AAUW, Princeton Chapter of AAUP, Harvard Student Council, Central Conference of American Rabbis.

PROGRESS

There has been little evident progress towards deflation of investigative zeal. Senators Morse and Kefauver and Reps. Keating and Javits have

sought to establish rules of procedure to protect the rights of individuals called to testify. The Un-American Activities Committee has tried to restrict the individual initiative of its chairman to act in the name of the Committee. Speaker Martin, according to Drew Pearson, has acted to keep Velde in line and Rep. Roosevelt has even introduced a resolution calling for his removal. Two members of this Committee, Reps. Walter and Kearney, agreed with Granville Hicks that the emphasis is misplaced on "how much communism there is, not how little communism there is." Bills have been introduced, however, to limit the employment of persons of questionable loyalty in the US government or the UN, to bar Communists from positions in labor unions, and to deny income tax exemptions to organizations making donations to subversive individuals or causes.

NOTES The Ford Foundation has established a "Fund for the Republic" which proposes to spend up to \$15 million on "research into the extent and nature of the internal Communist menace" so that we may "arrive at a realistic understanding of effective procedures for dealing with it."... In a new book, "The House Committee on Un-American Activities," Prof. Robert K. Carr of Dartmouth treats the history and record of the Committee since 1945, including press treatment and court review of its work. It is one of the "Cornell Studies in Civil Liberty" made under a Rockefeller Foundation grant.

CONGRESS and SCIENCE

Representative Carl Hinshaw (R, Cal.) has introduced a joint resolution (H. J. Res. 166) to establish a "joint Committee on Science." The Committee would consist of seven members appointed in each House together with "such other members (of both Houses) as shall signify their intention" of joining.

PURPOSE The purpose of the proposed committee, as defined in section 2 of the resolution, follows: "In order to promote a better understanding of the actual and potential impact of science upon public affairs, including human and natural resources, interstate and foreign commerce, relations with foreign nations, the common defense and security, and the national health, prosperity, and welfare, the committee shall endeavor to keep itself informed with respect to, and bring to the notice of Members of the Congress, the results of scientific research and technical development which bear upon public affairs, and the problems being encountered in maintaining in the US a scientific and technical effort of outstanding quality and accomplishment."

The committee's functions would not supersede those of any existing Congressional committee, such as the Joint Committee on Atomic Energy. It would, however, be directed to "meet not less frequently than once a year...with the National Science Board of the National Science Foundation." The committee is authorized to utilize NSF and other government agencies to assist it in carrying out its functions, and "to accept the voluntary assistance of any private individual or organization."

BRITISH PROTOTYPE

Hinshaw's proposal recalls the British Parliamentary and Scientific Committee, described in the last issue of Impact (Vol. III, No. 4; In-

ternational Documents Service, Columbia Univ. Press: \$.75) by M. Philips Price, M.P., its former chairman. This unofficial body includes members from both Commons and the House of Lords, as well as "nominated representatives of those scientific and technological organizations in the country which, under the committee's constitution, can be affiliated." "The committee has sought to become a centre in the British Parliament for the consideration of any scientific or technological question which may possibly have a useful bearing on the current of future activities of Parliament or Government." It has played an important role, both during the war and since, as a liaison between British science and public policy.

HASSLE IN A.A.A.S.

Howard Meyerhoff, administrative secretary of the American Association for the Advancement of Science, and Mrs. Gladys Keener, executive editor of the association's two magazines, Science and the Scientific Monthly, offered their resignations to the association's Board of Directors at the quarterly board meeting held in Washington March 16. The board asked Dr. Meverhoff and Mrs. Keener to continue in office for as much as three months to permit other arrangements to be made, but the two association officials announced in Science (March 27) that they will withdraw as of March 31. They said their action grew out of disagreements on matters of detailed policy about association affairs with E. U. Condon, the president, and Warren Weaver, the president-elect, of the association. As an interim arrangement, D. W. Bronk, chairman of the board, has asked Fernandus Payne, chairman of the publications committee of the association's board of directors, to make arrangements for the continued publication of the two journals.

EARLY IMMIGRATION CHANGES UNLIKELY

Amendments to the existing legislation on immigration are not likely to be passed in the present Congressional session, according to Chairman Wiley of the Senate Foreign Relations Committee (N. Y. Times, Mar. 17). While a number of bills affecting immigration have been introduced in the House, the Senate apparently is awaiting specific recommendations from the President before taking action.

In his State of the Union message, the President called for enactment of a statute "which will at one and the same time guard our legitimate national interests and be faithful to our basic ideas of freedom and fairness to all." Since then, according to the <u>Times</u>, he has instructed Secretary Dulles to consult Congressional leaders about the possibility of amending the Immigration Act, which is also under study by the Justice Dept.

NEW BILL In the meantime, a number of Senators are preparing a new bill which will include the recom-

mendations of the Truman Commission on Immigration and Naturalization. Prospects for enacting such a bill even in a future session appear slender, unless popular support becomes more vocal. At present, almost 90% of the mail received by Congressmen on the McCarran-Walter Act is reported, by R. M. Raives (Amer. Jewish Congress), to favor the Act.

The President is also understood to have insisted that Dulles ease the present regulations as far as legally possible, and immigration officers have been instructed to use more discretion in their search for moral deficiencies among visiting seamen. Apparently nothing has been done with respect to the "red tape" curtain which now prevents many European scientists from participating in and contributing to unclassified scientific activities in America.

SHUFFLING ATOMIC LEADERS

Admiral Lewis L. Strauss, former member of the Atomic Energy Commission, has been appointed by the President as his special assistant in atomic energy matters. It is suggested in some quarters that this may be an interim position until Gordon Dean leaves the AEC chairmanship in June, when Strauss might take over. Other sources maintain, however, that Dean will be persuaded to stay, with Strauss simply added to the chain of command. To date, the President has not filled the vacancy in the AEC occasioned by the resignation of T. Keith Glennan.

HEAD Uncertainty in our top A-command exists in Congress as well. For over two months, the Joint Congressional Committee on Atomic Energy has

been deadlocked -- trying to pick a new chairman. House members are determined to take over the chairmanship for their ranking member, Rep. Coie (N.Y.), while Senate members stand solidly behind Sen. Hickenlooper (Ia.). Meanwhile, despite repeated meetings to settle the matter, Rep. Durham (N.C.), a Democrat, remains in nominal control.

As the Washington Post pointed out, "A committee chairman...[is its] generator -- of ideas and of projects...No committee can function with full effectiveness unless the chairman enjoys the confidence of his colleagues and can speak for them authoritatively." In the past three months, the Joint Committee has done little, making no public contribution, for example, to debate on development of industrial power or on atomic defense.

No resolution of the stalemate is in sight. It seems certain, however, that the House has won its fight to establish the principle of rotation for the chairmanship. In the next Congress, if not in this one, a House member will be chairman of the Joint Committee.

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FROM THE RECORD

Admiral Strauss, when a member of the AEC in 1949, strongly opposed shipment of radioisotopes to our European allies for medical re-

search, and was a dozen times in formal voting disagreement with Lilienthal and the other Commissioners. The critical minority report, following the Joint Committee's 1949 investigation, signed by both Sen. Hickenlooper and Rep. Cole, states "...Commissioner Lewis L. Strauss has strongly opposed the Commission's desire to exchange atomic information with other nations."

WHITHER THE GOLDEN GOOSE?

The Committee on Institutional Research of the American Council on Education recently issued a preliminary report on government-sponsored research in educational institutions. The Committee, which includes J. R. Killian, MIT president, and Robert Bacher, former AECommissioner, aimed its fire at the same target recently selected by NSF Director Waterman (NL 53-2)—the "serious imbalance" between support for development and emergency research as against basic research. "The Committee is fearful that, since the war, we have not maintained the proper emphasis on basic research and that this may be reflecting itself both in the quality of scholars we are turning out at the present time and in the accumulation of fundamental knowledge on which future applications and development are based; hence, we may be jeopardizing the progress and security of the nation."

RECOMMENDATIONS Recognizing the importance of applied and emergency research, the Commit-

tee noted nonetheless that "classified research...contravenes the diffusion of knowledge" and found it justified in academic centers "only so long and so far as emergency conditions exist." It warned that despite the legitimacy of demands upon colleges and universities to serve national needs, these institutions "have the obligation to minimize the hazards of emergency research, whether supported by government, industry or foundations."

The Committee recommended that academic institutions stay clear of classified military research except in the case of compelling need not otherwise able to be met. With the same exception, "no arrangement should be permitted which would inhibit free and effective work by the institution in any scholarly field. Normally, no project should be accepted unless it is open to qualified students."

The Committee urges Federal agencies to give the maximum amount of support to basic research projects but cautioned colleges and universities to maintain a proper balance, and not to reach the point where dependence on Federal support of research is essential for survival.

HOW MUCH FOR NSF?

Senators Smith (R, N.J.) and Aiken (R, Vt.) have introduced a bill (S. 977) to remove the statutory ceiling of \$15 million per year on appropriations for the National Science Foundation. The move was recommended by NSF and the Truman budget message, and is in tune with efforts to transfer to NSF some of the basic research funds now disbursed by other agencies. To date the maximum NSF appropriation has been only \$4.75 million.

Even if granted the full \$15 million now allowable, NSF under its present budgeting would allocate only \$8.9 million to the basic research program. This is but a small fraction of the \$140 million spent by Federal agencies in this fiscal year for basic research. Hence, under the ceiling, NSF cannot come close to being the principal agency for support of basic research -- as the NSF Act of 1950 provides.

If S. 977 were to be passed this year -- and its chances cannot be judged good -- the NSF appropriation for fiscal 1954 still would not exceed \$15 million. In fact, it is rumored that the agency has taken its first cut within the Budget Bureau itself -- from the \$15 million requested in the Truman budget to something of the order of \$12 million.

STORM WARNING

The new Republican administration made its maiden appearance in the scientific literature recently with an interesting letter to the editor of Chemical and Engineering News (Mar. 16). Asst. Secretary of Commerce C. R. Sheaffer pointed out that a technical report on battery additives prepared by the National Bureau of Standards was "released prior to clearance by the current Department of Commerce officials." He said that the Dept. has "not yet made a final decision as to their attitude on previous opinions" of NBS on the value of such additives. The NBS report was summarized in Chemical and Engineering News of Feb. 23.

A'sniffin' of the breeze, old-timers in Washington opine a "bit of a blow" may be in the offing before government technical departments learn the requirements of business methods.

A-POWER DEBATE CONTINUED

[In our last issue, we presented two viewpoints on development of atomic power and possible changes in the Atomic Energy Act. Below is a third -- an editorial from the February issue of <u>Nucleonics</u>, reprinted with the kind permission of Jerome D. Luntz, Editor.]

"RECENTLY EXPRESSED industrial interest in nuclear power requires an evaluation of whether the Atomic Energy Act of 1946 meets this country's present needs for atomic energy development.

When the Act was written seven years ago, the paramount concern of the legislators was that our national program fit into the framework of an international authority. Thus, it was felt necessary to vest in the federal government complete control of producing fissionable materials.

To date, it has not been possible to set up an international control program. In addition, it has been announced that

Russia has produced atomic weapons.

THESE FACTS, combined with the record of safe and secure operation of Atomic Energy Commission production plants by industry, indicate that it is no longer necessary to prohibit non-government activity in the nuclear power field.

These are perhaps negative reasons why the statutory limitation on industrial ownership of power reactors should be revised. On the positive side is the need we have to develop nu-

clear power.

There appears to be fairly common agreement that within the next 25-50 years there will be the need for a significant new source of low-cost energy. Our present energy resources will not be able to keep up with the energy needs of a growing population and a growing industrial economy.

Specifically, by the end of this century, the energy consumption of the whole world will be about 100 X 10¹⁸ BTU per century. World energy reserves (coal and oil), economically recoverable at substantially present costs, add up to 30-40 X 10¹⁸ BTU.

The need is apparent. Can nuclear power step into the breach? This depends upon whether tough engineering problems can be licked and whether costs can be brought down low enough. But we are not yet at a point where we can find out -- mainly because there is no known nuclear power plant operating in the world today.

IN THE PAST SIX YEARS, the AEC has concentrated on military reactors (either for the production of plutonium or for the propulsion of craft). And it does not appear that the Commission intends to spend any significant sums of money on civilian nuclear power in the next several years.

But within the past year, industry has shown very great interest in pressing the development of nuclear power. The positions of three industrial groups can be summarized as follows:

One is proceeding to attack the technical problems before it decides to go ahead and finance the building of a full-scale plant. A change in the Atomic Energy Act would be necessary for the latter.

A second has proposed a joint study with AEC of technical problems. If these can be licked and AEC would guarantee it a plutonium market, it would finance a full-scale plant. A change in the Act would again be necessary.

A third wants AEC to pay for the reactor. It would pay for the generating equipment. No change in the Act would be necessary.

It is apparent that there is no agreement as to which approach should be followed. It is also clear that if the Act were changed today industry would not invest large sums tomorrow.

We don't know exactly when industry will be ready to finance full-scale plants (probably within five years). But, if we are to have nuclear power reasonably soon, it is important that in the meantime it be made clear that the Act will impose no barrier.

It is in the public interest to see that the \$10-billion being spent on atomic energy results in material benefits to the public. It must be possible for nuclear power development to proceed as rapidly as possible."

NEW FEDERAL SECURITY PLAN

Federal agencies have now returned to the Justice Department their comments on the proposed new security program, expected to be put into effect by the President in the near future. The plan is reported to abolish Truman's Loyalty Review Board and extend to all Federal employees the provisions of Public Law 733 -- which granted summary dismissal powers, previously held by highly sensitive agencies, to several distinctly less sensitive ones. FAS opposed the law at the time of its passage (1950) on the ground that it represented diffusion of the most stringent regulations into areas where they were inappropriate and dangerous.

NEW New features of the program are expected to be FEATURES (1) adoption of "security" instead of "loyalty" as a standard; (2) extension of summary dismissal powers to heads of all agencies whether sensitive or not; and (3) elimination of any central appeal body. It is also reported that cases already decided in favor of the employee, but involving derogatory information still in the files, will be re-opened.

FAS STATES
POSITION

In an interview on March 10 with Robert W.
Minor, first assistant to the Deputy Attorney
General, Dr. E. C. Pollard presented the FAS
policy on security and loyalty procedures as it applied to the
prospective new Federal security program. Pollard, who is
chairman of the FAS Scientists' Committee on Loyalty and Security, emphasized (1) that all types and levels of scientific
effort do not have the same degree of sensitivity, (2) that in a
program where department heads are supreme, the program
will tend towards the most stringent common denominator, (3)
that some type of extra-departmental review board is necessary,
and (4) certain procedural safeguards for hearings ought to be
spelled out for the program to be fair and effective.

FAS MEETINGS

An open membership meeting is planned in Washington on April 30, during the week in which the National Academy of Sciences and the American Physical Society meet in the Capital. Place, speakers, and topic to be announced in the next Newsletter....The FAS Council also will meet -- on April 29 and May 2.....The Executive Committee met in Philadelphia March 7 and reviewed current FAS activity in 10 separate areas, including A-power, freedom of inquiry, anti-intellectualism, and the UN. Plans were outlined for establishing semi-formal FAS Branches in communities containing a sizeable number of members.

The FAS is a national organization of scientists concerned with the impact of science on national and world affairs. This Newsletter is designed primarily to inform the membership and stimulate discussion of relevant issues. The facts and opinions contained do not reflect official FAS policies unless specifically so indicated. The Newsletter is edited by member-volunteers in the Washington area. Comments and contributions are invited.

MEMBERSHIP GROWTH is essential to continued FAS effectiveness. All scientists, graduate students in science, and a limited number of non-scientists are eligible. Use the coupon.

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BW FRONT STILL ACTIVE

The (British) Medical Association for the Prevention of War, in its <u>Bulletin #8</u> (Feb., '53), reproduces a statement on biological warfare by its Executive Committee. After examining the report of the "International Scientific Commission" which visited China last summer to investigate Communist charges of US use of BW, the Committee "does not consider that it is in a position either to endorse or to reject the Commission's findings. The evidence produced is impressive, but it is in the nature of the case circumstantial, except for the statements of the captured airmen. To pronounce upon its validity is the function of a judicial tribunal and the Association is in no sense qualified to act as such a body."

BW PROBLEM ANALYZED

Analyzing the problems posed by BW, the Committee argues that they differ at least in part from those raised by other weapons in that

"the effect of other weapons cannot be concealed or simulated and the fact of their use is bound in the long run to become public; bacteriological warfare is exceptional in that its use or non-use in a particular theatre of war can be open to dispute."

The Committee urges:---

- "1. That all governments publicly state that they will not in any circumstance resort to this form of warfare.
- "2. That those governments which are not signatories to the existing undertakings on this subject should sign them.
- "3. That secrecy in the field of bacteriological research should be replaced by full publication and that all research stations engaged in such research should be opened to international inspection by an agreed authority.
- "4. That pending the realization of these requirements medical and scientific workers should decline to participate in any secret research which appears to them to be directed toward the further development of these weapons."

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<u>NEW</u> MANEUVERS

In the UN on March 27, US delegate Ernest Gross called anew on North Korea and China to cooperate in an impartial investigation of their

charges, recently warmed up again by the Polish delegate in the UN Political Committee. Responding to quoted Radio Peiping reports of new confessions by two captured US Marine airmen, Gross challenged Communist authorities to allow questioning of the airmen by a neutral commission, in a neutral country, "after an adequate period of rest and recuperation." He proposed that the commission, consisting of five nations, be set up by the General Assembly. Soviet delegate Zorin peremptorily rejected the proposal, after being voted down 40 to 15 in an effort to invite Communist China and North Korea to participation in the debate.

PROJECT LINCOLN

Proposals of "a group of the most highly qualified American scientists" for the expenditure of 1 to 2 X 10¹⁰ dollars on a project for continental air defense, similar in scale to the Manhattan Project, recently were discussed in a syndicated series by the Brothers Alsop. Findings of MIT's "Project Lincoln" were outlined, along with reaction and sentiment of military men and civilians in the Defense Establishment.

According to the authors, Project Lincoln's proposed defense would consist of successive rings of early-warning radars, with an integrated system of ground-to-air and air-to-air intercept weapons -- based on the premise that successive attenuation of an attacking group must eventually reduce its penetrability below the danger point. With present techniques an impractical number of rings is required for zero penetration.

The Air Force, which sponsored the project, appeared not altogether happy with the resulting recommendations. Comments reported Mar. 17 re-emphasized the importance of speedy atomic counterattack via the Strategic Air Command, and referred to the plan as a "Maginot line type of defense."

BRICKER AND ATOMIC CONTROL

Authorities in constitutional law assert that international agreements in the field of disarmament or atomic control would be impossible if a constitutional amendment now being seriously considered in Washington were adopted. The Bricker resolution (S.J.Res. 1), sponsored by 64 Senators, would amend the constitution to severely limit the Federal treaty-making power. The Association of the Bar of the City of New York testified at hearings Feb. 19 that the Baruch Atomic Energy plan could not have been adopted, or even advanced, by the US if the proposed amendment had been in force.

The same opinion has been given by Benjamin V. Cohen, formerly of the US Delegation to the UN, Philip B. Perlman, former Solicitor General, the Baptist Joint Committee on Public Affairs, and many others. Secretary Dulles, who is shortly to give the official administration view, previously has made statements both favoring and disapproving the resolution. The President has said the proposal would restrict his authority to conduct foreign affairs, but has not yet taken a definitive stand.

SCIENCE AND THE SOCIAL ORDER by Bernard Barber; The Free Press, Glencoe, Illinois. \$4.50.

A brief review of the social interaction of science -- and its role and problems in mid-20th century America. Calm, mid-dle-ground discussion of such problems as government support of science, security and secrecy, and planning of research. Good for nerves jangled by the Bernal-Polanyi debates of a decade ago.

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