

F. A. S. NEWSLETTER

FEDERATION OF AMERICAN SCIENTISTS
Jules Halpern, Chairman

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ENIWETOK, the ELECTION, and FAS

TWO EXPLOSIONS -- one of public sentiment at the polls on November 4 and the other of a "thermonuclear weapon" at Eniwetok in that same eventful first week of November -- marked the end of a chapter for the world and the FAS in particular. Neither explosion

represents a discontinuity; both were on the course the US has been following since the end of World War II. Nonetheless, in both events, trends crystallized into new situations and in the light of them FAS will have to re-evaluate its role and its policies.

BORN -- THERMONUCLEAR WEAPONS

"Joint Task Force 132, operating for the Department of Defense and the US Atomic Energy Commission, has concluded the third series of weapons development tests at Eniwetok Atoll in the Marshall Islands."

In three paragraphs beginning with the above words, the US announced, in a hurried AEC press conference at 5:30 of a Sunday afternoon, Nov. 16, 1952, that a series of weapons tests had been completed and that "the test program included experiments contributing to thermonuclear weapons research." Gordon Dean, chairman of the Commission, referred in his announcement to the Presidential statement of Jan. 31, 1950, ordering the Commission to proceed on "thermonuclear research," commonly referred to as development of a hydrogen bomb.

FAS COMMENTS

Jules Halpern, chairman of FAS, in a press statement on Nov. 17, said "The evident progress in thermonuclear weapons research reported by the AEC and the press drives home with renewed force the need for some alternative to the present arms race." The statement added, "We may be sure that we are not the only country engaged in such research. We must have no illusions based on monopoly of a superweapon. In fact, no nation is secure against the hydrogen bomb and our people must realize that the threat is nowhere greater than here. The kind of security we need and want can be had only by building a stable peace."

GIVES WARNING

The FAS statement, and those of J. Robert Oppenheimer and others, avoided referring to a "hydrogen bomb" as an accomplished fact, but from Chicago Harold C. Urey, when queried about the AEC announcement, said it "sounds like official language for a successful H-bomb."

FAS warned that "Our country must distinguish between the false security of bombs and the genuine security which requires a slow, step-by-step, but positive approach to peace by mutual agreement, by gradual disarmament, and by world-wide economic reconstruction and development. The nations of the world are loading the balance with a terrible weight for destruction. A greater weight must now be found for the side of real security and peace."

"Almost three years ago, [the FAS] urged establishment of a top-level commission with broad perspective to make a fresh start on our atomic policy. A State Department advisory (Continued on Page 4, Column 2)

CHANGE IN WASHINGTON

For the first time in FAS experience, a Republican administration will soon be in power in Washington -- an administration which believes it has a mandate for change. FAS, too, has sought change in some aspects of national policy. The degree to which administration objectives and our own are likely to be in harmony deserve some analysis.

ADMINISTRATION AND CONGRESS

The character neither of the administration nor of the Congress can yet be predicted in detail. Given the deep cleavage within the Republican party, and the fact that Eisenhower moved from one wing toward the other during the campaign, the actual center of gravity of his coalition will not be known for some time. Even the past records of individuals now expected to assume positions of influence can be misleading. Most leading Republicans made reputations while in minority opposition -- where the premium is on volume rather than quality of voice. Changes not only in the tune, but also of choir leaders, may occur with new-found authority and responsibility.

ATOMIC ENERGY

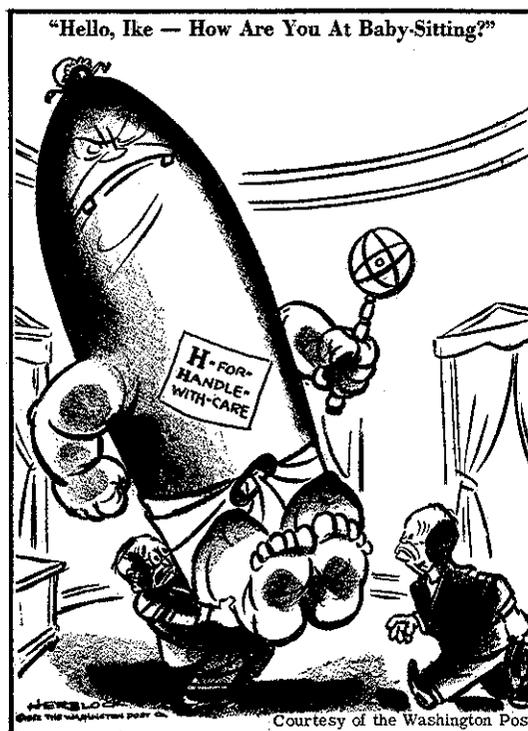
With Republicans in control of Congress, the next chairman of the Joint Committee on Atomic Energy is expected to be either Sen. Hickenlooper of Iowa, leader of the attack on Lilienthal's AEC administration, or Rep.

Cole of New York. Hickenlooper is known to want the post but there is strong feeling in the House that after seven years in Senate hands, it should now go to a Representative. Either Hickenlooper or Cole might be expected to continue past Republican efforts to tighten security and secrecy and accelerate weapons development. There are indications, however, that efforts are in the offing to alter the Atomic Energy Act to permit private industry to develop atomic power (see Bulletin of the Atomic Scientists, November, '52).

Personnel of the Commission is not expected to undergo significant turn-over. Only the chairmanship is viewed as politically sensitive, and it is anticipated that Gordon Dean will submit his resignation as chairman though not necessarily as a Commissioner. While partisanship may not influence personnel, it may bring an early full-scale investigation of AEC expenditures with resultant headlines of atomic waste and corruption.

ECONOMY

If campaign promises mean anything at all, strong efforts to reduce Federal (Continued on Page 3, Column 1)



Courtesy of the Washington Post

NEW VISA ANALYSIS EXPECTED

Visa problems probably will receive considerable attention in a comprehensive report expected next month from the Commission on Immigration and Naturalization. The Commission was appointed by President Truman early in the fall, to make a broad survey of the field, in the light of the 1952 McCarran Act.

HEARINGS HELD Headed by Philip Perlman, the Commission held hearings in 11 major cities across the country, and heard much testimony concerning the restrictive effect of visa policies on scientific interchange vital to US welfare and positive security. The Commission heard from the FAS Committee on Visa Policies in Boston, from the editorial staff of the Bulletin of the Atomic Scientists in Chicago, from the FAS Stanford chapter in San Francisco (see NL 52-8).

BIG GUNS FIRE At the concluding hearings in Washington in late October, there was vigorous testimony by Vannevar Bush, Howard A. Meyerhoff, and Alan T. Waterman. NSF Director Waterman estimated the fraction of scientist visa applications encountering "difficulties or serious delays" at 50%. He doubted it was the intent of Congress "to impede the progress of

science or decrease the military security," but clearly implied that it is happening nonetheless. According to Bush, the McCarran Act makes it appear to the rest of the world that we are "intent on keeping the wrong people out, rather than intent on keeping the wrong people out while attracting the right ones." He contended that unless there is a real security risk, "an established professor of an outstanding institution should be cleared automatically" to attend a scientific conference. "Suppose he is a Communist, what harm can he do coming over for a week or so?" Bush asked.

INFO IMPORTS NEEDED These views were strongly supported by AAAS administrative secretary Meyerhoff at a discussion meeting sponsored by FAS' Washington chapter on Nov. 18. Observing that he had two objections to the current situation -- the McCarran Act of 1950 and the McCarran Act of 1952 -- Meyerhoff noted that security zealots show too much concern that US scientists not carry information out and too little concern that foreign scientists be encouraged to bring information in. Other members of the WAS panel were Jack Wasserman, Washington attorney, Watson Davis, Science Service Director, and A. H. Shapley, FAS Executive Committee.



Courtesy of the Washington Post

REMINDER -- Order now some extra copies of the October Bulletin of the Atomic Scientists -- the special issue documenting the visa problem. Price \$1 from FAS office.

UN FUTURE DARKENS -- FAS ROLE ?

The US election, the widening cleavage over the Korean issue, and attacks on the international Secretariat by a US Senate subcommittee all seemed to combine in the past month to produce the deepest crisis in UN affairs since its hopeful advent six years ago. The crisis was symbolized by the resignation of Secretary-General Trygve Lie and the tragic suicide of Abraham H. Feller, UN General Counsel. The crisis gave new point to the debate going on within FAS on the question of taking a more active role in UN support.

PREAMBLE CHANGE ? The question is posed in the form of an amendment to the preamble to the FAS constitution, offered by delegate David Hill at the invitation of the Council. His original proposal included a new seventh "aim" of the FAS: "To promote, in these and other ways appropriate to an organization of scientists, the development of the UN into an authority of such defined and limited powers as are required for the enactment, interpretation, and enforcement of world law to prevent aggression, and to maintain peace." Mixed reactions have come from Council delegates and chapters. In the light of comments received, Hill has revised his draft (see below).

REACTION Though the executive committee of the Stanford chapter agrees with the principle of "support of the UN," it feels that the Hill proposal is "unnecessarily elaborate" and that the constitution should be changed as "little as possible" to assert the principle. A Council delegate-at-large says that the proposed "aim 7" would not "do at all in its present form." He points to the ambiguity and danger of misinterpretation in using the word "aggression" -- which he calls meaningless unless accompanied by a definition indicating its intent in the many complex international situations where it may be charged. In addition, he argues: "A constitutional preamble should be limited to propositions sufficiently basic or general to be acceptable to substantially all members...." He also feels that changes in the UN "in the direction of 'enforcement of world law' are...more likely to increase tensions and

dangers of world war than to reduce them," pointing to the consequences of Russia gaining control in the UN.

Another Council delegate feels "very definitely that the FAS should offer support for the UN in whatever way it can.... The only limitation I would put on this is that specific actions of the FAS should probably be limited to those portions of the UN which deal more or less directly with scientific and technical matters, such as UNESCO, WHO, and any atomic energy activities undertaken by UN." An FAS member urges "maximum practical support" for the UN because it "offers the only practical machinery for dealing with many very important problems." He asserts that "the UN can be made an effective agency for handling world problems if we want to make it one."

OPPOSITION The Mohawk Association of Scientists and Engineers has discussed the proposed revision and "discovered considerable opposition and no real support to the suggestion implied that the FAS commit itself in its preamble to backing the world government movement." They feel that Hill's proposal is "too much committed to specific means for obtaining our aims...." Finding little wrong with the present preamble, they have suggested an alternative rephrasing which does not mention the UN or world law explicitly, but which they believe includes the essential points of both the present preamble and proposed revisions.

NEW DRAFT In response to such suggestions, Hill has prepared a new draft of "aim 7": "To promote... the growth of a world community with a governing authority to subordinate nationalistic aims to the common welfare of mankind, insuring the peaceful coexistence of diverse cultures and the cooperation of all peoples in an open world." Originally, it was planned to consider this question at a Council meeting this week in St. Louis. With postponement of the meeting until January in Cambridge, members have further opportunity to voice opinions. Communications to Council delegates or to the Washington office are invited.

Change in Washington (Continued from Page 1).

expenditures are in the cards. Inevitably these will be aimed at, and if successful will primarily affect, "fringe" programs which are tolerated in periods of relatively free flow of funds. In this category may well be research in general and basic research in particular. Involved are not only the pitiful sums allotted to NSF under the present "spendthrift" administration, but the vast sums (see next column) administered by the Defense Establishment and the AEC. If the Federal budget is to be cut to anything like the levels urged by economy advocates, these agencies must necessarily suffer heavily. And if they do, they will have to cut first -- and most -- those activities furthest from their primary mission.

Critics of the system of research financing which grew up after the war (as a "temporary expedient") have long pointed to this danger of paying for research out of surplus for guns. We may now be faced with the alternative of quickly developing new mechanisms of support for scientific research -- or seeing our national scientific effort slacken and become further distorted as more basic laboratories turn toward application to ensure their continued existence.

VISAS AND PASSPORTS It is generally felt that administration of existing visa and passport regulations has been slowly improving during recent months -- largely due to public outcry and resultant corrective measures within the present Executive Branch. These improvements, however, have been procedural and cannot remedy the fundamental difficulties imposed by the two McCarran Acts. Both sides found fault with these Acts during the recent campaign, though primarily with their immigration provisions. It is known that efforts will be made to rewrite the Acts in the coming Congress but, despite the harmony of campaign oratory on this point, the chances for success cannot be calculated with any certainty.

A barrage of criticism of the McCarran Act may be anticipated from the President's Commission on Immigration (see p. 2), but it must be recalled that this is a creation of the outgoing President and may be of reduced effectiveness accordingly. The departure of Sen. McCarran from the chairmanship of the Senate Judiciary Committee, and his expected replacement by Sen. Langer, should be of assistance. Sen. Langer filed minority reports against both McCarran Acts and unsuccessfully supported the President's vetoes.

LOYALTY The Republican campaign pledge to sweep alleged Communists out of government and the probable appearance, for example, of Sen. McCarthy as chairman of the Committee on Government Operations -- with its broad investigative powers -- do not augur improvement on the loyalty front. Nonetheless there are some, possibly whistling in the dark, who suggest that the issue may have run its course in public interest and that things may, at least, get no worse.

INVESTIGATIONS In both houses, a new team of investigators will take over the several committees, none unmindful of the career of Vice-president-elect Richard Nixon. Of special interest will be the ascension, barring intervention in violation of the seniority rule, of Rep. Harold H. Velde to the chairmanship of the House Un-American Activities Committee. Velde, a former FBI agent, regards present security organization as "disgraceful" in its inadequacy, has introduced a bill to require listing of "subversive" books by the Librarian of Congress, and has proposed a non-Communist loyalty oath as a condition to voting in national elections. On Nov. 12, he was reported to be "personally" strongly in favor of a suggested probe of alleged subversive influences in education. He referred to education as "the most important field to go into. It has been largely untouched...."

Parenthetically, the Cox committee investigation of tax-exempt foundations authorized by the House is now under way. Feared as a lion, it has begun, at least, like a lamb. The first sessions brought forth strong statements on the great contributions of the foundations to the national welfare. Rep. Cox, accused last spring of seeking to conduct a "witch hunt," mildly remarked, "Probably I'm less inclined to point the accusing finger at foundations now than I was before this committee staff did a lot of work."

FINANCING FEDERAL RESEARCH

Federal support of basic research in non-governmental laboratories declined somewhat in fiscal 1952 as compared with the previous year. According to figures released by the National Science Foundation, 18 government agencies spent 71 million dollars on basic research at non-profit institutions in 1952, 76 millions in 1951. Applied research funds, on the other hand, went up from 144 to 173 millions while development funds increased from 54 to 77 millions.

UP SOCIAL SCIENCES Support for the social sciences in 1952 moved up to 16.6 millions from 10.9 millions in 1951. The figure was, however, only 6% of the physical-mathematical-chemical sciences support and about 23% of the biological-medical-agricultural support in the same year. The social sciences increase was heartening, but its level still remains low enough to give substance to the concern of educators that government spending is distorting the pattern of higher education in the US. According to the N. Y. Times of Nov. 16, the recently appointed Committee on Institutional Research Policy of the American Council on Education calls this a new national problem of great importance and will seek a broad, sound policy to meet it. The present distortion, of course, reflects the predominance of short-range needs as determined by the character and interests of the major agencies supporting research and development. The Department of Defense and the AEC account for some 85% of the total expenditures; the Federal Security Agency and the Department of Agriculture between them account for another 11%.

DOWN BASIC RESEARCH In the face of the general increase in support of research and development -- 297 millions in 1951 and 341 millions in 1952 -- the downward movement in basic research is particularly significant. If the 1951-52 figures are indicative of a trend, the rate at which we are draining our fund of basic knowledge is increasing. Moreover, we are moving against the consensus of responsible scientists who have been urging increased, not decreased, support for basic research. It was exactly this that NSF was created to prevent -- and it is to be hoped that in supplying these figures the agency is taking only a first step. Policy to correct the present unbalance is desperately needed. With the McCarran Act placing a high tariff on imports of foreign basic knowledge, also in violation of scientists' advice, we must at least ensure the health of the "domestic industry."

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.

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NEWS of FAS

CHAPTERS AND ELECTION

Members of the Atomic Scientists of Chicago, working through the Independent Voters of Illinois, probably made a decisive contribution to the election of Barratt O'Hara, acknowledged spokesman for intellectuals and liberals. O'Hara defeated Richard Vail, the Republican incumbent in the 2nd Congressional District of Illinois, by 4500 out of 182,000 votes. Supporting activities included giving speeches, writing literature, and raising funds. As a House member in 1949-50, O'Hara favored NSF, UN, Point IV, co-sponsored the World Federation Resolution, and opposed the McCarran Internal Security bill. Vail, on the other hand, voted for cutting foreign aid, for the McCarran-Walter Immigration bill, and against wheat for India. He also spearheaded the Un-American Activities Committee attack against E. U. Condon.

FAS' Mohawk chapter, as reported earlier (see NL 52-8), successfully polled and publicized the opinions of its local congressional candidates on issues of concern to scientists. Re-elected Congressman B. W. Kearney (Rep.) has pledged his continued cooperation with the Mohawk chapter, which will keep him informed on its stand on scientific and technological issues. Mohawk, at present, has one of the most active FAS chapter programs. Luncheon meetings, usually with a speaker on a topical or scientific subject, and Mohawk's own mimeographed newsletter, are weekly features. During the past months, the chapter has concerned itself with such problems as BW, Pauling's passport case, fluoridation of city water, science in secondary education, and TV in education.

COMMITTEES ACTIVE

FAS members at Yale are organizing to take over the work of the Scientists' Committee on Loyalty Problems -- formerly centered at Princeton but inactive for the past two years. The Yale group will make information on loyalty and clearance procedures available to interested scientists, help ensure to individuals the greatest possible protection under existing regulations, and use its influence to improve such regulations. Although the Yale Committee is not yet completely organized, it can now provide general information and is ready to help in individual cases brought to its attention. Correspondence may be addressed to John Phelps, Sloane Physics Lab., Yale U., New Haven 11, Conn.

The FAS Committee on Passport Problems is still urgently requesting data on operation of the new passport regulations in particular cases. No passport refusals are known to have occurred since the grounds for denial were made more explicit (see NL 52-7, Sept. 16). Cases in which the appeals procedures have been utilized are yet to be publicly reported, but some delays still seem to be occurring without explanation to applicants. Specific information should be sent to Committee Chairman, Geoffrey Chew, Physics Dept., U. of Illinois, Urbana.

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Thermonuclear Weapons (Cont. from Page 1).

panel has this objective in part and release of their findings is eagerly awaited. The entire problem must be a matter of the first and most urgent consideration by the new administration.

"Efforts toward international atomic control must be pushed forward in spite of present obstacles. The AEC announcement is a sober and grim reminder to the world that a way must be found to prevent the use of these and even more potent weapons to come."

SECURITY BREACH

First accounts of the history-making blast had come in "letters home" -- presumably from observers inadequately briefed on security. It was in answer to mounting protests from the press, whose appetite was whetted but unsatisfied by the unofficial accounts, that the AEC made its hurried announcement. Both the AEC and Sen. Bricker of Ohio, a member of the Joint Committee on Atomic Energy, said there would or should be an investigation of the "leaks." No official source denied or confirmed the accounts, some of which said a "sheet of flame" which was "two miles in diameter" completely destroyed an island "a mile long."

That there would be a full-scale investigation was doubted by Washington observers who pointed out that these security breaks could only be described as "stupid, not sinister."

For the over-all effect of allowing a great event in human history to be dribbled out through the letters of sailors to their wives or mothers, the AEC and its public information staff were roundly criticized. The Washington Post editorialized, "The AEC has let secrecy become an end in itself. If we have really developed a hydrogen bomb it might be just as well to let the Russians know it...."

"HYDROGEN" PEACE USES

More startling to scientists outside the AEC than the "news" and rumors of a hydrogen bomb was the statement by Sen. Hickenlooper, Joint Committee member, that "We must remember that the hydrogen picture contains some hope, in time, for peaceful and constructive applications." In this connection, Sen. McMahon said shortly before his death, "There is now hope...that possibly there may develop, years hence, important peacetime applications of hydrogen principles -- and this all amounts, or may amount, to a basic change in the focus of the [atomic] control problem."

Informed persons state guardedly that there "is something in the peacetime application idea." The application would be in power -- conversion to electrical energy of energy gained from fusion -- and AEC officials are cautiously weighing a public announcement of new findings in this field. They are said to hesitate because they fear the public would exaggerate the importance of information which would not lead to genuine results for "a fairly long-term period," and because the military establishment, as usual, fears that some of the information would be valuable to potential enemies.

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