

# F. A. S. NEWSLETTER

Published by the  
FEDERATION OF AMERICAN SCIENTISTS  
1805 H Street, N.W., Washington 6, D.C.  
Donald J. Hughes, Chairman

--- to provide information  
and to stimulate discussion. Not to  
be attributed as official FAS policy  
unless specifically so indicated.

56 - 1

January 16, 1956

## H - TEST BAN REJECTED BY DULLES

On Jan. 11, Secretary Dulles ruled out US consideration at this time of an international ban on further tests of nuclear weapons. The Secretary's statement came as signs multiplied that emphasis in the race between the US and USSR is shifting from armaments to economic and political competition. In this area, the USSR has seized a new initiative with offers of economic aid to India and the Near East. In its recently devised counterplans to stabilize and somewhat expand US foreign economic aid, the Eisenhower Administration is faced with threatened Congressional opposition. Nevertheless, it appears to be conceding a tactical propaganda victory to the Soviet Union on the testing issue -- since the Soviets can now assert that they sought to end the H-bomb race but were rebuffed by the US.

**SOVIET OFFER** In November, the Russians exploded a thermonuclear device rated at a minimum of 2 to 4 megatons. Almost before the not inconsiderable fallout had settled, Radio Moscow suggested "that the countries which possess nuclear weapons pledge to discontinue their testing." Premier Bulganin and Communist Party Secretary Khrushchev, during whose visit to India the H-bomb test took place, on Dec. 13 issued a joint communique with Prime Minister Nehru adding a call for "unconditional prohibition of the production, use and experimentation of nuclear and thermonuclear weapons." The communique also proposed "a substantial reduction of conventional armaments coupled with arrangements for effective international control."

**BAN REJECTED; TESTS GO ON** Official reception of the offer in the West, cool from the first, is now decidedly cold. Shortly after the Moscow radio broadcast, Secretary Dulles said that a test ban had "been under consideration and study," but that to date no formula had been found that would make the ban "dependable and in the interests of the US." Then, on Jan. 11, Dulles told reporters that a test ban was out of the question and that "a sure disarmament plan must be found before such tests can safely be halted." Confident that the US is ahead in atom weapons, Dulles added that we must "stay in the forefront of scientific knowledge in this field until a safe disarmament system is found."

Almost simultaneously with Dulles' rejection of the ban on H-tests, the AEC announced (Jan. 12) plans for a new round of tests in the Pacific this spring. The tests will not include bombs anything like the size of the 15 to 20 megaton super that caused so much furor in 1954. According to a joint Defense-AEC announcement, an important purpose of this series will be "the

### QUESTIONNAIRES WANTED

The MEMBERS' BULLETIN mailed last month contained a questionnaire to determine membership views on nuclear tests. Of the 154 replies tabulated by Jan. 9, 53% were in favor of international agreement to suspend weapons tests [3(b) and (d)], 16% wanted to limit weapons tests [3(c) and 3(e)], 13% favored holding tests under UN auspices [3(f)], 6% wanted unilateral suspension of tests by the US [3(a)], and 12% felt FAS should take no action in this field at present [(1) and (2)]. A more complete analysis of the results will be presented in a future Members' Bulletin.

All members are urged to respond to the questionnaire if they have not already done so.

further development of methods of defense against nuclear attack."

British reaction to the Moscow offer has also been unpromisingly negative. Despite pressure from the Labor bench, Prime Minister Eden refused (Dec. 6) to commit his government to a move that "would put the United Kingdom in a position of decisive inferiority to other great powers."

**VATICAN MESSAGE** In a dramatic Christmas message, Pope Pius XII called on the world to recognize the terrifying spectre of nuclear war. "There will be no song of victory," only the inconsolable weeping of humanity, which in desolation will gaze upon the catastrophe brought on by its own folly," observed the Pontiff. With regard to A-testing, the message stated that "the opinion of those who fear the effects produced... would seem to be finding greater acceptance. Too many such explosions would in time cause... conditions very dangerous for many living beings."

The Pope proposed a 3-point program: (1) renunciation of experimentation with A-weapons, (2) renunciation of the use of such weapons, and (3) general control of armaments. He stressed the need for simultaneous agreement on all 3 points, noting that agreement only on the first point would give "sufficient reason to doubt the sincere desire to put into effect the other two conventions." Among possible control measures, the Pope mentioned aerial inspection, previously proposed by President Eisenhower, and a worldwide network of observation posts, a suggestion made in the UN by India and favored by the USSR.

The US, in a Voice of America broadcast Dec. 29, welcomed the Pope's message but emphasized the crucial need for simultaneous agreement on all 3 points: "Soviet leaders and Communist spokesmen elsewhere have talked a great deal about verbal pledges relating to the renunciation of nuclear weapons. But unhappily, they have not shown an equal interest in the measures of control and inspection which would give force and certainty to such verbal pledges."

**TEST BAN FAVORED** From a number of sources come arguments favoring a test ban. As pointed out editorially by the Washington Post (Dec. 4), violation of such a ban, according to our own authorities, could not be concealed. If further tests are not necessary to bring us up to parity in the field of nuclear weapons, a test ban would be in the interest of the US and the world. "In any case, the possibility ought to be explored by the US with genuine interest and good will."

Rep. W. Sterling Cole (R, N.Y.), member and recent chairman of the Joint Atomic Energy Committee, said on Dec. 11 he thought "very highly" of the Soviet proposal and that it merited "careful consideration." Washington Post columnist Herbert Elliston sees a test ban as an opportunity to "reverse the trend" in the armaments race. With regard to what may well be the most significant aspect of this episode, namely, its propaganda aspects, he added: "If we cannot counter the Soviet initiative in this substantive matter, at least we could come out in favor of a tentative deferment until an organizational body of knowledge has been crystallized."

**UN RADIATION STUDY** Such a body of knowledge is about to be gathered by a new UN scientific committee authorized by unanimous vote of the General Assembly  
(Continued on Page 4, end of Column 2)

# The RESEARCH BUDGET -- SURVEY & PROSPECTS

## DISARMAMENT -- BONES OF CONTENTION

A compromise disarmament proposal presented on Nov. 23 by Jules Moch, French representative on the 5-nation UN Disarmament Subcommittee, illustrates major bones of contention in the 12-nation UN Disarmament Commission. Suggested were: (a) unconditional prohibition of nuclear weapons (a Russian demand for initial action), but as a final, rather than initial, step; (b) reduction in conventional armaments (US resistance to this Russian request has been cited by the Soviets as a US renege on disarmament); (c) combination of the Eisenhower early warning ("Open Sky") system, the Eden pilot ground inspection plan for Europe, and the Faure budgetary arms control proposal; (d) prohibition of military nuclear testing (repeatedly urged by India); (e) conferences on stockpile detection methods.

Despite its catch-all character, the French plan failed of either Russian or American approval and the Subcommittee reported deadlock. As the Christian Science Monitor (Dec. 1) put it, the core of the East-West deadlock is that the US is insisting on "inspection and then perhaps disarmament" while the Soviet Union demands "disarmament and then inadequate inspection." Secondary "strings" have also been made part of the asking price of both sides, such as the US requirement for a European political settlement and the USSR call for dismantling of oversea bases.

### DISCUSSION TO CONTINUE

In spite of the deadlock, the US apparently intends to continue the drive for an "Open Sky," while also making some compromise with Soviet demands for conventional disarmament. A vigorously supported Western resolution directing the Disarmament Subcommittee to resume work (probably in February) passed the General Assembly's Political Committee 53-5 on Dec. 12 and the General Assembly itself 4 days later. The resolution directed the Subcommittee to give priority to the "Open Sky" proposal, the Bulganin strongpoint ground check, and the Eden plan.

At year's end, there were rumors of a coming US plan with detailed quotas for conventional arms (Washington Post, Dec. 29), and of the possible early development of a technique for "tagging" fissionables derived from A-power plant operation (Post, Dec. 7). Such a technique would be useful in detecting illegal diversion of fissionables to weapons under a control system. The plan is said to be under study by the scientific committee, headed by E. O. Lawrence, which is advising Harold E. Stassen, disarmament aide to the President.

Meanwhile, fears have been expressed that if some control plan is not soon adopted, inspection possibilities will be outpaced by intercontinental nuclear missiles. Rev. Edward A. Conway, S.J., a former official and active participant in the Nat. Committee on Atomic Information, urges "a crash program for disarmament" at least equal to that for intercontinental ballistic missiles.

## SEGREGATION ISSUE CONFRONTS AAAS

The American Association for the Advancement of Science, meeting in Atlanta the week of Dec. 27, decided to poll its full Council, representing the more than 2 million members of affiliated societies, on the question whether the AAAS should hold future meetings in cities where segregation is practiced. The decision came after protests by some AAAS members against holding the 1955 meeting in Atlanta. The AAAS section on anthropology voted not to participate in the Atlanta meeting and the Nat'l Assoc. of Science Writers and the Amer. Assoc. of Scientific Workers offered individual resolutions to ban, as meeting sites, cities which practice segregation.

On Dec. 27, the convention had been asked by the Council for the Advancement of Negroes in Science to adopt a resolution not to meet in segregated cities. On Dec. 29, the AAAS's governing council voted 72 to 13 to conduct a mail ballot of the entire council membership (335 total) on a resolution which read in part:

"In order that the Association may attain its objectives, it is necessary and desirable that all members may freely meet for scientific discussions, the exchange of ideas and the diffusion of established knowledge. This they must be able to do in formal meeting and informal social gatherings. These objectives cannot be fulfilled if free association of the members is hindered by

unnatural barriers. Therefore, be it resolved that the annual meeting of the AAAS be held under conditions which make possible the satisfaction of those ideals and requirements."

Another in a series of reports on federal funds for science, "IV. The Federal Research & Development Budget," was recently issued by the National Science Foundation. Devoted mainly to figures for the fiscal years 1954, 1955 and 1956, the report traces the growth of federal expenditures for science from \$97 million, or 1%, of the federal budget in 1940 to an estimated sum of \$2.2 billion, or over 3%, for 1956.

**AGENCIES & FIELDS** Of the 20 out of 56 federal departments and agencies which administer the funds, the Defense Dept. alone accounts for 70%. AEC is next largest, but accounts for only 1/5th as much as the Defense Dept. When five other agencies -- National Advisory Committee for Aeronautics (NACA), Agriculture, Health, Education & Welfare (HEW), Interior, and Commerce -- are added to AEC and Defense, 97% of federal expenditures for science are spoken for.

By scientific fields, the physical sciences (including mathematics and engineering) lead all others -- 85% of the total for fiscal years 1955 and '56 (almost all under Defense, AEC, and NACA). The life sciences (biological, medical and agricultural) get 11% to 12%; social sciences and general purpose statistics divide about equally the remaining 3% to 4%.

**BASIC vs. APPLIED** Acknowledging the difficulty of distinguishing between applied research and development as opposed to basic research, the NSF report assigns 93% of federal science funds to the former category and only 7% to the latter. The Smithsonian Institution and the NSF are exceptions to the rule of application first, giving primary support to general purpose basic research. However, the AEC supports 1/4th to 1/3rd of all basic research with smaller amounts coming from Defense, the NACA, HEW, Agriculture and Interior. Physical, life, and social sciences get 68%, 31% and 1% respectively of the amounts obligated for basic research.

**PROSPECTS** Indications are that on the whole federal appropriations for science have stabilized at current levels. Exceptions are expected appropriations for AEC and HEW. Increases in the AEC's budget will reflect additional planned construction of experimental and prototype reactors for both civilian and military use as well as the construction of a new medical research center at the Brookhaven Nat. Laboratory. Expected increases in the HEW science budget will be mainly for basic and applied research in medicine. Publicity attending the death of former Sen. Taft from cancer, the more recent heart attacks of President Eisenhower and Senate Majority Leader I yndon Johnson, and the debut of the anti-polio vaccine are credited with stimulating groups in and out of the Government to call for increased support for medical research. As affirmed by the President in his recent State of the Union message and stated originally by HEW Secretary Folsom, the "Administration will recommend to Congress a 25% to 30% increase in Public Health Service research appropriations," as well as the initiation of "a new program for a limited period of matching grants to medical schools and non-profit institutions for construction of research, teaching, and training facilities."

### FAS to MEET in NEW YORK

Monday, Jan. 30 -- Joint meeting of Long-Range Objectives Committee with Advisory Panel (6:30 PM)  
Thursday, Feb. 2 - Executive Committee (5:30 PM)

Friday, Feb. 3 -- Council: 4:00 PM, adjourn for dinner, and continue through evening (Columbia Univ. Men's Faculty Club, 400 W. 117th Street)

NOTE: Member observers are welcome at Council meeting.

although the 87 council members present at the Atlanta meeting constituted a quorum, a poll of all voting council members was wise to forestall the interpretation that the action taken was a regional decision, rather than a national consensus.

## Actions on the Security Front

A chairman, vice-chairman and several staff members have been selected for the newly appointed Commission on Government Security (NL 55-9), which will review the entire Federal security system. Loyd Wright of Los Angeles, immediate past president of the Amer. Bar Association, is the new chairman and Sen. John Stennis (D, Miss.) -- co-author of the resolution which set up the Commission -- is vice-chairman. Murrey Marder, in the Washington Post (Jan. 12), reports that staff appointments which have been made include Carl McFarland, president of Montana State Univ., as head counsel and Richard A. Edwards, assoc. prof. of government and law at Lafayette College, Easton, Pa., as research director. These job titles are still indefinite. McFarland was a special assistant to the Attorney General from 1933-37 and Asst. Attorney General from 1937-39. Edwards was recommended for the staff by Rep. Walter, chairman of the Un-American Activities Committee.

**KAMIN** Leon J. Kamin, a former research assistant at **ACQUITTED** Harvard under indictment for contempt of Congress, was acquitted on Jan. 5 of the contempt charges when Federal Judge Bailey Aldrich held that a Senate Subcommittee headed by Sen. McCarthy had exceeded its authority. The Judge found that the committee which interrogated Kamin was not authorized to examine the general subject of communism, but only to investigate Federal operations. Commenting on this decision, the Washington Post (Jan. 9) editorialized: "Judge Aldrich's decision gives a salutary check to the arrogance with which some Congressional committees have conducted themselves in recent years. Citizens of the US are not without rights when they are haled before these committees, and it is well to have those rights protected by the judicial branch of the Government."

**TARGET HUTCHINS** Chairman Francis E. Walter (D, Pa.) has indicated that the House Un-American Activities Committee wants to question Robert M. Hutchins, president of the Ford Foundation's Fund for the Republic, and also to investigate some activities of the Fund. Said Rep. Walter (Washington Post, Jan. 12): "We're going into Dr. Hutchins. ... we are disturbed about his statement which creates the impression that he believes the Communist Party is a 'political party' in the same sense that the Democratic and Republican Parties are political parties."

### LEADERSHIP LACKING IN CIVIL DEFENSE

The habit of officials at all levels to pass the buck for governmental failures in civil defense planning must come to an end, asserted a report published Jan. 3 by a 13-man committee headed by Gen. Otto H. Nelson. Nelson, president of New York Life Insurance Co. and former head of Project East River, was appointed last spring by Sec. of Defense Wilson, Fed. Civil Defense Administrator Peterson, and Office of Defense Mobilization Director Flemming to head up a review of CD policies in the light of new weapons developments. Among its recommendations, the Nelson Committee urged adoption of a national dispersal policy, and allocation of \$100,000 each to the "leading 14 metropolitan target zones" for studies to reorganize protection on a regional basis, thus utilizing city-state-federal cooperation.

As a result of this report, Flemming issued new dispersion criteria, replacing the previous requirement of a 10-mile minimum distance from target areas for new industrial plants important to defense. Although no specific rules are given, federal agencies are to consider such factors as most likely targets of enemy attack, radius of blast and heat waves, and plant construction features. Compliance with this order will be encouraged by withholding tax concessions and other benefits from firms which do not comply.

A symposium on "ATOMIC POWER DEVELOPMENT" and its legal and economic aspects will be released this month. The discussion will appear in the Winter, 1956 issue of the quarterly publication, "Law and Contemporary Problems," published by the Duke University School of Law, Durham, N.C.; \$2 per copy.

### FAS URGES VISA RULES BE RELAXED

Victor F. Weisskopf, physics professor at M.I.T. and co-chairman of the FAS Visa Committee, testified on Dec. 1 before the Senate Judiciary Subcommittee on Immigration and Naturalization. Presenting the views of FAS on "the detrimental effect of our present visa regulations for non-immigrant visitors," Weisskopf contrasted simplicity of travel in Western Europe -- no visa is required for European or American visitors -- with restricted travel to the US caused by the McCarran-Walter Act. He noted that the FAS committee has in its files about 100 cases of scientists, including several Nobel laureates, who have had visa difficulties. Weisskopf's principal recommendation was that "a more basic distinction be made between the visa regulations for temporary visitors and those for prospective immigrants."

Appendices to the testimony cited data, compiled by the Stanford branch of the Visa Committee, which included abstracts of 27 visa cases and a listing of 7 international scientific unions which avoided meeting in the US because of the visa policies. Appended also was a translated copy of the visa application blank (see also Dec. Bulletin of the Atomic Scientists) used by the US embassy in Paris, asking the applicant to list, among other things, every residence since 1932 and every organization in which he may have taken part since December 31, 1918.

Although President Eisenhower's State of the Union Message promised that "detailed recommendations for revision of the immigration laws will be submitted to the Congress," attention was centered almost entirely on the problem of immigration quotas. The Washington Post reported (Dec. 29), however, that the Administration also contemplates recommendations to "facilitate exchange visits between this country and foreign nations as advocated by President Eisenhower." It is hoped that the policy to be evolved will at least alleviate current difficulties for non-immigrant visitors.

### PASSPORT EVIDENCE MUST BE REVEALED

A new Federal court ruling may help to clarify further the rights of passport applicants. Last summer a Court of Appeals decision established that a passport is a "natural right" of a citizen, not a privilege, and that it can be withheld only through due process of law after a quasi-judicial hearing. In the case of New York attorney Leonard Boudin, Judge Luther Youngdahl ruled on November 22 that the State Department must reveal its evidence "so that the applicant may have the opportunity to meet it and the court to review it."

In an affidavit in support of the government's appeal of this case, Secretary Dulles said Boudin's passport had been denied partly on the basis of information from "informants whose identity is not known to the Department but whose credibility has been evaluated and made known to the Department by the Government agency furnishing the information." (Underlining ours)

\* \* \* \* \*

The FAS is a national organization of scientists and engineers concerned with the impact of science on national and world affairs. The Newsletter is edited by members of the FAS Washington Chapter.

- MEMBERSHIP APPLICATION** -- Dues: Regular - \$5 (with income below \$2500 - \$3); Supporting - \$10; Patron - \$25. New membership and an introductory subscription to Bulletin of the Atomic Scientists - \$8.50 (with income below \$2500 - \$6.50).
- SUBSCRIPTION to INFORMATION BULLETINS** -- \$10 to individuals; \$25 for Societies, etc. (including Newsletter)
- NEWSLETTER SUBSCRIPTION** -- \$2 to non-members (all members receive the Newsletter)

Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

Check enclosed  Send bill

MAIL TO: FAS, 1805 H Street, N.W., Washington 6, D.C.

## GLOBAL ACTIVITY on

The nations of Europe and Southeast Asia are looking to plans based on international cooperation to provide the large amounts of financial and scientific capital necessary for the development of the peaceful uses of atomic energy. The US is involved in the various multi-nation plans on the highest foreign policy levels, because of this nation's position as the most important supplier of fissionable materials and technical advice in this field.

**EURATOM** Two different proposals for the cooperative development of atomic energy in Western Europe have been put forward. The first, called Euratom, was reported by the Technical Committee on Nuclear Energy of the European Coal and Steel Community last November. It calls for: (1) pooled development of all European atomic resources under a council with real and extensive powers to act rapidly; (2) buying and distribution of raw fissionable materials by the council; (3) a free market in Europe for nuclear products. Specific relationship of the atomic development council to the existing structure of the Coal and Steel Community was not delineated. Strong pressures for a federal organization, with each nation surrendering some sovereignty to a supra-national authority (as in the Coal and Steel Community), are developing under the leadership of Jean Monnet, leading exponent of European integration. The 6 member-nations of the Coal and Steel Community involved in the Euratom proposal are France, West Germany, Italy, Belgium, the Netherlands and Luxembourg.

Following the NATO meeting of Foreign Ministers in mid-December, Secretary Dulles is reported to have encouraged the development of the Euratom plan in private discussions with Monnet and with the foreign ministers of West Germany, France and Belgium. This is in line with the general American interest in furthering European integration.

Another plan for the cooperative planning of atomic development in Europe was proposed by a special committee of the Organization for European Economic Cooperation, which is composed of 17 nations and was organized in 1948 to help distribute Marshall Plan aid; it was later continued as a means of integrating economic cooperation in Europe. The proposal calls for a steering committee to promote joint atomic enterprises among those member nations wishing to participate, and a control bureau to insure that all A-developments are for peaceful purposes. Any actual cooperative projects undertaken would be carried out by joint corporations formed by the participating governments. The possible relationship of this plan to Euratom was not considered.

**ASIAN CENTER** An announcement is expected soon from the US State Department of the final choice of site for an atomic research and training center in Southeast Asia, to be

## A-POWER DEVELOPMENT

financed by the US and operated under the auspices of the Colombo Plan nations. John B. Hollister, director of the International Cooperation Admin., made the formal offer of American support for such a center in a speech to the Colombo Plan Conference in Singapore last October. The US will furnish a research reactor and funds for the support of other activities of the center, which is expected to include a cyclotron, isotope laboratories, an agricultural research center and possibly a cancer hospital. A small power reactor may also be supplied in a few years if proper safeguards on disposal of fissionable materials produced can be established. Press reports indicate that, on security grounds, the US strongly favors the Philippines for the research center site.

**UN APPROVES NEW A-AGENCY** Worldwide cooperation in the development of atomic energy was brought one step closer last Dec. 3, when the UN General Assembly approved by a 58-0 vote a proposal for establishment of an Atomic Energy Agency under its auspices. The actual statute defining the agency's functions, modes of operation, and relationship to the UN is to be drawn up at a 12-nation conference, which will be held later this year in Washington. The proposed statute will then be submitted for final approval to a conference of the 84 countries which are members of the UN and of its specialized agencies.

### DISAPPEARING SCIENCE IN STATE

A trenchant article in *Chemical & Engineering News* of January 9 asks "What's Happened to Science in State?" Almost unnoticed, the State Department's program for relating science and foreign relations virtually has passed out of existence. At the moment, there are no scientific attaches abroad (there were once 10) and no scientist in the Science Office at home. No decision appears to have been made to abolish the program but, on the other hand, no initiative has been taken to keep it staffed and operating. For full documentation of the history and mystery of science in State, *Chem. & Eng. News* of Jan. 9 is a must.

**H-TEST BAN REJECTED** (Continued from Page 1). on Dec. 3. Composed of scientists from 15 nations, this committee will "receive and assemble" radiological information and submit a summary and evaluation of its findings on "the effects of ionizing radiation upon man and his environment" to the UN by July 1, 1958. On Dec. 9, the US announced that Shields Warren, director of the Cancer Research Institute at New England Deaconess Hospital in Boston, would be the US member of this committee. Alternates are Austin M. Brues of Argonne National Laboratory and Merril Eisenbud of the New York Operations Office of the AEC. The UN committee is expected to hold its first meeting sometime in March.

### F A S NEWSLETTER

Federation of American Scientists  
1805 H Street, N. W.  
Washington 6, D. C.

56 - 1

Sec. 34.66, P. L. & R.  
U. S. POSTAGE  
PAID  
WASHINGTON, D. C.  
PERMIT NO. 9124

Postmaster: If addressee has moved and new address is known, please forward and advise of new address on Form 3547. If new address unknown, return to sender. Postage for these services guaranteed.