

F. A. S. NEWSLETTER

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NUCLEAR TESTS EMPHASIZE NEED FOR CONTROL

The continuing East-West disarmament controversy was sharpened in recent days with announcements by the AEC and the White House of 3 Russian "nuclear device" tests since Aug. 24. These explosions have been estimated as yielding about one megaton. In the announcement, AEC Chairman Strauss pinpointed two Soviet testing sites -- one in Southwest Siberia and the other in "the area of the Barents Sea." He criticized the secrecy with which the Russians have clothed their nuclear weapons testing. In contrast, he pointed to the detailed publicity and precautions taken by the US prior to our recent Pacific firings, including extensive post-shot monitoring of potentially affected areas. The President issued a brief statement reiterating continuing US efforts "for effective international control of atomic energy and such measures of adequately safeguarded disarmament as are now feasible." Russia acknowledged the test firing a few days later.

The President, in disclosing on Aug. 30 the second Soviet blast, again took the USSR to task for their secrecy and observed that, "although Soviet diplomats throughout the world talk about the possibility of plans of abolishing the atom weapon from the arsenals of the world, they go right ahead without prior announcement and with wartime secrecy... in testing these weapons." Little more than an hour later, the USSR announced the firings, adding that they "as well as other tests impending are for the improvement of nuclear weapons and the evolving of new types for... armament."

The Russian announcement claimed that their "tests, as a rule, are made at a considerable height which allows a sharp reduction in the fallout of radioactive materials. With this in view, the minimum possible quantity of radioactive substances is used in the tested charges." These implications of a "clean" bomb probably stemmed from the AEC's statement on July 19 after the recent US test series, that "there are many factors... which do make it possible to localize... the fallout of nuclear explosions." The Soviet statement criticized the US for failure to concur on proposals to ban nuclear testing, and said that, in lieu of such an agreement, the USSR is "compelled in the interests of its security to devote the proper attention to testing nuclear weapons." A third Soviet test took place on Sept. 2, the AEC said, "in the same region and the same range of size as the two previous bursts."

RUSSIAN PROPOSAL News of the Soviet tests came only a few weeks after the latest testing control proposal made by USSR Foreign Minister Shepilov. In an address in Moscow July 16, he outlined 3 possible approaches to a nuclear test ban agreement: (1) within the framework of the UN, (2) through a tripartite agreement among the countries concerned, which other nations could later join, or (3) by separate official statements from the 3 countries, declaring cessation of tests.

No direct replies to the Shepilov

proposal have come from US or British sources. A prior suggestion by Gromyko in the UN Disarmament Commission was flatly rejected by Ambassador Lodge on the ground that a test ban without adequate inspection and control "could be suicidal." A more hopeful note was struck by Prime Minister Eden when, in a debate in the House of Commons, he stated that although Britain "would have preferred" to deal with test limitations "in the context of a disarmament convention, ... we are quite ready now to discuss that matter separately" and "try to work out the best method of limitation and control that we can contrive."

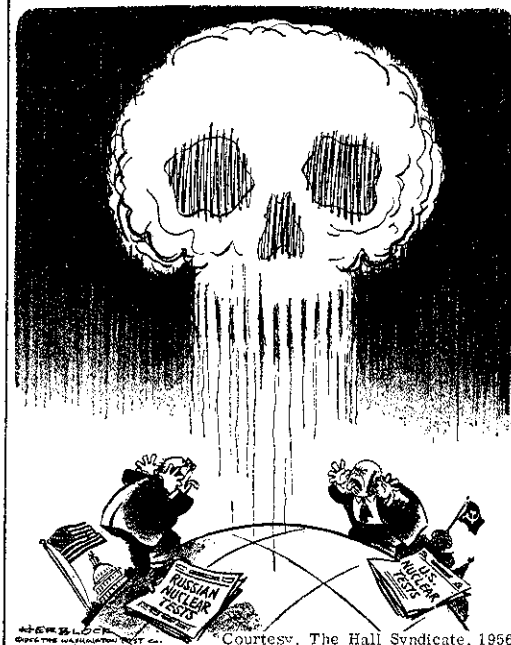
OTHER APPEALS Urgent notes for test bans were sounded on widely scattered fronts during recent weeks. In Copenhagen on Aug. 6, the International Congress of Human Genetics unanimously passed a resolution concerning radiation hazards, recommending that "the investigation of the amount and type of [genetic] damage [to man] and of related genetic questions be greatly extended and intensified with a view to safeguarding the well-being of future generations." The resolution was proposed by Nobel Laureate H. J. Muller of Indiana Univ.

Tito, Nehru and Nasser, in a communique released July 20, called for suspension of nuclear weapons tests, saying they violate international morality and "involve possible danger to humanity." The Indian Government, on Aug. 1, published a 184-page document summarizing Indian scientists' assessment of nuclear blast hazards and their probable genetic consequences. An H-bomb of 1-megaton force, it was estimated, would result in 400 world-wide deaths "spread over a large number of generations," plus detrimental mutations in an equal number of people. "To argue that tests should stop only if it is definitely estab-

lished their continuation would bring certain disaster to mankind," the report concluded, "is a regrettable commentary on the 2500 years of progress since Buddha."

CURB TESTS? The Washington Post on Aug. 28 reiterated its editorial stand of recent months calling for a halt to the testing of large nuclear weapons. It pointed out that "it would be well for the AEC not to be too pious about the information policy it has followed," since several recent tests are still publicly unevaluated with regard to size and aerial contamination. Russia "has offered to join in an international agreement halting nuclear tests, whereas the US has not. ... each big explosion -- Soviet or American -- still contributes to the level of radioactivity in the atmosphere which some scientists believe already is beginning to assume dangerous proportions. ... President Eisenhower's renewed appeal for international control of atomic energy would be more impressive if he would accompany it with a positive plan for controlling nuclear materials."

"Yaaa — You've Been Poisoning the Air, Too. So There!"



SECURITY CHANGES IN OFFING

Following the Supreme Court decision of June 11 in the Cole case (NL 56-6), evidence is mounting that the Federal security system is undergoing important changes. In that case, the Court ruled that under Public Law 733 dismissals and suspensions must be limited to sensitive jobs. Several agencies have recently announced procedural modifications (NL 56-5), and last month a new Defense Dept. security questionnaire for draftees and recruits gave greater protection to individual rights.

GOOD-BYE #10450 ? Asst. Attorney General G. C. Doub told the Amer. Bar Assoc. on Aug. 28 that the Administration soon will limit the Federal security program to sensitive jobs -- a step in accord with the Supreme Court decision and recommendations in a comprehensive report on "The Federal Loyalty-Security Program," released July 8 by a special committee of the N.Y. City Bar Assoc. (Dodd, Mead & Co., 289 pp., \$5). Prepared by eminent jurists with "the cooperation of . . . officials of the government responsible for the operation of the program" (including Att. General Brownell), the report was praised by Doub who noted it was being given "the most careful consideration" by the Justice Dept. The FAS Executive Committee commended the Bar report in a release from its July 14 meeting in New York.

RECOMMENDATIONS The Bar committee's recommendations, following consultation with 150 persons, would: (1) centralize supervision and review of all security programs in a Director of Personnel and Information Security, under the President; (2) limit personnel clearance to "sensitive positions;" (3) define sensitive positions as those involving policy-making related to national security, or requiring access to "secret or top secret" material; (4) continuously review methods of classifying and declassifying information; (5) adopt as a personnel security standard balanced judgment, based on all relevant evidence, as to "whether or not in the interest of the US the employment or retention in employment of the individual is advisable;" (6) accept a person's associations as relevant to security, if it is determined "that he shares, is susceptible to, or is influenced by [their] actions or views;" (7) abolish the Att. General's list of subversive organizations, or include organizations only after granting them due process and eliminate those defunct for more than 10 years; (8) establish training courses for security personnel; (9) establish a Central Screening Board for all agencies except AEC and Defense, which could use them at their option; (10) set up procedures to protect employees' rights, including specific statement of charges, assistance of counsel, continuance of pay, cross-examination of witnesses and right of confrontation unless this "would be injurious to national security;" (11) pay lawyers' fees of cleared employees; (12) give "final security determination" to the agency head; (13) prohibit the re-opening of security cases in the absence of new evidence; and (14) allow an applicant who is denied employment to learn security charges against him, and to reply to them.

SECURITY COMMISSION These recommendations will undoubtedly receive careful attention from the Justice Dept. and from the 12-man Commission on Govt. Security created by the last Congress. The Commission now has a staff of 80, and its report deadline has been extended to June 30, '57. A Science editorial (Aug. 31) urges individuals to send suggestions for revising current regulations to Commission Chairman Loyd Wright, 441 G St., Washington 25, D.C., or to SCS, Inc. (see story, p. 3).

Another report, released July 21 by a Senate Post Office and Civil Service Subcommittee, headed by Sen. Johnston (D, S.C.), severely criticized the present security system and recommended that a detailed legislative program, with proper safeguards, be worked out to cover both a security program for sensitive jobs and a loyalty program for all jobs.

An unsettling feature of the security picture is the support given to the Administration at the end of the last session of Congress by the Walter bill, which would have given authority for security clearance for all Federal employees. If control of the Executive and Congress should remain divided between the parties, a renewed political hassle over security may be in prospect. However, a moderate security program appears more likely at the moment.

REACTOR SAFETY QUESTIONED

The AEC's conditional permit for a nuclear power plant at Lagoona Beach, Michigan, is under fire because the safety of millions of people in the Detroit-Toledo area may be endangered. Two unions in the area have filed protests with the AEC, whose action has also been attacked by Joint Atomic Energy Committee members Anderson and Holifield. In dedicating the reactor site on Aug. 8, AEC Chairman Strauss pointed out that an operating license would not be issued unless the plant is "in compliance with the Commission's rigid health and safety requirements."

Part of the concern over the safety of the fast breeder reactor appears to stem from a report by the AEC's Advisory Committee on Reactor Safeguards. The AEC has refused to release the report but, according to a column by Marquis Childs (Sept. 1), it said "the committee as a whole was not satisfied with the evidence presented that no credible supercriticality accident resulting from meltdown could breach the container."

ATOMS AND 84th CONGRESS The adjournment of the 84th Congress found little legislative change in the A-power field. The Gore-Holifield bill (see NL 56-6), which would have authorized a \$400,000,000 program of accelerated power reactor development by the AEC, was passed by the Senate but killed by the House after a day-long debate July 24.

Other bills designed to encourage private industry in A-power reactor development also got lost in the rush to adjourn. Among these were measures designed to (1) provide federal indemnification from failure of a nuclear power reactor, and (2) change certain provisions of the Public Utility Holding Co. Act of 1935 to exempt utilities participating in A-power programs. The latter was accomplished administratively when the SEC on July 13 announced new rulings providing that industrial firms involved in cooperative A-power programs would not be classed as "electric utilities," and that public utilities owning stock in such reactor development concerns would not be classed as "holding companies" required to register under the act.

A nuclear-powered merchant ship was authorized in a bill signed by the President July 30. No specific type of ship was authorized and no limit on expenditures was set, but it is estimated the vessel should cost about \$40 million. Construction of an atomic powered surface vessel, a guided-missile cruiser, had been started earlier by the US Navy.

CD MANEUVERS, & PROPOSED DEPARTMENT

Operation Alert, a 5½-day exercise to test Federal CD plans in case of a nuclear attack, took place starting July 20. It was assumed that 75 areas in the US and its possessions were attacked with 124 nuclear weapons. Federal personnel moved out of Washington to emergency locations and there carried out, on paper, some actions that would be called for in the event of an actual attack. A comprehensive test of CONELRAD was also held, and many local CD organizations underwent drills.

Federal CD Administrator Peterson concluded the greatest needs for improvement were in the fields of communications and tracking radioactive fallout. The President suggested after the test that small staffs should be maintained at the Federal relocation sites on a permanent basis.

C D DEPT. ? Assumption of primary responsibility for CD by the Federal government, and creation of a permanent Dept. of Civil Defense, were recommended by the House Govt. Operations Subcommittee on Military Operations, headed by Rep. Holifield (D, Cal.). The report, issued July 27, followed a year of staff and committee study and testimony by 211 witnesses. The Subcommittee criticized the present reliance of the FCDA on evacuation, and concluded that an extensive shelter program would be effective and should be carried out, and that funds for CD training and stockpiles should be made available to State and local units. They saw little promise in industrial dispersal, because of the time involved in, and the obstacles to, such a program. The recommended Civil Defense Department, with Cabinet status, would assume the present CD functions of FCDA and the Office of Defense Mobilization, and would be charged with formulation of a nation-wide civil defense "master plan."

Academy Recommendations Accepted

The Administration recently adopted the recommendations of the Nat. Academy of Sciences (NAS) committee on "Loyalty in Relation to Government Support of Unclassified Research." In January, 1955, Presidential Assistant Sherman Adams had requested the NAS to "counsel with the Government" on this problem. The NAS report was released by the White House on April 4, 1956 (NL 56-4). After the report had been "carefully studied" by the executive branch, a letter from Adams to NAS President Bronk was released on Aug. 14. Stressing the "increasing importance of science to the national economy," welfare and defense, Adams said the Administration "recognizes that an atmosphere of free inquiry and protection of individual rights are prerequisite to sound scientific progress in this country."

"The principles set forth in the recommendations of the report," Adams continued, "have generally been found satisfactory as a basis for actions regarding grants or contracts for unclassified scientific research. It is noted that these principles are essentially those which support the policy of the National Science Foundation. The Departments and Agencies will, therefore, follow practices consistent with the recommendations contained in the report of the Academy's Committee. . . ."

The NAS report had pointed out that, "if there is evidence of criminal disloyalty or of any other crime under the law, it should be dealt with through the channels legally provided for the examination and disposition of such evidence -- not through the administration of research grants." It should be noted that NSF's policy, which Adams said is "essentially" supported by the NAS recommendations, provides for denial of a grant in some cases which do not involve violation of criminal statutes.

PLATFORM COMMITTEES HEAR FAS VIEWS

FAS presented testimony last month to the Platform Committees of the 2 major parties. William C. Davidson, Chicago Chapter chairman, appeared before the Democratic committee on Aug. 11, and members of the Berkeley Branch (Sidney Bludman, Owen Chamberlain and John Rasmussen) gave separate statements on Aug. 15-16 to subcommittees of the Republican counterpart. This represents another area in which the FAS can contribute to the formulation of public policy.

The testimony, compiled from past FAS policy expressions, urged that the US: (1) seek international agreement to ban tests of nuclear weapons and, if feasible, of long-range missiles, as a preliminary step toward enforceable world disarmament (see NL 56-6); (2) support measures to increase international understanding and cooperation, especially by initiating establishment of international laboratories for development of new areas of science; (3) expand efforts to share the peaceful uses of atomic energy with other nations; (4) revise passport and visa regulations to promote freer international travel; and (5) restrict Federal personnel security measures to sensitive areas, and revise them to include traditional legal safeguards.

RADIATION In a statement released from its New York meeting July 14, the FAS Exec. Committee commented on the Nat. Academy of Sciences report on radiation (see NL 56-6). The FAS statement observed that the Academy committee's estimates "imply that thousands of individuals, as yet unborn, will probably suffer impaired health as a result of nuclear bomb tests unless future scientific developments should give us means to undo the damage. Whether the benefits derived from these tests justify the injuries inflicted on all of mankind is a moral and political question, not a technical and scientific one. If the impairment of the health of hundreds or thousands of innocent by-standers were the immediate result of each bomb test rather than only the probable deferred result, public opinion would not countenance their continuation." The Exec. Committee also endorsed "the Academy's call for . . . minimizing heritable damage to future generations resulting from unneeded X-ray exposure."

In response to a request for suggestions about Federal security policies from Chairman Wright of the Commission on Government Security, FAS Passport Committee Chairman Chew transmitted his recent Senate testimony on passport problems and outlined the Passport Committee's recommendations to provide due process in any abridgement of the right to travel.

NEW SCIENTISTS' SECURITY COMMITTEE

A new Scientists' Committee on Security, Inc., organized early this year as a volunteer group under the chairmanship of Yale physics professor Ernest C. Pollard, has announced its plans to: (1) "act as a clearinghouse for information and responsible scientific opinion on matters of information and personnel security;" (2) study and report on "particular, important issues of science and security;" (3) work with the Government to establish and maintain "realistic security programs" safeguarding "both the long-range security of the US and the traditional rights of its citizens;" (4) "stimulate constructive thought on questions of information and personnel security;" (5) "foster a better popular understanding of the true relationship of science and security."

SCS requests information on: (1) cases where clearance difficulties have affected the ability of scientists and engineers to find employment, commensurate with their experience, outside classified areas (for a report on this special problem), and (2) security cases of scientists and engineers, and general recommendations for changes in the current programs (for SCS recommendations to the Govt. Security Commission). Send communications to: SCS, Inc., 2153 Yale Station, New Haven, Conn.

DISARMAMENT AS USUAL

The UN Disarmament Commission adjourned July 16 after a 2-week session which heard violent Russian rejection of Open Skies inspection, voted down the latest Soviet proposal (a Kellogg-type anti-war pact) by the usual margin, and left the 5-nation subcommittee instructions to continue exploring the various draft resolutions, including India's plea for a nuclear test ban. Interest was aroused by Russian acceptance of 2,500,000 manpower levels for the US, USSR and Red China, in lieu of the previous 1,500,000 figure. However, the Soviet "concession" was tied to levels of 200,000 for smaller nations (e.g., S. Korea and Germany), independent of political settlements and devoid of inspection provisions. Likewise, Russian demands for nuclear weapon prohibition and elimination of stockpiles continued.

Disarmament fared no better outside the UN. At regular intervals came official rejections by the British, Italian, French, Turkish, German and US governments of the June 6 Bulgarian letters urging unilateral disarmament. President Eisenhower made no new proposals in his reply (July 7), but took Russia to task for ignoring his earlier Atom Pool request and for renegeing on the Geneva "agreement" for German reunification. The President promised, however, to communicate to Marshal Bulganin any new proposals that develop from current "intensive study" of the disarmament problem.

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. Contributors to this issue were:

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MOSS SMOKES OUT PAPER CURTAIN

"Slowly, almost imperceptibly, a paper curtain has descended over the Federal Government. Behind this curtain lies an attitude novel to democratic government -- an attitude which says that we, the officials, not you, the people, will determine how much you are to be told about your own Government. The paper curtain... is not the fault of any one administration or any one party. It has developed over a 30-year period." This is the conclusion of a year-long study by the House Government Operations Subcommittee on Government Information, headed by Rep. John E. Moss (D, Cal.). The report brought out that 40 Federal agencies have developed "some 30 new labels to identify non-security information they wish to keep from public view."

COMMITTEE RECOMMENDS

Among 8 recommendations in the Subcommittee's report issued July 28, 3 concerned scientific information and were endorsed by the FAS Executive Committee in a statement which received wide coverage: (1) The Export Control Act of 1949 should be amended to exempt unclassified scientific information from export regulations now administered by the Commerce Dept. -- The FAS statement said many US scientists are "unwittingly violating the law" in their ignorance of Commerce regulations that "all unclassified scientific correspondence mailed outside the US be labelled on the envelope with an export license 'symbol.'" When the labelling requirement is observed, it interferes with technical progress by discouraging the "flow of information" so vital to creative scientific thought.

(2) "The [State Dept.'s] science attache program should be reactivated." -- FAS seconded this proposal and also urged the strengthening of the Science Adviser's Office in the State Dept. (3) "The [Commerce Dept.'s] Office of Strategic Information should be abolished." -- The OSI was set up in 1954 to promote "voluntary efforts to prevent unclassified strategic data from being made available" to unfriendly nations. FAS observed that "peacetime attempts to extend voluntary controls to any unclassified information are unrealistic and fraught with dangers far greater than the presumed benefits."

WEEKS REPLIES

Secretary of Commerce Weeks said in a press conference on Aug. 2 that the Department was taking a "very hard look" at the recommendation that OSI be abolished, but that exchanges of scientific information will continue to be licensed under the Export Control Act.

Continuation of the Moss Subcommittee's work depends on authorization by the parent committee in the next Congress. Persons wishing to ensure effective action by the Subcommittee should write Rep. Wm. L. Dawson, Chairman, House Govt. Operations Committee, Washington 25, D.C. Copies of the report and hearings (including a scientists' panel) are available on request.

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STATE REVERSES PASSPORT DENIAL

The State Dept. reversed itself and granted a passport N.Y. attorney Leonard B. Boudin on Aug. 29. This followed a Court of Appeals decision of June 28, returning the case to State on grounds that the Government had not followed its own regulations. Boudin was refused a passport, according to the Dept., because he supported the Communist movement. The passport regulations state, however, that such support must be "a result of direction, domination, or control exercised over [the applicant] by the Communist movement." No finding to this effect about Boudin was ever reported. If the State Dept. had produced facts to support such a finding, it would still have been confronted by the questionable legality of confidential information, an issue temporarily side-stepped by the Appeals Court in the Boudin case.

Confidential information is also an issue in the case of cosmic ray physicist Bruce Dayton, heard by the Appeals Court July 25. The State Dept. charge against Dayton involves his "association with persons suspected of being part of the Rosenberg espionage ring and his alleged presence at an apartment in New York... allegedly used for microfilming [classified] material." Dayton has denied under oath ever being a Communist and disclaims any knowledge of the New York apartment. He wants a passport for travel to India to work at the Tata Institute. The Court's ruling is expected this month.

WALTER BILL FAILS

Rep. Walter's bill to allow the State Dept. to deny passports on the basis of confidential information (see NL 56-5) died with the last session of Congress. Supported by the State Dept., the bill was intended to counteract recent court rulings that present procedures do not satisfy due process. Although the bill was reported favorably by a House Judiciary Subcommittee, it was not reported out by the full Committee before Congress adjourned.

SCIENTIFIC MANPOWER STUDY

An interim report on the "Shortage of Scientific and Engineering Manpower" was published July 12 by the Subcommittee on Research & Development of the Joint Atomic Energy Committee. Public hearings last spring, where testimony was given by experts in education, science, industry and government, emphasized that: (1) the shortage in science is a part of the overall lack of skilled manpower, and (2) mathematics instruction in high schools has deteriorated in recent years. The Subcommittee makes 10 major recommendations, including establishment of "a Federal mathematics scholarship award program," "earlier identification of potentially ablest students," "increased salaries for high school teachers..." "Federal contribution to private scholarship funds," and steps to improve the utilization of scientists. The hearings and report are available from the Joint AE Committee, US Congress.

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