

# F. A. S. NEWSLETTER

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Charles C. Price, Chairman

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March 18, 1957

## JAPANESE PROTEST BOMB TESTS

A widespread wave of protest against further nuclear weapons testing has swept Japan following the rebuff of three official notes to Great Britain requesting the suspension of forthcoming H-bomb explosions on Christmas Island later this year (see NL 57-2). Acting Prime Minister Kishi informed the Diet that the government would try to rally world opinion against the further testing of nuclear weapons because of the danger of radioactive contamination of the rainfall, soil and crops of Japan. The Russians have also been officially requested by the Japanese to cease their current series of weapons tests.

Japanese apprehension over the further contamination of the atmosphere and rainfall of that country stems not only from their past experiences but also from continued scientific reports from their own meteorological scientists. Dr. C. Ishii, Director of the Tokyo Meteorological Research Institute, stated that there are air masses hovering high over Japan, containing concentrations of radioactivity as large as 1/3rd of the maximum safe level. He has recommended that, at least, the tests should be spaced over intervals of 2 to 3 years, to permit this atmospheric contamination to dissipate. Similar warnings have been uttered by Dr. S. Ohta of the Central Meteorological Observatory, with regard to rainfall on Japan.

**PHYSICISTS ADD VOICE** Besides the official governmental notes to Britain and Russia on cessation of bomb tests, many private organizations and individuals in Japan have voiced a similar appeal. A group of 180 Japanese physicists, including Nobel Prize winner H. Yukawa, sent an appeal to leading British scientists to stop the tests. A public rally on Mar. 1, (Continued on Page 4, Column 2)

## STASSEN MOVED TO STATE DEPT.

On Mar. 1, it was officially confirmed that Harold E. Stassen's disarmament group will operate henceforth under the "policy guidance" of the State Department. On the basis of earlier reports that the move was imminent, the *Washington Post*, on Feb. 24, said the shift was a result of Dulles' dissatisfaction with having a second foreign policy group in the government, and of his feeling that policy-making cannot and should not be divorced from policy execution. Stassen was said to regard the move as a renunciation of his original philosophy of considering disarmament separately from the short-term policy-jockeying that characterizes the State Dept.'s day-to-date operations. Stassen will continue to attend National Security Council meetings on a "personal" basis, the *Post* reported.

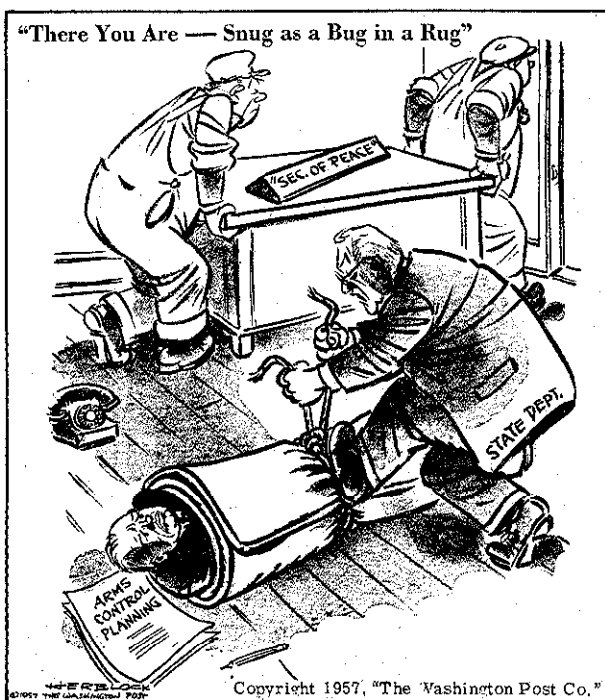
**DULLES GIVES RATIONALE** Leaving an interview with President Eisenhower on Mar. 1, Dulles and Stassen gave reporters the Administration's explanation for the change:

In its early phase, Dulles said, the Disarmament Office had an intergovernmental function -- to find a policy position acceptable to all agencies; at that time, he said, it was inappropriate to have the Office under any single department. The Administration now sees the Office in a new phase, in which it has essentially a "diplomatic" function -- one primarily of negotiating with foreign governments. Although many regard the change as a downgrading of the disarmament function, Dulles was careful to point out that it did not reflect any change in the President's views as to the importance of these matters.

While Dulles asserted that Stassen will retain his title as Special Assistant to the President, but it is not clear whether his successor will keep this title or the Cabinet rank assigned to Stassen when he was appointed on Mar. 19, 1955. Stassen heads the US delegation to the UN Disarmament Subcommittee's talks which opened in London Mar. 18, but he is expected to resign afterwards to seek the governorship of Pennsylvania.

**REACTION** Dissatisfaction with the Stassen shift came from various quarters. The *Washington Post*, in an editorial Mar. 1, said Stassen "has worked hard... and has made some notable progress in introducing more realism into the American position and narrowing the gap between it and the Russian position... He has shown a flexibility that unhappily has been lacking in the Dept. of State. The problems with which Mr. Stassen has been coping have by no means diminished in importance. Indeed, the imminence of the intercontinental missile and the stream of new evidence about the radiation dangers from nuclear explosions which the Administration has foolishly pooch-pooched, make arms-control efforts more rather than less necessary. The prospect that these efforts may now be buried and forgotten in another State Department bureau will be dismaying to the world."

And Sen. Ralph E. Flanders (R, Vt.), who co-sponsored a Congressional resolution in 1953 to increase our disarmament efforts, referred to the Stassen move as "disturbing," and one which downgrades "the greatest project with which the world is faced." "The State Dept.," said Flanders, "has not shown the imagination and the organization to follow through on all the various approaches to a world organized for the peaceful settlement of difficulties between nations. ... We can properly be fearful that we are about to lose energy, imagination, and drive toward the objectives that lay within Mr. Stassen's field of responsibility."



## Commerce Eases Data Export Rules

Little known regulations affecting scientists' correspondence with their colleagues abroad were eased recently by the Dept. of Commerce, largely as a result of an investigation by the House (Moss) Subcommittee on Government Information and of protests by FAS. The Bureau of Foreign Commerce (BFC) of the Commerce Dept. announced revision of these regulations on Jan. 31; details appear in BFC's Current Export Bulletin 779 of that date.

**LICENSE SYMBOL ON SCIENTISTS' MAIL.** Export (or shipment abroad) of "technical data" was explicitly brought under Commerce Dept. regulation in Jan., '55; minor improvements in the BFC regulations occurred in April and Sept. of that year and were reported to FAS members (see NLS 55-4, 5, 7 and 9). Regulations on the export of technical data had been in effect since 1951 but, until Jan. of '55, educational and research items were specifically exempted. Authority for the BFC regulations is taken from this clause in the Export Control Act of 1949: "...the President may prohibit or curtail the exportation... of any articles, materials, or supplies, including technical data, except under such rules and regulations as he shall prescribe..." (emphasis ours).

The regulation in effect from Sept. '55 to Jan. '57 required US scientists -- who are considered "exporters" by BFC -- to place a "license symbol" on the wrapper (envelope) of any technical data (say, a technical paper or reprint) which they chose to mail abroad ("export"). The wrappers on general scientific information of an unclassified nature, and on educational and technical data not related to design and production facilities for industrial processes were supposed to be labelled as follows: "GTDS [General Technical Data, Scientific] - Export License Not Required," when sent outside the US. The "general license," as defined by BFC, requires no application nor issuance of a document; the sender simply verifies he is complying with the regulation when he places the mystical symbols on his envelope.

**FAS PROTESTS** FAS discontent with these regulations was first expressed in a letter from then FAS Chairman D. J. Hughes to Secretary Weeks, in Oct. '55. The Dept. at that time informed FAS that they were aware their regulations were not uniformly enforced and that "the need for continuing the labeling requirement" was being re-examined. In March of '56, they wrote FAS that it had been decided to continue the export regulations for technical data.

Subsequently, FAS brought the Commerce Dept. regulations to the attention of the Moss Subcommittee. Testifying in April, '56, Chairman Hughes outlined these FAS objections to the regulations: (1) the labeling requirement slows down the flow of information, thus decreasing the national security; (2) "...there are already unfavorable reactions from European scientists, who assume that censorship is in force;" (3) scientists unwittingly violating these regulations are subject to maximum penalties of a \$10,000 fine and 1 year imprisonment; "under these conditions, the law is subject to arbitrary and capricious application against a few violators."

**FAS RECOMMENDATIONS** Hughes submitted 2 recommendations, which had the approval of the FAS Council: (1) eliminate the labeling requirements affecting export of unclassified technical data, and (2) amend the 1949 Act to exclude from export control all unclassified scientific and educational technical data. The Moss Subcommittee included the latter recommendation in its report to Congress, released July 28, '56, criticizing government information policies. Their report (H.Rept. 2947), as well as the hearings (Part 6) -- containing testimony by Hughes and Commerce Dept. officials in this connection, are available on request from the House Govt. Operations Subcommittee on Govt. Information, Washington 25, D.C.

A. V. Astin, Director of the Nat. Bureau of Standards, testified that his laboratory, which is under the Commerce Dept., followed the labeling procedures. Pressed by a Subcommittee member, Astin said, "I wouldn't be honest if I did not say that the requirement to stamp the document is a, you might say, minor annoying deterrent on communications." FAS' correspondence with Commerce Dept. officials is also reprinted in the hearings.

In a private interview after the hearings, the BFC staff ex-

## FALLOUT HEARINGS SCHEDULED

Radioactive fallout will be the subject of hearings, scheduled to begin sometime in May, before the Joint Committee on Atomic Energy. In his announcement of Mar. 6, Rep. Carl Durham (D, N.C.), who has replaced Sen. Anderson as Committee Chairman, observed; "There has been considerable concern" about "the effects of fallout from nuclear weapons tests." This is "a complex problem" requiring "sober consideration as a matter of urgent national interest. I don't believe anyone knows enough about this subject as yet."

The hearings will attempt to "delineate the areas in which... we lack knowledge, so that we will be able to isolate those areas which require the most intensive study," Durham explained. "Chief emphasis... will be on the research questions involved," and "the Committee will inquire into the adequacy of the Government's research program in regard to the fallout problem and what additional money and effort may be needed." Questions of reactor hazards and radiation injuries involving workmen's compensation will be discussed at separate hearings. Durham expressed his hope that "after we complete our hearings on the background of the fallout problem the Committee will then have an opportunity to discuss such questions as limiting the size of nuclear weapons to be tested; the accuracy and adequacy of existing detection devices, and associated questions of national policy affecting our nuclear weapons program."

It may be hoped that these hearings will spark the long-needed "Operation Candor" in the field of nuclear weapons testing, leading to a greater public awareness of the problems we face in this nuclear age.

## PENTAGON MERGES RESEARCH, ENGINEERING

In naming Frank D. Newbury to the newly created post of Asst. Secretary of Defense for Research & Engineering, on Feb. 25, Secretary Wilson reorganized two assistant secretaryships in the Defense Department into one office. The new office incorporates the post of the Asst. Secretary for R & D with that of the Asst. Secretary for Engineering, which Newbury formerly held. The secretaryship for R & D has been vacant since Clifford C. Furnas resigned earlier in February, to return to the U. of Buffalo as Chancellor. Despite official denial, this move was interpreted widely as giving higher priority to applied engineering and technical efficiency considerations than to research and development.

**REACTION** Anticipating opposition to the move, Wilson said that the new organization "would not decrease the responsibilities of contributions of the scientists in the overall research and engineering program." On Mar. 4, Chairman Durham (D, N.C.) and Rep. Price (D, Ill.), of the Joint Congressional Atomic Energy Committee, sharply criticized Wilson's action as putting "greater stress on so-called practical applications of technology" and relegating "basic research" to a "relatively minor role." Newbury, in reply, denied an engineering victory and pledged that "it will be our endeavor to promote research in which the Department of Defense has a justifiable interest where ever the necessary talent and the money can be found."

explored further with FAS some changes which would meet our objections. Their revision of Jan. 31 removes the labeling requirement "in cases (a) where non-commercial shipments of technical data are exported via first-class mail under the provisions of General License 'GTDP' (published technical data) or General License 'GTDS' (scientific and educational technical data), by other than a business concern, e.g., private person not engaged in business, philanthropic organizations, non-profit scientific society, etc., or (b) where technical data are exported via all classes of mail by a US government agency under the provisions of General License 'GTDS'" (Current Export Bulletin No. 779).

It appears that, while most technical personnel -- in and out of government -- are now exempted from the labeling requirement in their private correspondence, the present wording still authorizes controls in certain cases where they are quite unnecessary. We may hope for the day when the first recommendation in the FAS testimony is more completely implemented by the Commerce Dept., and the second acted upon by Congress.

## EURATOM & EUROPEAN UNITY

The Premiers and foreign ministers of six western European nations (which had participated in the Brussels conference for a common market and Euratom) issued a joint communique from their Paris meeting on Feb. 19-20, indicating full agreement on the basic provisions of 2 forthcoming treaties -- designed to broaden the economic union of their countries. The Premiers will meet in Rome Mar. 25 to sign the final form of the agreements and then submit them to their respective parliaments for ratification.

**TREATY DETAILS** One treaty would establish the European Atomic Energy Community (Euratom), in which the member-nations would pool their nuclear resources and skills. An atomic energy commission would have the actual property rights to fissionable materials. Operating from a common budget, the commission would purchase and distribute to the member nations all the materials needed to develop their atomic programs. The commission would also operate a research center and a school to train specialists. A council of ministers would provide the coordination of national policies, and have the final say regarding the size of the budget.

Although the actual text of this treaty has not been released, an official summary was made available; the N.Y. Herald Tribune News Service reported (Mar. 2) that the summary shows "that no distinction has been made between peaceful and military uses of fissionable materials by the governments within the Euratom combination." This reported omission of any nuclear weapons ban apparently was brought about through French insistence -- over opposition from Belgium, Italy, Luxembourg and the Netherlands.

The second treaty would establish, over a period of 12 to 17 years, a common market and free trade area in which tariffs and other trade barriers between members would gradually be reduced and removed. It would allow, however, for a common tariff against goods coming from outside the area. The trade area covers that of the member nations and their overseas territories. The inclusion of the territories was the final obstacle to settlement of the agreement on the common market and represents another concession to France. A tentative plan was presented also for investment in the overseas (e.g., African) territories, including detailed contributions to the investment fund during the first 5 years, and also for the allotments to be made to the territories.

The two plans apparently complement one another. The common market, via favorable trade conditions, is expected to induce increased production. This will require more power. However, development of conventional power sources (water, coal and oil) in Europe is already near its maximum; thus a parallel development of A-power is planned and will be a major function of Euratom.

**BRITISH-US REACTION** The US reaction to Euratom has been extremely favorable. A series of talks between US government officials and 3 Euratom representatives concluded Feb. 8, when the State Dept. and AEC issued a communique fully endorsing the Euratom plans (15 million kilowatts of atomic power plant capacity within 10 years), and pledging US support and assistance. This endorsement is to be implemented by our sending scientists and technicians to help start the project (a 5-man "high level" team of experts will leave shortly), and also by supplying the nuclear fuel to power the reactors. Great Britain, also, has promised to aid the Euratom program by sending a "task force" of technical experts and by assisting in training scientists at the British reactor schools at Harwell and Calder Hall. Britain offered (Mar. 1) "to facilitate contracts between UK firms and firms within the Euratom countries interested in building nuclear reactors." Russia, in notes to all European nations on Mar. 16, charged that Euratom and the common market program would further split Europe and heighten the chances of war.

Thus, with the Coal and Steel Community and Benelux already functioning and Euratom and the common market ready to start, western Europe is well on its way to a high degree of economic integration. The supranational authority of these "communities" already involves a substantial relaxation of individual national sovereignty.

## SENATE REPORT WOULD "UN-DO" COURT DECISIONS

In the 12th of a series of reports on its 1956 hearings, the Senate Internal Security Subcommittee, chaired by Sen. Eastland of Miss., recommended (Mar. 5) new legislation designed to undo the effects of 2 recent Supreme Court decisions on the administration of the Federal loyalty-security programs.

First, in the case of Pennsylvania vs. Nelson, the Court excluded states from the field of sedition legislation -- holding that Congressional action had preempted the area. The Subcommittee wants Congress to pass a law stating that it has no such intention. Second, the Cole vs. Young ruling (see NL 56-6) limited the Federal security program dismissal power in most agencies to sensitive jobs only. "One never knows just which job is sensitive," the report quotes from the dissent of Justices Clark, Minton and Reed. The Subcommittee advocates a law barring security risks from any US government job -- sensitive or not. Along this line, it also suggests study of a bill to require "responsive answers to . . . any authorized tribunal" respecting the loyalty of a Federal worker, as a condition of his employment.

The report devotes considerable space to Communist misuse of passports and to the loyalty of Americans employed by the UN -- especially by UNESCO. We quote one of these recommendations verbatim and in toto: "The US should take steps through proper channels to cause the UN to define the duties of its employees in such a way as not to put a premium on disloyalty to an employee's own country." UNESCO was apparently singled out for attack because of the allegedly high proportion of disloyal Americans employed by it. Seven of these, dismissed for refusal to testify before the International Organizations Employees Loyalty Board (a US agency), appealed and were later reinstated.

## SLOCHOWER RESIGNS

Harry Slochower, formerly Assoc. Professor of German at Brooklyn College, resigned on Feb. 26, the day before his department was to try him on charges of conduct unbecoming a member of the college staff. He had been reinstated on Jan. 5 (see NL 57-1) after being fired 4 years ago for refusing to tell a Senate Judiciary Subcommittee whether he was a Communist in 1941. The US Supreme Court held last year that the manner in which he had been dismissed violated his constitutional rights.

In the proposed departmental trial, he was to be accused of having made false statements under oath, during investigations into suspected Communist activities in the municipal colleges. He explained that, in his original case, he was trying "to vindicate a basic [Constitutional] principle," whereas "the present issue involves only myself, that is, my particular job."

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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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## USSR Assured of Technical Lead

In an address before the Air Force Association on February 15 in Washington, Edward Teller, physicist at the U. of California Radiation Lab., said Russia will definitely have the "best scientists in the world" ten years from now. In his opinion, there is nothing whatever we can do to alter this situation because of the long time it takes to educate scientists. The best that can be hoped for now is to "recapture" our present lead at a later time, by improving our methods of scientific education and by increasing the incentives leading people into scientific careers.

**UNITED STATES IS "A-INTELLECTUAL"** Teller said Russia's impending lead was brought about by its concentration on improvement of technological training and development, and by giving top rank to scientists. In contrast, he pointed out, scientists and other intellectuals are regarded in the US in a "somewhat peculiar way." While he would not call the US "anti-intellectual," he said he believed that "a great number of people who determine the future of the country are a-intellectual." That is, they take the position that "we don't really care what [the intellectuals] are doing."

**RUSSIAN SCIENTIFIC TRAINING** Teller's remarks become all the more forceful when viewed against the background provided by an article entitled "Training of Research Workers in the USSR," appearing in the first issue of *Scientific World* (8d, or 2/6 for four issues; 27 Red Lion St., London WC 1), published by the World Federation of Scientific Workers, which is headed by F. Joliot-Curie. The author, the Russian Academician Kolmogorov, writes that the USSR stresses the secondary school and undergraduate college phases in training research workers. Their secondary schools, equivalent in student age to our high schools, are widely attended and are soon to become obligatory for the entire population. The prescribed curriculum is the same for all pupils, with special outside work encouraged in fields of interest to individual students. This encouragement is often provided in the form of "circles," or clubs, specializing in mathematics and other fields, and supervised by teachers. Kolmogorov states that "any young person of either sex who may wish to take up research work will find no obstacle to doing so, provided, of course, that he (or she) has the requisite capacity and perseverance, and at least some aptitude for research." Such students are sent to the universities at government expense (including living expenses). Ninety percent of the college students in Russia have such grants, said Kolmogorov.

Extra-curricular study is also encouraged in the universities by organized "circles" in various subjects. At the end of the scholastic year the universities hold "mathematics olympiads," which are competitions in the solution of difficult problems, for the best of which, prizes (books) are awarded. Kolmogorov says

**JAPANESE PROTEST BOMB TESTS** (Cont. from Page 1). attended by some 2000 people including representatives of all political parties and many civic organizations, adopted a resolution asking Britain to abandon the Pacific tests "in the interest of world peace and humanity." A public debate has been going on in Japan over sending a "suicide sitdown" fleet into the test area in an effort to force Britain to stop the tests. The government has announced that it cannot give official sanction to any such project.

Representatives of the US Atomic Energy Commission, meanwhile, continue to play down the problems of bomb test fallout. AEC Commissioner Libby told the *N.Y. Times* Youth Forum on Mar. 11 that atomic fallout was not sufficient to be a physical or genetic danger. In a lecture before a Symposium on Radiation Hazards to Mankind, at Hunter College on Feb. 20, C. W. Shilling, deputy director of the AEC's Div. of Biology & Medicine, said we must continue nuclear weapons tests "not only to study their characteristics, but also, and perhaps more importantly, to study ways and means of protecting populations from their effects should they ever be used in warfare." He indicated that radiation from a variety of sources, including nuclear explosions, was low enough to constitute no more risk than that involved in any kind of industrial operation.

**WHO REPORT SEES DANGER** The World Health Organization, however, will issue a report later this month, in which it is stated that curtailment of man-made radioactivity is urgently needed to assure the "health and orderly development of future generations." The report further states that "there are strong grounds for believing that most genetic effects are very closely additive so that a small amount of radiation received by each of a number of individuals can do an appreciable amount of damage to the population as a whole." Two aspects of the problem were delineated for further attention: intensification of experimental research, and systematic recording of individual exposure to radiations.

A report, which was presented on Mar. 11 to the 1957 Nuclear Congress in Philadelphia by a group of sanitary engineers, stressed the danger of radioactive pollution of our air and streams from inadequate disposal of wastes from the growing atomic energy industry. The report, in the form of a technical paper, pointed out that intensive controls were necessary and that the states were not yet prepared to meet this challenge.

that those at the University of Moscow always have more than a thousand competitors.

If programs like this are pursued in Russian schools in all technical fields, Teller's concern about the future supply of scientific manpower in the US, as compared with that in Russia, would seem to be justified.

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