

F. A. S. NEWSLETTER

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May 28, 1958

CIVILIAN SPACE AGENCY FAVORED

A strong civilian space agency that would act as a "supreme arbiter" of astronautical research was recommended in a study issued by the staff of the House Select Committee on Astronautics and Space on May 19. The Committee is expected to report out a bill embodying the conclusions of this special study which stated that it was "imperative that the primacy of non-military space exploration be recognized and enforced, by having a national civilian space authority in undisputed, overall control." The staff report followed three weeks of hearings on bill S. 3609 to set up a National Astronautics and Space Agency (NASA).

PROPOSED FUNCTIONS OF NEW AGENCY The bill gives as the functions of the agency: (1) development of a comprehensive research program in space science, (2) direct studies of problems of manned and unmanned flight within or outside the atmosphere, (3) develop aeronautical and space vehicles, (4) provide for participation of scientific community in studies to be made using space vehicles. Policies and program of NASA are to be overseen by a seventeen man board, consisting of no more than eight government representatives, including one from the Defense Dept., and the rest eminent private citizens.

CIVILIAN CONTROL ESSENTIAL The original bill as proposed by the Administration, recommended that space research activities "should be directed by a civilian agency" except in the case of weapons systems or primarily military operations when "the agency may act in cooperation with, or on behalf of, the Department of Defense." This is essentially the same specification which defines the relationship between the Defense Dept. and the presently existing National Advisory Committee on Aeronautics (NACA), after which the NASA is patterned and which the NASA will replace. The House Committee staff report maintains that even more positive civilian control over space development is necessary than is provided for in the bill -- a view which is in accord with the statement submitted by the FAS Council to the House & Senate Space Committees on May 3.

FAS STATEMENT Citing the successful precedent of the AEC and the "failure of the Pentagon leadership to foresee the impact of the first satellites in the popular imagination," the FAS Council urged "immediate establishment of a civilian space agency" which would be entrusted with "full responsibility for the conduct of space research and development of space vehicles." The Council went on to recommend that "Congress prepare to seize the opportunity for American leadership in this frontier area by fostering international cooperation in space research and exploration. We can best improve our national security," the statement goes on, "by initiating cooperative programs which would draw together the peoples of the world in the joint conquest of outer space. It would be tragic if the challenging task of space exploration were carried on in the competitive nationalistic pattern under which it has begun."

CRITICISM Failure of the Administration's NASA bill to make adequate provision for international cooperation in exploring outer space, was a major criticism raised in the hearing (Continued on Page 4, end of Column 1)

TEST BAN HOPES RISE

The Soviet Union's dramatic announcement of its unilateral halt in the testing of atomic and hydrogen bomb (See NL 58-3) not only scored a propaganda victory for the Russians but may have given significant impetus to a "re-thinking" of the problem in the US. Although the immediate official response of the West can be summed up by Pres. Eisenhower's statement at a news conference on Apr. 2 that the Soviet declaration was a "gimmick not to be taken seriously," Sec. Dulles did reveal a day later that, ten days prior to the Soviet announcement, Eisenhower had considered a similar proposal but rejected it on the grounds that our tests are necessary for our defense and for the development of "clean" tactical weapons. Prime Minister Macmillan shared the US position but much of the world especially Japan and India greeted the Russian declaration with enthusiasm.

EXCHANGE OF NOTES The weeks since this unilateral announcement have been marked by a vigorous exchange of notes between Eisenhower and Khrushchev which may culminate in positive action towards an inspected test ban. On Apr. 4, Khrushchev called upon the West to follow the Soviet example and banish nuclear weapons tests permanently, thus "protecting the health of people" and making a "big step" toward the "consolidation of peace."

The answer to this note came in a proposal from Eisenhower that technicians of the East and West begin studies on detection and control mechanisms necessary to implement any possible arms agreement and stated that the US would continue to test for the development of defensive and "clean" weapons. From this letter and an elaboration on it by Dulles, it appeared that the US would not stop testing without the prior establishment of an adequate inspection and enforcement system and that the Administration still favored its "package deal" of 1957 linking a test ban to a production cut-off.

On Apr. 23, Khrushchev rejected completely this proposal and again called on the West to stop testing. On Apr. 28, Eisenhower sent a new note in which he re-iterated his request for technical disarmament studies. Finally on May 9, Khrushchev agreed to hold these technical talks as a preliminary to a test ban agreement and Eisenhower requested May 25 that scientific talks begin at Geneva in 3 weeks. The State Dept. named Drs. Ernest Lawrence, James B. Fisk and Robert F. Bacher to meet with Russian delegates and probably others from Britain, France and Japan.

CONFLICT OF OPINIONS In the meantime the debate on what should be the US position continues. The conflicting views were perhaps best delineated in testimony before the Senate Disarmament Subcommittee headed by Sen. Humphrey (D, Minn.), on Apr. 17. Professor Hans Bethe, special adviser to the President on scientific matters and head of the Killian "task force" whose study on the feasibility of adequate inspection of a test ban is still secret, expressed the view that the US would gain from a properly inspected test ban. Further he saw no need to tie the test ban to a nuclear weapons production ban. The testimony is considered especially significant as it is the first instance of Teller's position being contradicted by another scientist of equal renown and privy to all classified information. Shortly after, Admiral Strauss testified that "it would be a disadvantage for the US to stop their production and (Continued on Page 2, top of Column 2)

NUCLEAR TESTS AND PROTESTS

With all the talk of ending nuclear testing, bombs are still being exploded. In March the Soviet Union completed several months of testing weapons in what was reputedly the biggest series ever held. On April 28, Great Britain exploded a bomb in the megaton range in the Christmas Island testing area, apparently their fifth H-bomb in 12 months. And on May 7, the AEC confirmed that the first of 30 planned explosions had occurred on April 28 at Eniwetok.

FOREIGN OBSERVERS INVITED The US has followed through on its position that the main purpose of current tests is to develop "cleaner" weapons. Invitations to Eniwetok were extended through the UN to foreign observers on

Apr. 25. Each of the 14 members of the UN Scientific Committee on Radiation was invited to send one scientist and one newsman. The USSR declined on May 8, stating that its participation would be equivalent to sharing responsibility for such "dangerous" experiments and accusing the US of making the UN an "accomplice" in the tests.

ORGANIZED PROTESTS In late March four members of the National Committee for Non-violent Action against Nuclear Weapons set sail for the US atomic testing area in the Pacific aboard a 30 foot ketch, "The Golden Rule." On May 7, the crew was found guilty of criminal contempt in the violation of a Federal court order in Honolulu for attempting to sail into the 390,000 square mile area declared forbidden by the AEC in an unprecedented order. Spokesman for the crew said not to do so would be "in contempt of God." (Washington Post, May 8). Fifteen members of the same group camped in the lobby of AEC headquarters on a week-long hunger strike aimed at "evoking a human response to the problem of testing."

Four thousand Englishmen united by a common fear of "nuclear destruction" joined in a 50 mile march from London to the site of British atomic weapons research in Aldermaston. About 250 demonstrators marched from New Haven and Philadelphia to the UN in New York where they presented a petition calling for an end to nuclear tests.

On Apr. 4, a suit was filed in a Federal District Court by 18 people from 6 countries including Norman Thomas, Bertrand Russell and Linus Pauling against Sec. of Defense McElroy and the AEC commissioners to stop nuclear tests. They announced that similar suits would be filed in Great Britain and the USSR.

A crowd of 12,000 crowded London's Trafalgar Square to hear British Labor Party chief Hugh Gaitskell and "Nye" Bevan call on the US and Great Britain to follow Russia's lead in suspending tests. In the US a group of 140 Protestant clergyman and educators called on America to abandon its scheduled Pacific tests as "morally indefensible and politically disastrous."

On May 4, AEC Chairman Strauss stated on CBS "Face the Nation", that some of the protests against US nuclear tests -- coming after the Russians have finished their tests -- are prompted by a "kernel of very intelligent and deliberate propaganda."

SENATE COMMITTEE APPROVES HIGH COURT CURBS

The Senate Judiciary Committee approved by a 10-5 vote (Apr. 30) the revised Jenner-Butler bill (S. 2646 - see NL 58-3) which would strip the Supreme Court of review power in one field and reverse the effects of three of its security decisions. Sen. Thomas C. Hennings Jr. (D, Mo.) called it an "unvarnished attempt to intimidate" the Supreme Court and "one of the most irresponsible pieces of serious legislation" reported to the Senate in his eight years as a member. If the Senate decides to act on it he promised a month-long floor fight.

Commenting editorially the Washington Post (May 2) said: "We do not think any such bill has a chance of passing the Senate or the House, and if it did it would in all probability encounter a presidential veto. It is a matter of grave concern, however, that a court-wrecking device of this kind can emerge from the Senate Judiciary Committee with 10 votes behind it."

TEST BAN HOPES RISE (Cont. from page 1).
development of defensive weapons."

FAS STATEMENT In a release that received widespread newspaper coverage and was quoted on the Senate floor, the FAS Council urged the US to drop its "package proposal" and attempt to "negotiate an agreement, backed by UN inspection, to limit nuclear weapons tests." The statement noted that it is possible with a limited number of stations to monitor all tests over one kiloton while inspection of a production ban would require "access to virtually all restricted areas," thus necessitating an agreement, too broad to be feasible at the present time. A test ban agreement, it is argued, is an achievable "first step" which might break "the long disarmament deadlock" and diminish the "probability that nuclear weapons will get into the hands of irresponsible governments in other countries."

CHANGE IN U.S. POSITION ? Recently there has been evidence of a strong conflict within the Administration as to what should be the American position on test bans and nuclear disarmament. There have been some recent indications that a somewhat more moderate attitude is emerging with Dulles shifting the balance against Strauss (J. Alsop, Washington Post Apr. 25). As far back as Mar. 26 Eisenhower hinted that the US might be willing to separate the test ban issue from all others and on Apr. 9, he stated that the US might unilaterally suspend testing as a result of the current series if scientists "learn the bulk of what they seek." More recently it has been reported (Washington Post, May 10) that informed sources expect the US to announce such a test suspension the end of June, when our present series will be concluded.

ARDEN HOUSE REPORT (released May 26) by 31 well-known US citizens including Norman Thomas, Mrs. Eleanor Roosevelt and Rep. Charles Porter (D, Ore.), called for (1) universal suspension of nuclear tests with safeguards for enforcement (2) UN control over Antarctica and outer space (3) a UN police recruitment (4) Congressional scrutiny of the AEC's conduct in grossly understating the hazards of testing and exaggerating the difficulty of a feasible inspection system to enforce test suspension. Copies of the report are available free of charge from World Development & World Disarmament, UN Plaza at 46th St., New York 17.

SECURITY SYSTEM IMPEDES SCIENCE

In a report (released Apr. 18) on Scientific Information and National Defense, the House Govt. Information Subcommittee stated that Pentagon secrecy has severely slowed rather than protected American advances in science. The Subcommittee made three recommendations to the Administration for increasing the flow of information to scientists: (1) establish one uniform security clearance system for all scientists in the military services, the AEC and other classified agencies so that a scientist in one can talk to a colleague in another department working on the same problem. (2) abolish the "need to know" criterion for making classified information available. The Subcommittee said this was silly because a scientist often couldn't know what he needed until he saw what was there. (3) the Government should stop trying to keep discoveries of the basic laws of nature secret. Scientists reach the same conclusions about what makes the universe tick at about the same time.

WAR WITH PAPER The report contained testimony from many scientists including Dr. Lloyd V. Berkner, member of the President's Science Advisory Committee who said, "What I'm afraid of is that some day we may have to fight a war with pieces of paper marked 'secret' rather than weapons and men who are ready to fight." Dr. Donald J. Hughes, senior physicist at Brookhaven National Lab, stated that the Geneva Atoms-for-Peace conference revealed the American lead to be greater in fields that have been open in the US and secret in Russia than in fields secret in both countries.

More than 1 million people are authorized to classify Defense Dept. documents, the Subcommittee was told, and the rule is: When in doubt, classify it. A "workable" declassification system was needed, said the Subcommittee, to take the wraps off valuable information when there is no longer any need for secrecy.

ATOMIC ENERGY ACT REVISION ?

On Jan. 28 President Eisenhower, as promised at the Paris NATO council meeting asked Congress to amend the 1954 Atomic Energy Act to permit transfer to our allies of (1) weapons blue-prints (2) such special nuclear-bomb materials as U-235 and plutonium (3) such non-nuclear-bomb components as electronic-mechanical hardware, and (4) weapon delivery systems "that could include submarines, planes and missiles" said the Washington Post (Apr. 18). Though aimed primarily at eliminating US-British duplication of effort, the resulting Pastore-Durham bill (S. 3474) has become a bone of contention that illustrates the complex ramifications of the stalemated East-West arms race.

"FOURTH NATION PROBLEM"

Mr. Dulles, testifying before the Military Operations Subcommittee of the Joint Committee on Atomic Energy, argued that both disarmament and a test ban would be impossible without the requested amendments because otherwise any international agreement "... would have the effect ... of perpetuating for all time ... the present nuclear inferiority ... of other free world countries", (N.Y. Times Apr. 18); whereas Sub. Chairman Hollifield, the FAS and many others have expressed grave fears that "the greater the number of nations coming into possession of atomic weapons, the more precarious becomes the stalemate," (FAS statement May 6). In this connection Mr. Dulles emphasized that "US policy does not seek to spread nuclear weapons around the world" and commented that, "with the approval of the program ... the incentive to become an independent nuclear power will largely disappear," (Washington Post Apr. 18). These beliefs, however, were not shared by Sen. Anderson, who saw the amendments providing other countries with "do-it-yourself-kits", nor by many who, viewing the disorders in North Africa or recalling the Suez crisis, regard the prospect of atomic potential in unstable hands as "... a monstrous jeopardy ... to the American people." (Letter of former FAS Chairman C. Price to Washington Post on Apr. 27). Mr. Dulles' further contention that NATO would crumble if allied forces "are going to be forced into a war with, in effect, bows and arrows" was vigorously contested by former AEC Commissioner Thomas Murray, who warned that the US "already has in its stockpile enough or more than enough ... to do the job alone."

CONGRESSIONAL CONTROL

Aside from its possible effects on disarmament and on the "Fourth Country Problem," Congress is seriously concerned about delegating authority to the executive branch because it feels that the President and the AEC are already acting too independently of Congress -- the sharing of the Nautilus submarine data with Britain, and the Dixon-Yates contract are cited specifically according to Washington Post reporter Warren Unna (May 12). Sen. Anderson stated that this delegation of power would reduce Congressional control "to a 30 day review period of weapons transfers that were going to occur anyway."

FAS STATEMENT

The FAS Council (May 6) strongly opposed the bill stating "... any step which would assist other nations in obtaining atomic weapons should be taken only after the most careful and extensive consideration of all the implications. We feel that the US should negotiate with other nations individual agreements concerning the transfer of nuclear weapons material and the exchange of restricted data; this can be done under the existing regulations of Section 121 of the Atomic Energy Act of 1954. These regulations require positive action of Congress as well as action of the Administration." Other alternatives to the Administration proposal have ranged from Murray's suggestion that the transfer be limited to small weapons under 2 kilotons; Sen. Pastore's suggestion that Congressional approval of any action be required within 30 days of the President's request; down to the Washington Post's editorial view (Apr. 25) that "this is an area in which the Executive Department simply has to be trusted."

SCIENCE AND SURVIVAL will be the topic of a one day conference on June 7, sponsored by the Cleveland Branch of FAS. Principal speakers will be Dr. Edward U. Condon, Dr. Hugh C. Wolfe, Dr. John Keene Major and Mr. Charles R. Miller.

U.S. ARCTIC INSPECTION PLAN VETOED

In the field of worldwide propaganda, the US recently gained a major victory at the expense of Russia. This rare occurrence in recent times developed from Russian charges on Apr. 18 that the US was flirting with nuclear holocaust by dispatching Strategic Air Command planes in the Arctic toward the USSR. Shortly after this accusation was voiced by Soviet Foreign Minister Gromyko, a formal complaint was lodged with the UN Security Council. On April 21, the Council took up the Russian charges, and under the chairmanship of US Ambassador Lodge, dealt the Russians one of its severest propaganda defeats in recent times.

The Russian move, which was generally viewed as a new facet of their complex and intensive propaganda offensive, backfired by casting fresh doubts on the sincerity of the Russians in desiring a constructive Summit conference. In essence, the argument raised by the Soviets was that the alert response of SAC bombers to unidentified signals observed on the US-Canadian DEW Line warning system could inadvertently initiate a nuclear war. That the Russians undoubtedly have taken similar precautions, and that SAC operates on a "fall safe" system which requires alerted bombers to return unless specifically instructed in flight to complete their missions, was not mentioned in the Russian charges.

As the UN debate progressed, it became apparent that the Soviet charges would not be supported. After 6 hours of debate, Soviet Delegate Sobolev withdrew the Russian resolution since it was apparent that the charges would not be supported by a single delegation.

ARCTIC INSPECTION PROPOSAL

Pursuing the issue raised by the Russians, the US countered by introducing a constructive proposal to lessen world tensions by eliminating the possibility of an inadvertent H-bomb attack. This proposal, which was laid before the Security Council on Apr. 26, consisted of establishing an aerial Arctic inspection zone to insure that neither country could launch a surprise aerial attack on the other. The reasonableness of this proposal and its value in terms of an initial disarmament step and a means of allaying the world's fears of a nuclear war, led to the unusual intervention in the Security Council proceedings by UN Secretary General Hammarskjold. He appealed to the Soviet Union to accept the American plan as he had previously appealed to the US to join the USSR in suspending nuclear tests.

Using their 83rd veto, the Russians killed the US proposal, and charged that to accept it would amount to inviting the US to spy on Russian territory. The areas covered by the plan would have included most of Greenland, the northern portions of Canada and all of Alaska as well as the northernmost parts of the USSR.

The FAS is a national organization of scientists and engineers concerned with the impact of science on national and world affairs. This issue of the Newsletter was prepared and edited by I. Shapiro of the Washington Office Staff, together with E. Korn and V. Lewinson, Washington area members. Other member volunteers included G. Picus, J. Buck, H. C. Goodman, E. Shelton.

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FACT ON ANTARCTICA? Early in May, Pres. Eisenhower invited 11 nations, including the USSR, to join this country in writing a treaty to ensure the peaceful internationalization of Antarctica. A similar proposal made by our State Dept. 10 years ago was received coldly by most nations concerned, with Great Britain leading the opposition. Significantly, the current suggestion came after hints of a British policy reversal and was warmly received by Prime Minister Macmillan.

The 12 nations involved in this decision have all been engaged in scientific research in Antarctica for the last 9 months under the aegis of the IGY. Under joint US-Russian leadership there has been a complete exchange of all scientific information and it has been argued to continue the IGY Antarctic bases indefinitely. A cooperative behavior pattern has thus been established that is unprecedented since the advent of the cold war, and what the President has proposed is a more formal agreement to extend permanently "this same kind of cooperation for the benefit of all mankind."

WORLD HEALTH THREATENED SAYS UN

Scientists from 15 countries have found that radiation from nuclear tests threatens the health of the world now as well as unfold injury toward future generations. Carefully qualified with statements as to the present and future risks, these conclusions come from a report to be issued July 1 by the UN Scientific Committee on Effects of Atomic Radiation, according to a copyrighted story by the Chicago Daily News appearing in the Washington Post May 25. The study, says the paper, represents more than two years of work based on 180 reports from 30 governments and six international agencies. "It should finally dispose of the obscene platitudes from the AEC that radiation is nothing to worry about," the Post commented editorially the next day. The report estimates 3000 to 120,000 cases of future major genetic defects, 500 to 5000 additional bone tumor cases and 200 to 800 additional leukemia cases provided that tests are halted in 1958.

CIVILIAN SPACE AGENCY FAVORED (Cont. from page 1).

ings before the Senate Special Committee on Astronautics and Space. Other objections ranged from a fear that the military's interests might be submerged too deeply in a very strong civilian agency, to Sen. Clinton P. Anderson's protest that the wording of the bill left open the possibility that control of the agency might fall into the hands of private industry and the military.

Some representatives of the military, such as Roy W. Johnson, head of the Defense Dept.'s Advanced Research Projects Agency, maintained that the military interest in space science far overrode any possible civilian interests, and that the Defense Dept. therefore should be given prime responsibility in this field. However, Deputy Secretary of Defense Donald Quarles testified that he saw nothing in the Administration bill which would limit the military's activities in outer space.

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U. S. - EURATOM AGREEMENT

The US and the six nation atomic energy group called Euratom reached a broad agreement providing for American technical and financial assistance in the construction of atomic power plants according to a N. Y. Times report (May 8). The agreement, which still requires formal approval by both parties, is a big step towards implementation of President Eisenhower's atoms-for-peace policy proposed in 1953.

A compromise agreement was finally reached on the issue which had blocked recent negotiations. Euratom has insisted that it alone should be responsible for the inspection necessary to insure that no fissionable materials were used for military purposes. The AEC and the State Dept. demanded inspection rights of its own. "The US was said to have retreated from its insistence on unilateral inspection," said the Times, and Euratom "will establish inspection regulations meeting inspection standards set by the US." The details of this agreement were not revealed.

The compromise represented a significant change in US policy, continued the Times, for in forty other bilateral agreements for international cooperation on this issue, it has insisted on unilateral inspection rights.

RADIATION REPORTS AVAILABLE

"The Biological Hazards of Nuclear Weapons Testing," a report by the FAS Radiation Hazards Committee, was published in full in NL 57-6. Extra copies are still available from the Washington Office @ 10¢ each, 15 for \$1, and \$5 a hundred.

SECOND PUGWASH MEETING

The Second Pugwash Conference of Nuclear Scientists was held last April at Lac Beauport, Quebec to discuss ways of breaking the nuclear and disarmament deadlock. Among the 30 scientists invited from both the Communist and non-Communist world were FAS members W. Higinbotham and E. Rabinowitch.

No formal statement was issued at the conclusion of the conference but according to a report in the N. Y. Times (Apr. 6) one of the major questions discussed was the danger that a small nation might precipitate a nuclear war between the great powers. "After some discussion", reported the Times, "it was concluded that the possession of nuclear weapons by small nations constituted a new threat to peace," with the possibility of some dictator intent on gaining power involving the US and Russia. To lesson the dangers of such an outbreak, the scientists suggested the establishment of a UN arms research and information agency, reinforced by inspection.

The four Soviet scientists participating made no proposals or comment other than those expressed in recent Soviet letters and statements, said the Times. A "Third Pugwash Conference" with 75-80 international scientists participating, is being planned for Kitzbuhel, Austria next September.

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