F.A.S. NEWSLETTER

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

August, 1958

EDUCATION BILL IN CONFERENCE

The most important question mark in this field is the fate of the Federal aid to education bill which at press time is heading for a Senate-House conference in an attempt to

iron out the differences in the versions passed by each House in the last days of the adjournment rush.

Only two weeks ago little hope was held for legislation before adjournment. Since then, both the House and Senate bills were brought out of committee and passed in a gratifying response to increasing pressure from parents, educators, labor and social service groups. The House bill totaled 900 million dollars and included student loans and a further program requiring matching funds from the States. After President Eisenhower recommended cutting the proposed 23,000 scholarships to 10,000, the House responded by eliminating scholarships altogether by accepting an amendment to this effect by Walter H. Judd (R,Minn.). The Senate bill authorizes 1.5 billion dollars and, while similar to the House bill, includes scholarships although these were reduced from \$1,000 dollars to \$250 per year by Sen. Cooper's (R,Ky.) amendment.

Senate Bill

The Senate bill would set up a four year program of Federal scholarships, fellowships, and student loans with preference given to students of science, mathematics and foreign languages. Funds would be provided to State education agencies for improvement of science facilities in elementary and secondary schools and for a guidance and counseling program. The bill would establish institutes to train teachers in subjects deemed necessary for national defense, support vocational training, finance research in new education techniques, and set up a National Advisory Council on Science and Education.

Council on Science and Education.

Prior to Senate passage on Aug. 14, acrimonious debate broke out between those who fear Federal encroachment in education and those who feel the desperate need for Federal action. To show his disdain for the bill, Sen. Wm, Jenner (R,Ind.) proposed an amendment which. was approved excluding the state of Indiana from all provisions of the bill. Sen. Thurmond (D,S.C.) said the bill "would do more harm by far through the destruction of individual motivation than good through the additional opportunity provided" (W. Post 8/14). Senate Majority Leader Lyndon Johnson (D,Tex.) called the bill "one of the most important measures of this or any other session". Sen. Hubert Humphrey (D,Minn.) attacked the cut in scholarships from \$1,000 to \$250 per year as an "insult to the intellectual attainment of American students" and "a challenge to the Soviet Union at cut-rate, bargain-basement, back alley prices" (Wash. Post 8/14). The House bill passed back alley prices" (Wash. Post 8/14). The House bill passed despite denunciation of "this crazy bill" by Rep. Taber (R,N.Y.) and "half baked legislature" by Rep. Howard Smith (D,Va.) (W. Post 8/8).

Best Effort

A New York Times editorial (8/5) noted precedent for Federal aid to education in the Morrill Land Grant College act of 1862 which made state colleges possible. Although an amendment by Sen. McNamara (D,Mich.) to provide school construction funds in the bill was defeated, for fear of embroiling the bill in the issue of school segregation, the bill represents the present legislature's best effort to meet the need for encouraging more capable youths to use the opportunities for higher education and to provide more and better instruction for them.

It is questionable, however, whether or not the Senate-House conferees can deliver a compromise bill to the Presi-

dent before adjournment.

LATE FLASH!

The Administration, in an 11th-hour move, is trying to speed congressional action on a bill to deny passports to persons who knowingly have furthered Communism. This would give the State Dept. power to withhold passports from the alleged 386 Reds and fellow travelers who have applied for them since the June 16 Court decision according to Rep. Vorys (R, Ohio), co-sponsor of the bill with Rep. Selden (D, Ala.).

PASSPORT ACTION HALTED

Although a variety of bills have been introduced into Congress to either reaffirm or contradict the Supreme Court's recent passport decision, it appears as if there will be no action this session of Congress.

On June 16th, the Supreme Court in the Kent, Briehl and Dayton cases (see last Newsletter) held invalid present State Department results in a probabilities in the Kent, Briehl and Dayton cases (see last Newsletter) held invalid present

State Department regulations prohibiting issuance of passports to suspected Communists, Communist sympathizers and those whose travel abroad would be "inimical to the interests of the US."

Knight Criticized

Since the decision, the State Department Passport Office has issued passports to many who had previously been denied them, such as singer Paul Robeson, writer Corliss Lamont, and labor leader Harry Bridges. Miss Frances Knight, director of the Passport Office, has been severely criticized for her forthright actions by Rep. Francis E. Walter (D,Pa.), but praised by more liberal sources, such as the **Washington Post**.

Although passport bills are pending before five Congressional committees, only the Senate Foreign Relations Committee has held hearings. And on August 5th, they voted to shelve further hearings for the remainder of the session, virtually eliminating the possibility of any such legislation before Congress adjourns. Since the decision, the State Department Passport Of-

before Congress adjourns.

FAS Spokesman Testifies

Hearings were held on a bill submitted by the Administration, restrictive in nature, which would enact into law the regulations under which the Passport Office had been operating prior to the Court's decision; and grant broad new power to prevent American citizens from going into new power to prevent American cruzens from going into areas the State Department rules out of bounds. Prof. John S. Toll, chairman of the U. of Maryland's Physics Department testified for FAS against the bill. He told the Senators: "The restrictions of liberty to travel works a stifling effect upon the scientific advance and the growth of browledge. Petrictions of liberty to travel in general of knowledge. Restrictions of liberty to travel in general tend to have an adverse impact upon the interchange of ideas in medical, cultural, sociological and other professional and scholarly fields, as well as upon international understanding."

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To Our Readers:

We hope you like the changes in appearance and style evident with this issue of the FAS Newsletter. Other new features are being planned. Further suggestions from FAS members are invited.

McCONE QUIZZED BY SENATORS

Since the naming of John A. McCone as chairman of the AEC, as reported in the last issue (see NL 58-5), the transcript of the July 2 hearings have become available.

The hearings were held before the Senate Section of the Joint Committee on Atomic Energy and covered three major points. These were: 1) The right of scientists, either singly or in groups, to make statements on political issues related to science 2) AEC policy with respect to weapons testing and 3) Possible conflict of interest between Mr. McCone's private interests and projected official function.

McCone Letter

A great deal of discussion centered around a letter writ-A great deal of discussion centered around a letter written by Mr. McCone to Dr. Thomas Lauritsen of CalTech while Mr. McCone was a CalTech trustee. Mr. McCone objected in the letter, (which is published in full in the transcript) to a statement by Dr. Lauritsen, Dr. Harrison Brown and eight other CalTech scientists, proposing the cessation of weapons testing. Senator Clinton P. Anderson, (D, N. Mex.) tried to get Mr. McCone to clarify before the committee his viewpoint on the rights of scient fore the committee, his viewpoint on the rights of scientists to express their views either as groups, large or small, or as individuals, since Mr. McCone stated, "I took exception to this particular procedure (the issuing of the letter by Dr. Lauritsen, et al) . . . because I thought this group of scientists used their position as professors of distinction at the California Institute of Technology not to express themselves on a particular technical matter but to rise. themselves on a particular technical matter, but to inject themselves into a political discussion." It was pointed out at some length by the Committee, that these men were acting as individual scientists, in the same way that Drs. E. Teller and E. L. Lawrence were when they made statements concerning testing. The matter was finally dropped after the following interchange:

Rep. Holifield: So your objection then, fundamentally, as as to their (the 10 scientists) position and not the fact that they happen to be members of a single university or a criticism of the fact that they acted as a group?

Mr. McCone: That is correct.

Rep. Holifield: So you would grant a group of people the same freedom to express their views as you would an in-

Mr. McCone: Most certainly.

Rep. Holifield: That is the only point I wanted to clear up. Sen. Anderson: That was the point I was hoping to get

cleared up. I am happy to have it.

In summary, Mr. McCone: is in favor of a program to halt testing of nuclear weapons "under adequate and proper safeguards"; does not, as yet, feel qualified to speak on a proposed plutonium producing reactor; thinks the development of nuclear power vital to the development of the US; finds "the fact that there are some 120 to 130 (private) power companies that have joined in one group or another to advance the (nuclear power development) program . . . very gratifying."

FAS Questions

The day before the hearings the Los Angeles Chapter of FAS wired a number of questions to Senator Anderson to ask Mr. McCone.

Senator Anderson used these questions to introduce the issue of academic freedom and the rights of scientists, connected with AEC directly or by grants or contracts, to speak freely and openly, and to directly criticize the policy of the AEC

PASSPORT

(continued from page 1)

"We believe that there is no need to push through emergency passport legislation," said Toll. "Any gain in restricting travel... does not equal the damage to our international reputation and national traditions... the potential damage to our civil liberties from the passage of S. 4110 would far exceed any conceivable security benefits.

Of the several passport bills introduced, the most affirmative and libertarian is the "Right to Travel Abroad Act" presented by Sen. Hubert Humphrey (D,Minn.). Its stated purpose is "to protect the travel rights of persons owing allegiance to the United States and to govern the issuance of passports." In general, the proposal is aimed at facilitating travel rather than impeding it; and its interesting travel and the proposal is aimed at facilitating travel rather than impeding it; and its interesting travel and the proposal is aimed. junctions are aimed not at passport applicants but at public officials.

Action on these bills is sure to be considered soon after the new Congress convenes in January.

The Senate tabled the Jenner-Butler "court curb"

COURT CURB BILLS ADVANCE

The House passed a bill on July 17 introduced by Rep. Howard Smith (D,Va.) which is designed to restrict the power of the Supreme Court and to increase the jurisdiction of the states in many areas. Although this legislation was aimed at reversing recent Supreme Court decisions (see NL 58-3) its effect would be much broader since it lays down the general rule that a state may operate in the same areas as the Federal government unless expressly forbidden by Congress or unless state and Federal laws are in irreconcilable conflict.

New Laws

Because few Federal laws explicitly limit state action, confusion and conflict would certainly ensue in areas such as civil rights, commerce, entrance of aliens, food and drug standards and so on. A similar bill was introduced in the Senate by Senator Jenner (R,Ind.) but was approved by the Judiciary Committee only as amended by Sen. Butler (R.Md.).

In the amended form the bill limits the Court's review power in only one area, namely cases involving admission of lawyers to state practice and also reverses the effects of several recent Court decisions, including the Steve Nelson case. The objections of the Administration and Senate leaders to both the House bill and the Butler-Jenner bill have led to further modification of these provisions.

Nelson Case

Recent bills reported out of the Senate Judiciary Committee and being considered by the Senate Democratic Policy Committee include provisions which would return to the states the right to enforce their own sedition that the provisions which would return to the states the right to enforce their own seditions. and subversive activities laws, thus nullifying the 1956 Supreme Court decision in the Steve Nelson case. Nelson, a Communist leader, had been convicted under a Pennsylvania sedition law but the Court held that the Smith Act preempted the claim of the state to prosecute in this area. Another provision of the Senate bill would require Congress to state specifically when its legislation was to preempt state laws, but this would apply only to future laws and is not therefore subject to the same criticism as the House version.

NUCLEAR SHARING BILL PASSED

The House-Senate Committee on Atomic Energy approved a pending US agreement with Britain on exchange of military and atomic secrets. Essentially, the committee's action means that Congress will not employ the veto with which it was empowered by the recent Atomic Information Sharing Act.

Information will be exchanged on the development of defense plans, the training of personnel in the use of atomic weapons and methods for defense against them, the eval-uation of the capabilities of potential enemies in the atomic weapons field, the development of capabilities to deliver atomic weapons to targets (presumably including inter-continental missiles), and the development of reactors use-ful for military purposes, for instance for powering submarines. The present agreement does not include the transfer of fissionable materials for nuclear weapons, but, according to the Washington Post, July 9, "it is unofficially understood in Britain that such an exchange is to be proposed in a subsequent agreement.'

\$70 MILLLION ASKED FOR CIVIL DEFENSE

The Director of the Office of Defense and Civilian Mobilization, Leo A. Hoegh, has asked Congress for a supplemental appropriation of \$29 million, in addition to the \$41 million operating budget already assigned for 1958-59. Most of the increased funds would be used for a national program of construction and research of fallout shelters and for radiation detection devices.

Hoegh urged that future government buildings be conructed with such shelters. These would be valuable prostructed with such shelters. tection for the community as well as for employees.

In a study by the Rand Corporation (NY Times, 8/11/58), the casualties resulting from an atomic attack on 150 major American cities were predicted for various means of civil defense. The report said that given three to

(continued on page 4)

SPACE CHIEFS APPOINTED

A National Aeronautics and Space Agency to guide this country's research and development efforts to penetrate space came into being early this month with the appointment of T. Keith Glennan, president of Case Institute of Technology, and Hugh L. Dryden, present director of the National Advisory Committee on Aeronautics, as director and deputy director, respectively. A compomise bill, which retained most of the features of the original Senate Bill (see NL 58-5), was passed last month by both houses of Congress and signed into law by the President on July 30.

Supercedes NACA

The new agency which supercedes and takes over the facilities and staff of the NACA, will have jurisdiction over all space and aeronautical research activities except those primarily associated with the national defense. What falls into the latter category is left to the decision of the President. An advisory National Aeronautics and Space Council will review and advise on policy and programs for the new agency. The Council consists of the President, the secretaries of State and Defense, the administrator of NASA, the AEC Chairman, and four other appointees—three non-government.

Glennan Appointed

The appointment of Glennan as administrator of NASA is expected to be confirmed without controversy. He was a member of the AEC from 1950 to 1952 and during World War II directed the Navy's Underwater Sound Laboratory at New London, Conn. Before the President's announcement, it had been expected in many quarters that Hugh Dryden would be named to the top post of the new agency because of his long record as head of NACA. However, congressional opposition to him developed after his testimony on the new agency before the House Space Committee. Members of the committee commented that his views on space exploration programs and budgets were too conservative. However, both the New York Times and the Washington Post pointed out editorially that this attitude was unsupportable by the facts of Dryden's record with NACA. The Post stated that "... a review of his many far seeing and pioneering contributions to aeronautics does not support the view that Dr. Dryden is in any damaging sense too conservative." (8/11/58). Both papers regarded it as fortunate that the new agency will have the benefits of his services as deputy administrator.

The new agency has a budget authorization of \$242 million for this fiscal year. It will establish a new space

The new agency has a budget authorization of \$242 million for this fiscal year. It will establish a new space projects center at Beltsville, Maryland, and is planning to expand NACA's rocket testing station at Wollops Island, Virginia, as a test center for space research.

A FOURTH NUCLEAR POWER?

Premier Charles de Gaulle of France has made it clear, after separate discussions with Prime Minister MacMillan of Britain and Secretary Dulles, that France is determined to become a nuclear power, "a rank she is capable of reaching and has the right to claim". The French leader is said to feel that since no East-West nuclear disarmament is in sight, his nation cannot afford not to enter the current weapons race. Significant developments toward this aim include the completion on July 21 of a second nuclear reactor (at Marcoule) capable of producing plutonium and the planned completion of a third such reactor by the end of the year. The successful testing of the first French atomic bomb, perhaps in the Sahara, may occur within the next six months. In that event France would be propelled immediately into membership in the heretofore three-membered exclusive "nuclear club."

Need For Agreement

As a portent of future nuclear capabilities by Communist China and other nations, France's imminent success may serve to renew the lagging sense of urgency concerning the need for a test ban agreement. De Gaulle's position emphasizes the international prestige associated with nuclear weapons capabilities as exemplified by the recently passed nuclear exchange law which, in effect, limits exchange of information only to Great Britain at the present time.

The projected gift by the US of an atomic engine to power a new submarine which France has on the way, will supplement her already developed program for peaceful uses of atomic energy but presumably will not influence French ambition to become a nuclear power.

AGREEMENT REACHED AT GENEVA TALKS

The US was reported ready to announce a temporary suspension of nuclear weapons testing, but the White House declined to confirm or deny the report.

Scientists from the United States, Britain, France, Canada, the Soviet Union, Czechoslovakia, Poland, and Roumania are currently winding up their meetings in Geneva on possible detection systems which would be needed to monitor an international ban on the testing of nuclear weapons. The meetings have been in session since July 1 and are notable in that Eastern and Western representatives, dealing with scientific questions, have agreed on most if not all major points.

New Study

Recently, a group of fifty scientists, engineers, and specialists from here and abroad completed an extensive study on essentially the same subject under the aegis of Columbia University's Institute of War and Peace Studies. A report has been published entitled "Inspection for Disarmament" which was edited by Seymour Melman of Columbia (see Science, 128, 245 (1958) Aug. 1 for an excellent review by Ralph E. Lapp). In recent polls, including Gallup's the United States, with 70% favorable, ranked lowest on the list of countries favoring world wide inspection (West Germany, Japan were highest). This compared to 97% favorable of the membership of the FAS and 53% of the American Legion.

Even though the scientific questions appear to be resolved, such as the kind of blast that can be detected and by what types of instruments, the political questions still remain. It is yet to be determined whether or not the apparent success of the technical experts will be matched by a politically acceptable international agreement.

Control Posts

It was jointly recommended that a detection system should include a network of control posts in the areas where testing is most likely to occur. Agreement was reached on major methods of detection which included monitoring of acoustic, seismic, and electromagnetic waves as well as the collection of radioactive particles. Accord was also reported on the nature of the instrumentation considered most suitable. The most difficult point to resolve seems to be the distance between stations and consequently the number to be located within any one country. The Russians have, in the eyes of Western scientists, attributed a greater degree of sensitivity to their detection devices in the belief that fewer stations should be required to monitor a given area. In recent sessions, however, the views of the Easternbloc scientists have approached those of Western-bloc scientists with regard to the number of detection stations required.

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 Irving Shapiro of the Washington Office Staff, together with Washington member volunteers: Gerry Picus, Dr. and Mrs. Len Herzenberg, Dr. Goodman, Dr. Singer, Dr. Hendler and Dr. Rothberg.

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ANTI-SECRECY BILL SIGNED

The Moss-Hennings bill, a one sentence measure, was signed into law by President Eisenhower on August 12, 1958. The design of the legislation is to prevent executive agencies from using a 1789 law, the "housekeeping" statute, to withhold information and records to which Congress and the public are entitled.

The new law does not alter any of the nearly eighty provisions in effect now, under which secrecy is preserved. Senator Hennings (D,Mo.) stated that the law would serve to prevent "misguided officials from engaging in outright censorship of information to which the public is entitled."

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Attorney General William P. Rogers has pointed out that the power of the President to withhold information is unlimited, and as the President can delegate this power to every official in the executive branch, the new law is thus meaningless.

Representative John E. Moss (D,Calif.), believes the new law represents a "modest first step to pierce the curtain of secrecy surrounding much non-classified information."

ATOM FUNDS VOTED

President Eisenhower signed a bill, August 5th, which authorized the appropriation of \$386 million for atomic energy projects for defense as well as for peaceful purposes. The bill authorized several projects which the President and his advisors opposed. According to an editorial in the Washington Post several of these objections are a result of the opposition of the Administration to any legislation that may lead to public development of atomic power as opposed to private ventures.

Public atomic power, however, is becoming a reality. The Shippingport project is in operation (see NL 58-5) and, on August 4, ground was broken for the construction of a nuclear power plant by the Rural Cooperative Power Association of Elk River, Minn., in conjunction with the AEC. The plant, which is slated to be in operation in 1960, will be owned by the Government and operated by the Association as part of its regular power system.

CIVIL DEFENSE (continued from page 2)

six hours warning, the use of fallout shelters and strategic evacuation would reduce casualties by 80%. A combination of blast and fallout shelters would be more effective, but far more expensive. The DCM recommended that all efforts be directed towards the construction of the less expensive fallout shelters.

The House military operations subcommittee released testimony that a major hydrogen bomb attack on unprepared cities would result in 160 million dead, whether or not several hours warning was given. If blast and fallout shelters were available, and a strategic evacuation program were in effect, casualties would be only 5 million dead. The published report does not indicate whether these figures refer only to immediate deaths or to all deaths eventually resulting from radiation exposure.

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Time Value: Dated Material

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SENATE APPROVES UN FORCE

The US Senate has overwhelmingly affirmed a resolution urging the creation of a permanent UN police force. House approval is expected shortly. The FAS, in an official statement (July 30) to Rep. Carnahan, Chairman of the subcommittee holding hearings on a UN police force, encouraged congressional action in behalf of such a body. The UN is currently waiting for the Secretariat to complete a study on the question before further action.

There are many ways in which such an organization might be useful. In addition to observation teams in troubled areas, temporary occupation forces might be maintained where conflict was imminent. Ceasefires and troop withdrawals could also be supervised, such as in Kashmir where the withdrawal of Indian and Pakistani troops might be facilitated. Internationally owned facilities such as the proposed International Atomic Energy Commission could be guarded, and general inspection and police services could be provided where needed.

NEWS IN BRIEF

The suit brought in a Federal court by a world-wide group of individuals including Linus Pauling and Bertrand Russell, to forbid further nuclear tests by the United States, has been dismissed. District Court Judge Keech said that the court has no jurisdiction to act in this matter. The suit contended that further bomb tests could be barred by the court because radiation resulting from fallout inflicts general injury on the population of the world.

On Aug. 13 Dr. Edward Teller resigned as a member of the general advisory committee to the Atomic Energy Commission. He had been a member since Aug. 1956. Dr. Teller resigned because he felt that his job as director of the University of California Radiation Laboratory at Livermore conflicted with membership on the advisory committee. The laboratory is under the AEC and Dr. Teller has been its director since April 1.

SENATE VOTES AID TO EURATOM

On August 18, the Senate approved an appropriation of \$3 million to match European capital invested in Euratom. Eventually the United States will supply \$50 million for research and development, \$135 million as a capital loan, and 30,000 kg (\$350 million) worth of U-235. The nuclear fuel will be sold to the Euratom Community (Belgium, France, Germany, Italy, Luxembourg, and the Netherlands) on a deferred-payment basis. The initial operating inventory, 9000 kilograms, will be followed by 1000 kg for research and test reactors and by 20,000 kg for burn-up and process losses.

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