

PHYSICS

Civilian Control Demanded

Navy chief of research is against military control of further research on nuclear fission and its possible uses, with inevitable over-emphasis on "security."

► "THE NAVY believes that the entire control of atomic energy should be placed completely in civilian hands."

With this repetition of the opinion of his chief, Secretary of the Navy Forrestal, Rear Adm. H. G. Bowen, chief of the Office of Research and Development, set himself squarely against military control of further research on nuclear fission and its possible uses, with its inevitable over-emphasis on "security."

"We can have so much security that progress will be completely stopped or slowed to our great disadvantage," Adm. Bowen declared.

"Where there is need for advice and consultation with the military," he continued, "the Secretaries of War and the Navy can call upon officers of the Army and the Navy. The function of the military, however, should be strictly limited to the consultative and the advisory. . .

"Speaking not for the Navy now, but for myself as a private citizen of the United States, I am particularly apprehensive of any aspect of military control over atomic energy when I view that possibility in conjunction with the proposal to merge all the military, naval and air services in a single department, and under a single Chief of Staff. I believe that of itself the proposed merger plans to put so much authority in the hands of one individual that it might extend itself into the field of atomic energy and scientific research in general. Then indeed this nation could well be translated from a republic to military dictatorship.

"I believe, still speaking as an individual citizen, that there is more than a threat in the proposed merger legislation to place all scientific research under the thumb of a single, professional, military chief. Perhaps you will choose to wait until the legislation is reported to Congress to determine whether there is a foundation for my fear. But I am sure that you will concur in my belief that if control of atomic research and development is placed under military influence, and that if all military authority is lodged in a single, all-services Chief of Staff, then we will indeed have, as I have said, 'so much security that progress will be completely stopped.'"

One of the reasons why Adm. Bowen

wants to see unhampered research on atomic energy go ahead as rapidly as possible is his hope of eventually seeing it used as a controlled means of power and not solely as a weapon worthy of the Apocalypse. He would like to see ships, merchant ships as well as warships, propelled by small atomic power-plants weighing only hundreds of tons, instead of the thousands of tons now tied up in boilers, turbines and huge tanks of oil. The space and weight saved could be utilized for cargo in merchant ships, for better protection in war craft. Perhaps the battleship's answer to the atomic bomb is the use of atomic power to make herself invulnerable.

Outside the field of nuclear physics, Adm. Bowen wants to see vigorous Naval research on such things as guided missiles which, he said, "are ushering in a new artillery era." Until atomic-energy propulsion becomes practicable, he hopes to see wider application of the simple, rugged gas turbine, which he be-

lieves may mean more to our economy than jet propulsion. Radio, radar and other applications of electronics are another direction for research to take.

One possible super-long-range weapon which the speaker believes to be possible is a two-stage rocket, that is, a big rocket carrying a smaller one, which is launched as the carrier-rocket's fuel becomes exhausted. The Germans, he stated, had a weapon which they called the A-10, which was designed to cross the Atlantic, and arrive on this side with a one-ton payload of high explosive. Substituting an atomic bomb for the relatively feeble TNT, this would be a most terrible weapon, and one practically impossible to intercept and destroy.

Science News Letter, April 6, 1946

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