

needed, research should continue on nuclear energy from deuterium. Power plants of the future might be run on this atomic fuel. The production of a continuing (chain)

reaction that won't explode should be as possible with heavy hydrogen as with uranium. And there is probably more heavy hydrogen than uranium on earth.

Science News Letter, July 17, 1948

NUCLEAR PHYSICS

Control of Atomic Bomb

If it is taken from the hands of civilians and given to the military it will create great uneasiness here and abroad. It will be an important political issue.

➤ A PRIME political question in this year of politics is:

Who shall control the atomic bomb, civilians or military?

The peace of the world may depend upon its answer.

The decision to put the bomb securely in the hands of the U. S. Atomic Energy Commission, composed of civilians, seemed to have been made by the passage of the McMahon Act two years ago.

But by providing only two-year terms for the atomic energy commissioners, Congress has served notice of the possibility of changes to come.

There is a quiet drive underway to put the military service back into the driver's seat on atomic energy. Latest manifestation is a plan sponsored by the McGraw-Hill Publishing Co. through its \$15-per-year monthly magazine, *Nucleonics*. This divorces military activities and production from the AEC, and actually leaves only research in the hands of the AEC.

If atomic bombs were ordinary weapons it might not be very important just where the U. S. A. stock is kept and who controls it. But atomic bombs are extraordinary, devastating weapons. They are unlike machine guns, ordinary bombs or 16-inch guns. One can wipe out a city.

The rest of the world is afraid of Amer-

ica's atomic bombs. There is a measure of reassurance in the fact that the armed forces of the U. S. cannot use atomic bombs until they are turned over to them by the AEC on presidential order.

No angry general or admiral can order an atomic bomb dropped on his own authority, as he might order a border guard to fire upon attackers. The dropping of an atomic bomb would be the equivalent of a declaration of war and that is the job of Congress on the recommendation of the President.

There is still high fear on the part of many that, given the bombs and a more aggravated international situation, some high military officials may be tempted to start a preventive war. Some have openly urged this.

As it is now close cooperation of the military services with the Atomic Energy Commission provides for development and testing of atomic weapons, as was done at Eniwetok.

The loyalty investigations of AEC employees (as well as all government employees) with attention being paid to the most insubstantial gossip of "guilt by association" have done great damage to the quality of the scientists at work on the atomic energy program. The scientists themselves say that our second or third

team is in the atomic energy game today.

Peaceful use of atomic energy has developed much more slowly than most scientists and laymen had hoped it would. Not even pilot plants for atomic power are underway, so far as known. This is added discouragement.

If the atomic bombs themselves are turned over to the men in uniform, it will be a new and ominous danger signal of a new war. This will be the case even if it should be done, secretly or openly, by Presidential order, without new legislation or change in atomic energy control.

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Losses of *vitamin C* value occur in plants that grow too much to foliage.

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Question Box

ENGINEERING

How are combustible gases produced from unmined coal? p. 38

ENTOMOLOGY

What new chemicals are useful in killing grasshoppers? p. 46

GENERAL SCIENCE

How will science help in the 1948 Olympic Games? p. 37

MEDICINE

How does blood ward off diseases? p. 42

Photographs: Cover, General Electric Co.; p. 35, The M. W. Kellogg Co.; p. 37, Westinghouse Electric Corp.; p. 39, Zator Co.; p. 42, p. 43, American National Red Cross.

What new remedy has been found for typhoid fever? p. 34

What new tactics may help in fighting polio? p. 34

NUCLEAR PHYSICS

What element might be used in an atomic superbomb? p. 35

What would be the disadvantages of military control of the atomic bomb? p. 36

ORDNANCE

How does "Alloy X" prolong the firing life of guns? p. 44