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# DEPARTMENT OF DEFENSE APPROPRIATIONS FOR 1970

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## HEARINGS BEFORE A SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES NINETY-FIRST CONGRESS FIRST SESSION

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SUBCOMMITTEE ON DEPARTMENT OF DEFENSE APPROPRIATIONS

**GEORGE H. MAHON, Texas, *Chairman***

ROBERT L. F. SIKES, Florida  
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AND ROBERT FOSTER, *Staff Assistants*

<sup>1</sup> Temporarily assigned.

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### PART 6

Budget and Financial Management  
Budget for Secretarial Activities  
Chemical and Biological Warfare  
Defense Installations and Procurement  
Defense Intelligence Agency  
Safeguard Ballistic Missile Defense System  
Testimony of Adm. Hyman G. Rickover  
Testimony of Members of Congress and Other  
Individuals and Organizations

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agents that we have ever considered. So, we have to believe they are probably working in the same areas.

#### SYNTHETIC BIOLOGICAL AGENTS

There are two things about the biological agent field I would like to mention. One is the possibility of technological surprise. Molecular biology is a field that is advancing very rapidly, and eminent biologists believe that within a period of 5 to 10 years it would be possible to produce a synthetic biological agent, an agent that does not naturally exist and for which no natural immunity could have been acquired.

Mr. SIKES. Are we doing any work in that field?

Dr. MACARTHUR. We are not.

Mr. SIKES. Why not? Lack of money or lack of interest?

Dr. MACARTHUR. Certainly not lack of interest.

Mr. SIKES. Would you provide for our records information on what would be required, what the advantages of such a program would be, the time and the cost involved?

Dr. MACARTHUR. We will be very happy to.

(The information follows:)

The dramatic progress being made in the field of molecular biology led us to investigate the relevance of this field of science to biological warfare. A small group of experts considered this matter and provided the following observations:

1. All biological agents up to the present time are representatives of naturally occurring disease, and are thus known by scientists throughout the world. They are easily available to qualified scientists for research, either for offensive or defensive purposes.

2. Within the next 5 to 10 years, it would probably be possible to make a new infective microorganism which could differ in certain important aspects from any known disease-causing organisms. Most important of these is that it might be refractory to the immunological and therapeutic processes upon which we depend to maintain our relative freedom from infectious disease.

3. A research program to explore the feasibility of this could be completed in approximately 5 years at a total cost of \$10 million.

4. It would be very difficult to establish such a program. Molecular biology is a relatively new science. There are not many highly competent scientists in the field, almost all are in university laboratories, and they are generally adequately supported from sources other than DOD. However, it was considered possible to initiate an adequate program through the National Academy of Sciences-National Research Council (NAS-NRC).

The matter was discussed with the NAS-NRC, and tentative plans were made to initiate the program. However, decreasing funds in CB, growing criticism of the CB program, and our reluctance to involve the NAS-NRC in such a controversial endeavor have led us to postpone it for the past 2 years.

It is a highly controversial issue, and there are many who believe such research should not be undertaken lest it lead to yet another method of massive killing of large populations. On the other hand, without the sure scientific knowledge that such a weapon is possible, and an understanding of the ways it could be done, there is little that can be done to devise defensive measures. Should an enemy develop it there is little doubt that this is an important area of potential military technological inferiority in which there is no adequate research program.

#### CROSS-COUNTRY SHIPMENT OF LETHAL AGENTS

Mr. SIKES. Now, let's talk about shipments. There has been a great deal of discussion—most of it hostile—about the proposal to ship certain stocks of nerve gas across country for transporting to a deep

ocean area and disposal. Tell us something about the reasons, and the alternatives, and why you propose to follow this procedure and what the alternatives would be.

DR. MACARTHUR. I would like Colonel Osick, who is here, who is the action officer in this program, to address himself to that question.

#### OBSOLETE CHEMICAL AGENTS

Colonel OSICK. Sir, we have roughly 27,000 tons of obsolete or unserviceable munitions.

MR. SIKES. What do you mean by that? They have been stored too long?

Colonel OSICK. Some of them stored too long. In the case of the Air Force bombs, they have become obsolete because of the calendar time. They were all manufactured in 1953 and 1954 and with an expected life span of 5 to 10 years, but, more importantly, for an aircraft that is no longer in the inventory.

In addition to that, in the normal surveillance performed year by year and in analyzing the results, we find that they are passing the point in time where they are now beginning to leak. The Air Force recently declared them obsolete and has no requirement for them. Since we are the custodians of them we are now obligated to carry out some type of disposal.

In addition to the Air Force bombs, we have a number of Army rockets. This rocket is an item about 6 feet long, about 115 millimeters in girth, holds about 10 $\frac{3}{4}$  pounds of nerve agents in the head and has a motor and booster that goes with it. This is a thin-skinned rocket made of aluminum. It was a first step in this area and we are finding now that, having been in storage for some time, there is an electrolytic process that sets up and we are getting leakers. We don't really know what is happening in all cases. As a result of our surveillance, we have identified those leakers and they have been put aside and encased in concrete and are part of the disposal action that you hear of.

Recently it has been determined by DOD that we had sufficient quantity of mustard and could dispose of a large part of it. This, too, then was added to the disposal action.

In addition to that, we have some contaminated containers. We don't know really what contaminated them, whether it was an arsenical or phosgene or what, and we are not sure we can decontaminate it satisfactorily and we have declared them excess and are disposing of those.

The last item in this group is some CS. This CS was manufactured and put up with a pyrotechnic mix designed to go into an artillery shell, but the CS itself was rejected as not being able to meet the specifications. Rather than burn this in the atmosphere, this rather large quantity of 3 tons we decided to encase it in concrete to provide the negative buoyancy and include this in the shipment.

#### NEED FOR SHIPMENT

Now, what does this shipment involve? We have most of the ship-