

GENERAL SCIENCE

Security Program Changes

Board of Directors of American Association for the Advancement of Science, in unprecedented statement, calls for emphasis on positive achievement for national security.

► A NEW idea for strengthening our national security, positive achievement rather than the negative bottling up of secrets, is urged in *Science* (Dec. 10) by the Board of Directors of the American Association for the Advancement of Science.

The statement was the first official one ever made on this country's security procedures by the giant scientific organization. Over 256 scientific societies are affiliated with the AAAS, as it is known, and their membership is estimated at over 2,000,000.

Grave concern for national security caused issuance of the unprecedented statement. The strength of the United States, the AAAS board said, can be "enhanced by changing our basic concept of internal security from one that attempts almost exclusively to minimize our losses to one that places greatly increased emphasis on maximizing our gains."

Guarding the nation from internal subversion by screening government employees and persons having access to classified information is "necessary, but it poses a serious dilemma," the statement said.

That dilemma is:

"The more completely we succeed in reducing the danger that information now in our possession may leak to a potential enemy, the more risk we run of interfering with scientific progress and of reducing the technologic superiority and the moral and physical strength upon which victory in the ultimate test would depend."

There are four points basic to the nation's security program, the AAAS said:

1. A security-screening program combating infiltration by enemy agents, espionage and sabotage, and the communication of classified information to unauthorized persons.

2. Examining the character of persons likely to be entrusted with vital information beyond a determination of loyalty to that of security risk.

3. Putting the welfare of the nation ahead of the interests of an individual or the welfare of a particular group by comprehensive policies impartially applied, even though the intimate dependence of military strength upon scientific progress means that security-screening affects scientists more than it does most people.

4. Security-screening programs are a means to an end, not an end in themselves. Their purpose is to keep a potential enemy from learning facts about our armed might or our weapons, but such programs do not increase the size of that force nor create new weapons.

This fourth point, the AAAS urged,

should be given much more serious consideration than the other three, which have been widely discussed.

The degree of secrecy, the conditions under which secrecy is desirable and the risk of losing secrecy should be considered in terms of "their contribution to the development and maintenance of the military, industrial and moral strength which are our ultimate protection against effective attack."

Historically, the AAAS pointed out, secrecy in defense has applied to military plans and equipment, properly to keep such information out of military hands.

Scientific knowledge, however, cannot be kept secret by the "security practices that serve to safeguard military information."

Progress in science is a cumulative process in which each scientist builds upon what is already known, adding to it through research and intellectual effort. This process simply cannot be contained by national boundaries and security systems, the AAAS statement said.

Scientific knowledge will continue to grow as long as men are curious about the world around them. Security precautions may sometimes give a slight time advantage to one nation, but the basic fact is that there are "no such things as permanent scientific secrets."

When this is recognized, the whole picture of how to keep the nation strong changes.

"Clearly," the AAAS stated, "the security of the nation requires the most favorable circumstances for the advancement of science, an environment that will foster a healthier, more imaginative, more energetic development than that which serves the enemies of freedom."

A positive program for preserving national security should be substituted for the present negative one. Ask these questions, the AAAS urged:

"How can we best aid national progress?" instead of "How can we avoid the danger of leaks?"

"How can we maximize our gains?" not "How can we minimize our losses?"

"What risk of delayed progress or diminished achievement is incurred in not employing this person?" rather than "What security risk is incurred in employing him?"

Such phrasing of questions weighed when considering an individual's security status, the AAAS said, would give our country a positive program for strengthening the nation.

The AAAS statement concludes:

"A positive program of security can be



MAYAPAN INCENSE BURNER—*Copal, a resinous incense, was burned in these vessels, made in effigy of the gods, which appeared late in the history of Mayapan. (See SNL, Dec. 18, p. 388.) This old man is probably Mayan God D, a sky god.*

developed. It requires boldness; it demands continued belief in the fundamental loyalty of American scientists, engineers and industrialists and in their ability to keep the United States ahead of potential enemies. It would foster the development and effective use of the resources of knowledge, talent and enthusiasm which can keep us ahead. Such a program would strengthen the democratic spirit of freedom and of progress which is the hope of the free world."

Science News Letter, December 25, 1954

PALEONTOLOGY

Fossil Beds Found In Oregon Mountain

See Front Cover

► FOSSIL BEDS found at the bottom of the mountain at John Day River, Ore., can be seen in the photograph on the cover of this week's SCIENCE NEWS LETTER.

Camels, tapirs, rhinoceros and other types of animals now inhabiting Africa and Asia are represented. The layers of sediment were deposited about 30,000,000 years ago.

Fossils as old as 360,000,000 years can still be analyzed for their amino acids, which were discovered to be identical, in many cases, to those from living animals by Dr. Philip H. Abelson, director of the geophysical laboratory of Carnegie Institution of Washington. (See SNL, Dec. 18, p. 388.)

Science News Letter, December 25, 1954