

PROGRAM.—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

A. The statutory authority for the program is found in title 14, United States Code.

B. The output of research, development, test, and evaluation cannot be easily quantified but is reflected in improved effectiveness in other programs. Listed below is a description of the research, development, test, and evaluation program, and performance.

This appropriation provides for administration and conduct of basic and applied scientific research, development, test, and evaluation with maintenance, rehabilitation, lease, and operation of facilities and equipment.

1. *Search and rescue*.—The program for search planning will be continued in 1969 and further expanded to include sensor systems for locating distressed vessels, processes for converting distress information into an optimum search plan, and methods of improving aerial delivery of survival equipment.

2. *Aids to navigation*.—Additional effort will be applied in 1969 to development of lightweight buoys for protected waters. The initial developmental stages of a high precision all-weather harbor approach and evaluation of the long-range OMEGA navigation system in relation to future loran requirements will also be instituted in 1969 while continuing buoy moorings, light source, and sound-package development.

3. *Marine safety*.—The program under this activity includes investigation of construction standards in new fields such as nonmilitary submersibles and nuclear plants as well as expanded efforts in study of firefighting agents, lifesaving devices, and investigation into methods of avoiding casualties associated with carrying toxic chemicals, loose cargoes, elevated temperature cargoes, and other dangerous or explosive substances in bulk quantities. In addition, the program also calls for continuation of research efforts with interagency groups such as SOLAS subdivision and stability panel, the NAS advisory committee on toxic chemicals, interagency firefighting studies, and a wave motion study in connection with structural strength of vessels.

4. *Marine law enforcement*.—Under this activity, the program provides for research efforts in the control of pollution by oil or other wastes of our navigable waters. The program includes a feasibility study of airborne sensors for detection, booms and gelling agents for control, and containers for defueling of wrecks. A companion project will be instituted for design of systems to reduce pollution by the Government's own facilities, including Coast Guard cutters.

5. *Oceanography, meteorology, and polar operations*.—This program calls for refinement of data collection packages, development of iceberg tracking capability, and increased support of the National Oceanographic Data Center, as well as including research in connection with data collection on Coast Guard offshore structures, vessels, and buoys, exclusive of their actual servicing and operating costs.

The national data buoy system program initiates the developmental phase of a national system to collect oceanographic environmental data through a worldwide system of buoys. The overall program in 1969 will be monitored by the Marine Sciences Council.

C. Rear Adm. O. R. Smeder, Assistant Chief of Staff for Research and Development, is the official having direct operational responsibility over this program.