FINAL REPORT

CONTRACTOR:

American Institute of Biological Sciences

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REPORT TITLE:

The AIBS Shark Research Panel

AUTHOR:

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John R. Olive, Director
American Institute of Biological Sciences

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NATIONAL TECHNICAL INFORMATION SERVICE Springfield, Va. 22151 The AIBS Shark Research Panel was established on June 1958 to (1) expedite and activate recommendations formulated at the ONR sponsored conference on Basic Research Approaches to the Development of Shark Repellents and (2) to serve as a clearing house for all information related to the field of elasmobranch biology in general and the shark hazard problem in particular.

From 1958 to 1970 the Panel initiated or served in an advisory capacity in the following activities:

- (1) BASIC RESEARCH The Panel stimulated, activated, and coordinated basic investigations dealing with taxonomy, behavior, and functional anatomy of sharks, essential to the understanding of the shark hazard problem.
- (2) <u>APPLIED RESEARCH</u> With consultants, the Panel developed methods for testing and appraising the effectiveness of various anti-shark measures.

 As a result of several testing programs, meshing, shocking, and use of chemical and physical repellents are now in use throughout the world.
- (3) Maintenance of SHARK-ATTACK FILE A special form was prepared by the Panel for reliable documentation of shark attacks. These forms, completed by a physician or scientist in the area where the attack occurs, plus information concerning worldwide shark incidents from five different newspaper clipping services form the basis of the shark-attack file. From information of this type, the environmental conditions and the behavior patterns and activities of swimmers which provoke a shark to attack are studied.

The shark-attack file is maintained at the Mote Marine Laboratory and the information is being prepared for incorporation in a data retrieval system.

- Analyses of shark attacks that took place during 1959 and 1960 were published by the Panel (Science, 132:323-326 and 134:87-88).
- (4) <u>SERVICE</u> The Panel has provided direct consultation to various government agencies and scientists concerning anti-shark devices. The increasing public demand for information on shark behavior and realistic evaluations of the shark hazard problem has also been met, by the Panel, collectively, or through efforts of its individual members by participation in the preparation of films, television and radio programs and by articles for publication in the popular press.
- (5) MEETINGS The Panel has had thirty-one executive meetings during the twelve year period. Periodically, symposia and conferences were organized dealing with various aspects of the biology of sharks. These meetings provided a forum for the exchange of scientific information on current research.
- (6) <u>PUBLICATIONS</u> Two major volumes and two sets of Abstracts resulted from papers presented at Panel Symposia and open meetings:
 - (a) Sharks and Survival, edited by Perry W. Gilbert, D. C. Heath and Company, 1963.
 - (b) Sharks, Skates, and Rays, edited by Perry W. Gilbert, Robert F. Mathewson, and David P. Rall. The Johns Hopkins Press, 1967.
 - (c) Abstracts of Current Investigations in the United States Dealing
 With Elasmobranch Fishes, The AIBS Shark Research Panel, 1968.
 - (d) <u>ABSTRACTS: Current Investigations Dealing Mith Elasmobranch Fishes</u>,
 The AIBS Shark Research Panel, 1970.

The final meeting of the AIBS Shark Research Panel was held in January 1970. The Panel and their consultants recommended the formation of a new expanded advisory

group: The Panel on Hazardous Marine Biological Phenomena. This new Panel would identify, consolidate and freely provide rapid authoritative information and/or recommendations on marine problems caused by disasters and catastrophies or by hazardous flora and fauna. The 'umbrella' Panel would be composed of three Subcommittees: I. Venomous and Poisonous Marine Animals II. Unusual Marine Phenomena III. Sharks and Other Predactious Marine Animals.

Members of the AIBS Shark Research Panel:

Dr. Perry W. Gilbert, Chairman, Mote Marine Laboratory

Captain H. David Baldridge, Mote Marine Laboratory, Naval Aerospace Medical Center

Dr. Sidney R. Galler, Smithsonian Institution

Dr. John R. Olive, American Institute of Biological Sciences

Mr. Stewart Springer, U. S. National Museum

Dr. Albert L. Tester, University of Hawaii

Dr. Leonard P. Schultz, Member Emeritus

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