## SYMPOSIUM ON FISHERIES OCEANOGRAPHY

MAURICE BLACKBURN, Editor 1

## INTRODUCTION

At the Eastern Pacific Oceanic Conference of 1957, Mr. Townsend Cromwell (Inter-American Tropical Tuna Commission) explained the need for a symposium for exchange of information and views about the usefulness of ocean-ography in fisheries investigations, and was asked to suggest a scientific meeting in which such a symposium could appropriately take place.

Mr. Cromwell was killed while on duty in June 1958. At the Eastern Pacific Oceanic Conference of 1958, the matter was raised again by Dr. Maurice Blackburn (Scripps Institution of Oceanography, University of California) and discussed by conference participants.

As a result, arrangements were made to include a "Symposium on Fisheries Oceanography" in the programs of the forthcoming meetings of the American Society of Limnology and Oceanography (Pacific Division) and the American Society of Ichthyologists and Herpetologists, to be held as part of the 40th annual meeting of the Pacific Division of the American Association for the Advancement of Science. Dr. Blackburn was invited to organize the Symposium and preside over it.

The Symposium took place at San Diego State College, California, on the afternoon of June 17 and the morning of June 18, 1959. It took the form of presentation of papers (recorded), questions and discussion from the floor (not recorded), and summaries and comments by persons who had been invited to present them (recorded).

Publication in this medium was arranged by one of the participants, Mr. Garth I. Murphy, with the consent of all concerned.

The organizer of the Symposium wishes to thank all who participated in it, the office bearers of the societies who sponsored it, and the Marine Research Committee of the California Department of Fish and Game which published the proceedings.

The heading of each paper states the organization to which the author belongs. An additional contribution of a general nature presented by Richard H. Fleming, Department of Oceanography, University of Washington, Seattle, is not available for publication.