TABLE OF CONTENTS*

Foreword. ............................................. ii

PART I -- FISHING VESSEL DEVELOPMENT

Changes in the World Fisheries Situation and Vessel Need -- The Past Twenty Years. Peter Hjul ................. 2

50 Years of Improvements in Fishing Vessels -- from 1950 to 2000. Jan-Olof Traung. .......................... 12

Written Contribution. Bruce Culver ...................... 20

PART II -- FISHING VESSEL OPERATIONS

Waterfront Use Conflicts and Their Effect on Commercial Fishing Operations in Florida. Leigh Taylor Johnson .... 22

A Simple Method to Determine Optimum Vessel Speed. George A. Lundgren ....................................... 33

The Development of an Off-Bottom Shrimp Trawl. Clifford A. Goudey ............................................. 43


Fishermen and Oilman Working Together in the North Sea. Alan Wilson ............................................. 63

Computer Applications in Midwater and Bottom Trawling. J. Douglas Dixon ......................................... 79

Written Contributions. S.M. Calisal, Christopher Tupper, Cliff Goudey ............................................. 90

PART III -- FISHING VESSEL DESIGN AND CONSTRUCTION

Fishing Vessel Design Curves. W. Brett Wilson .............. 94

Weight and Kg Estimates for Ferro Cement Fishing Vessel Hulls. B. Pickett, R. Latorre .......................... 112

Hydrodynamic Design of Tuna Clippers. R. Adm. Pascual O'Dogherty, Miguel Moreno, Manuel Carlier, Manuel O'Dogherty .... 121

Added Resistance of Fishing Vessels in Head Seas. Stephen R. Judson ............................................. 140

The Effect of Variations in Major Hull Parameters of Fishing Vessels Upon Directional Stability. W. Brett Wilson .... 152
Fishing and Ship Motions -- Design Considerations Based on Observations of Operations. Christopher N. Tupper. ....... 169

A New Approach to the Problem of Sheathing Wooden Hulls. Bill Seemann. ................. 177


Written Contributions. N.T. Riley, Cliff Goudey. ........ 204

PART IV -- FISHING VESSEL SAFETY


Legal Aspects of Fishing Vessel Safety. Robert R. Hyde. ........ 238

Fishing Vessel Safety in the U.S.A. What are we Doing? Robert J. Shephard. .......... 256

Fishing Vessel Intact Stability Criteria and Compliance due to Variation in Vessel Dimensions. Philip M. Read, R. Latorre ... 261


Written Contributions. Bruce Culver, Cliff Goudey, N.T. Riley, Robert Hyde. ........ 311

PART V -- SAIL-ASSISTED FISHING VESSELS


Rotor Propulsion for the Fishing Fleet. Kenneth C. Morisseau. .... 344
Further Development of the Tunny Rig. E.W.H. Gifford, C. Palmer... 360

A Microcomputer-Based Instrumentation Package for On-Board Wind-Assist Measurements. Jeffrey Zenoniani, John W. Shortall III... 378

Design and Testing of a Fishing Vessel With Combined Motor/Sail Drive for the Artisanal Small Scale Fishery of Sierra Leone. K. Lange... 388

A Progress Report With Special Reference to a 30.5 M Fishing Catamaran. John G. Walker... 391

Easily Handled Rigs for Fishing Vessel Sail Assist. Frank MacLear... 401

Written Contribution. Gunnar C.F. Asker... 406

PART VI -- INTERNATIONAL AND SMALL-SCALE FISHERIES

Comparison of Operational Economics for Vessels Working From Three West African Ports. John C. Sainsbury... 412

Appropriate Designs for Fishing Craft in Bangladesh. R.R. MacAlister, C. Eng. Mrina... 423

Particular Needs of Fishing Vessels for use in the Developing World. Alejandro Acosta et al... 433

Development of a 48-Foot Multi-Purpose Fishing Vessel: A 12-Year Retrospect by the Builder. H. Lee Brooks... 445

Energy Saving and Rig Development for Artisanal Fishing Boats. E.W.H. Gifford, C. Palmer... 458

Change on the Chesapeake. Donald W. Webster... 479

Development of a Sail-Assisted FRP Fishing Canoe for the Comoros. Fukamachi Tokuzo, NA... 484

APPENDIX

Conference Participants... 493

*Statements contained herein are the private opinions and assertions of the writers and should therefore not be construed as reflecting the view of the sponsors; nor of any other organization with which the writers are affiliated.