

# The Executive Committee

## Report to the 20<sup>th</sup> ITTC

### I INTRODUCTION

The Introduction to the Report of the Executive Committee of the 19<sup>th</sup> ITTC contains an interesting and complete outline of the history of the ITTC and its predecessor organizations. The development is traced starting from the first International Conference of Ship Tank Superintendents held in The Hague in 1933.

The principal components of the conference structure are Technical Committees, the Advisory Council and the Executive Committee. The Technical Committees are responsible for the technical content of the meetings, and have increased from three originally to seven at present. Continuity in the administration of the conference is vested in an Advisory Council and an Executive Committee.

As stated in the Rules of Organization adopted by the 18<sup>th</sup> ITTC, the Advisory Council consists of representatives of the major member organizations of ITTC. Its function is to recommend to the Executive Committee subjects for its consideration, bearing in mind that the primary aim of the Conference is to solve technical problems of importance to Tank Directors.

The Executive Committee consists of seven members selected on a geographic basis, the Chairman, appointed by the members of the committee, and a secretary. The chairman is normally from the host institution for the next conference. The function of the Executive Committee is to act on the recommendations of the Advisory Council and to implement the policies proposed by the full conference.

### I.1 Memorials

It is the sad duty of the Executive Committee to report the deaths of the following distinguished colleagues who have contributed so much to the activities of the ITTC:

#### **Martin A. Abkowitz**

Martin A. Abkowitz, Professor of Ocean Engineering at the Massachusetts Institute of Technology, died on 26 January 1993 at the age of 74.

Professor Abkowitz received the SB and SM degrees in Naval Architecture from MIT and the PhD from Harvard in 1953. From 1940-42 he was employed at the David Taylor Model Basin and returned there in 1946 after serving as a Captain in the US Army Transportation Corps.

He was appointed Assistant Professor of Naval Architecture at MIT in 1954 attaining the rank of Professor in 1959. His teaching and research focused on ship hydrodynamics, particularly ship motions in waves and the stability and motion control of ships and submarines. He was also responsible for the design, construction and operation of the MIT Ship Model Tank.

After retiring from MIT in 1988, Professor Abkowitz continued to participate in research and other professional activities until prevented from doing so by illness. He was a life member of the Society of Naval Architects and Marine Engineers and an active participant in the American and International Towing Tank Conferences. He travelled and lectured ex-

tensively in Europe, Israel and Asia including periods at the Technical University of Denmark (1962-63) and Nantes, France (1971-72) under Fulbright Fellowships. In 1990-91, he was awarded a von Humboldt Fellowship to the University of Duisburg in Germany.

### Adalbert Gross

On 8 August 1992, Adalbert Gross, former Deputy Director of the Versuchsanstalt für Wasserbau und Schiffsbau (VWS), the Berlin Model Basin, passed away.

Born on 6 July 1924 in Berlin, he joined the Navy after High School and later studied naval architecture at the Technical University of Berlin. From 1952 to 1986 he was a member of the staff of VWS, taking part in its reconstruction from ruins. He was a member of the ITTC Powering Performance Committee from 1972 through 1978, taking an active part in the development of the ITTC method of Power prediction.

In his free time, "Addi" was passionately devoted to sailing his folke boat on the Wannsee and the Baltic.

### W. P. A. van Lammeren

Professor Dr. Ir. W. P. A. van Lammeren, former Managing Director of MARIN, died on 20 October 1992.

At the age of 22, Van Lammeren accepted a job as project engineer at the Netherlands Ship Model Basin as assistant to the director, Professor Ir. L. Troost. At that moment, he had one year of experience at a shipyard and wanted to deepen his fundamental knowledge to use this later in ship design. In 1930, the model basin was under construction and young Van Lammeren was sent to Hamburg and Vienna to make himself familiar with the "towing tank" profession.

During the first period of the existence of the NSMB, a careful policy was followed due to the economic recession. In this period, the Institute established its strong industrial orientation very much supported by Van Lammeren. Besides his daily work with customers, Van Lammeren prepared his PhD thesis dealing with the analysis of the propulsion components in relation to scale effects. His

results of tests on a series of geometrically similar models of the steamship *Simon Bolivar* were a basis for many investigations later on in the Netherlands and abroad.

In 1938, Van Lammeren became assistant managing director in charge of Research and Development. Between 1940-1945, when model testing was very much reduced due to World War II, he wrote the book "Resistance and Propulsion of Ships" together with Troost and Koning. This book has seen worldwide use by designers, students and colleagues.

After 1945, Van Lammeren continued his research in scale effects by carrying out the *Victory* and *Arabia* programs. Important parts of this program were the tests with a 22 m steel model ship, *D. C. Endert*, and full-scale tests with the inland tanker *Arabia*. In addition, Van Lammeren carried out research including the development of new propulsion devices, the extension of standard propeller series (Wageningen B-screw series) and the determination of the excitation forces generated by propellers.

In 1952, after Professor Troost became professor at MIT in Boston, Van Lammeren became managing director of the Netherlands Ship Model Basin. In the same year, he succeeded Professor Troost at the Technical University of Delft as professor in "resistance and propulsion" of ships.

In the period from 1950 up till 1970, a large extension in the shipping and shipbuilding activities took place worldwide resulting in a diversification of ship types and a rapid growth in size and speed. Also, a start of offshore and ocean engineering activities took place. To cope with the demands of industry, Van Lammeren initiated the building of a whole series of special purpose laboratories, including a seakeeping basin, shallow water basin, wave and current basin, high speed towing tank and depressurized towing tank. Most of these facilities were unique at the time that they were built. It underlined the fact that Van Lammeren, besides being a researcher, had entrepreneurial qualities.

Van Lammeren has always been a strong believer in international cooperation. The first ITTC was held in the Netherlands in 1933 and Van Lammeren, as a very young scientist, had the privilege to attend this conference. Since

that time he has been a strong supporter of the ITTC and has attended nearly all conferences.

In 1972, Professor Van Lammeren retired as managing director of MARIN and was succeeded by Professor Dr. J. D. van Manen.

### Frederick H. Todd

Dr. Frederick H. Todd, whose distinguished career spanned the Atlantic, died on 20 August 1992.

Born in Newcastle-upon-Tyne, UK, in 1903, Dr. Todd graduated from Kings College, Durham University, receiving his Bachelor of Science Degree in 1925, and the PhD degree from the same university in 1931. Following graduation, he served an apprenticeship at Armstrong Whitworth and Company, Shipbuilders. After his graduate study, he joined the National Physical Laboratory, Teddington, as Scientific Officer, later being appointed Deputy Superintendent of the Ship Division from 1942 to 1947. In 1948 he came to the United States to take a position as Chief Naval Architect and Technical Director of the Hydrodynamics Laboratory at the US Navy's David Taylor Model Basin. He returned to the National Physical Laboratory in 1957 as Superintendent of the Ship Hydrodynamic Laboratory where he remained until 1962. In that year, he returned to the David Taylor Model Basin as Scientific Advisor to the Commanding Officer, and later serving in the US Office of Naval Research Branch Office in London, from which post he retired in 1969.

Dr. Todd was an active member of the ITTC, contributing to many of its activities and serving as Chairman from 1960-62. He was a member of the major ship technical societies including SNAME and RINA and has been honored by receiving major medals and prizes from several of them.

## I.2 Committee Membership

The Executive Committee membership for the 20<sup>th</sup> ITTC, appointed by the general membership at the conclusion of the Madrid Conference is as follows:

Dr. M. E. Davies	UK
Mr. J. C. Dern	France
Mr. A. K. Hansen	Norway
Mr. D. C. Murdey	Canada
Dr. O. P. Orlov	Russia
Dr. H. G. Payer	Germany
Prof. S. Takezawa	Japan

Chairman:  
Prof. J. Randolph Paulling USA

Secretary :  
Prof. W. C. Webster USA

In addition, the following are *ex officio* members.

Past Chairman:  
Professor J. A. Aláez Spain

Past Secretary:  
Dr. José F. Nuñez Spain

Chairman, Advisory Council:  
Dr. M. W. C. Oosterveld Netherlands

Dr. William B. Morgan of the David Taylor Model Basin, a member of the AC and the immediate past Americas representative on the EC, served as advisor to the Committee.

## II. REVIEW OF ACTIVITIES OF EXECUTIVE COMMITTEE

### II.1 Committee Meetings

During the period between the 19<sup>th</sup> and 20<sup>th</sup> ITTC, the Executive Committee held four meetings. A summary of the meetings is given in this section followed by a section describing actions taken by the Committee.

The first meeting of the Executive Committee was held in Madrid on 22 September 1990 in conjunction with the 19<sup>th</sup> ITTC. New members of the committee were introduced after which the discussion was devoted to the time and place for the next three meetings of the Committee and to a preliminary description of arrangements for the 20<sup>th</sup> ITTC.

The second meeting was held in Memphis, Tennessee, USA on 10 January 1991, in conjunction with the opening of the David Taylor Model Basin's Large Cavitation Channel. The principal discussions centered on the possible dates and Northern California locations for holding the 20<sup>th</sup> ITTC. It was noted that the SNAME Centennial meeting and the MAR-SIM congress were scheduled for the late September-early October time frame and, by choosing a suitable date for the ITTC, delegates might be able to combine their participation in these conferences. It was decided to postpone a final decision until the next EC meeting. Additional discussion concerned the production of the ITTC Newsletter and means of updating the Catalog of Facilities.

The third meeting was held in Wageningen on 15 May 1992, during the MARIN 60<sup>th</sup> Anniversary Celebration. At this meeting, the dates and location for holding the 20<sup>th</sup> ITTC were decided upon, and the format and time schedule of the conference sessions were discussed. Two principal changes in the session format were adopted that will add six workshop sessions and a poster session to the meeting schedule. The workshops will be held in two groups of three parallel sessions each. The objective of the workshops is to highlight new areas of interest to the ITTC and to determine if a more concentrated effort should be expended on those areas in future conferences. The poster sessions are intended to allow contributions containing material of interest to the ITTC but perhaps more specialized than that covered during the regular committee sessions.

Also established were the deadlines for preparation of committee reports and other material to be included in Volume I of the PROCEEDINGS, and mailing dates for Volume I and the final invitations to the Conference. A number of applications from institutions interested in becoming members in ITTC were received and discussed.

The fourth meeting of the EC was held at Larkspur, California, near San Francisco, on 18 March 1993. The principal subject of this meeting concerned the final arrangements and schedule of the Conference. A visit to the conference hotel and a tour of its facilities were included in the agenda. Other matters discussed included the preparation by each area representative of lists of delegates to be invited, the completion of the Catalog of Fa-

cilities, proposals for hosting the 21<sup>st</sup> ITTC and applications for membership in ITTC.

## II.2 Committee Decisions

### New ITTC Member Organizations

The following nine organizations were accepted into ITTC membership:

- The Indonesian Hydrodynamic Laboratory, Surabaya, Indonesia.
- The Hydrodynamic Laboratory of the Institute of Technology Ten November, Surabaya, Indonesia.
- The High Speed Towing Tank of the Naval Science and Technological Laboratory, Visakhapatnam, India.
- The Ocean Engineering Research Centre at Memorial University of Newfoundland, Canada.
- The Offshore Technology Research Center of Texas A and M University, College Station, Texas, USA.
- The Nagasaki Institute of Applied Science, Nagasaki, Japan.
- The University of Glasgow, Glasgow, Scotland.
- Institute of Marine Science and Technology of the Tokyo University of Mercantile Marine.
- Faculty of Mercantile Marine Science of the Kobe University of Mercantile Marine.

In addition to those listed above, several other organizations have submitted preliminary applications for membership in ITTC and these will be acted upon when the applications are received in complete form. In this regard, the EC decided that a description of the applicant's facilities, in the form required for inclusion in the ITTC Catalog of Facilities, should be a required part of the application for membership.

## 2.2 Changes of membership of Technical Committees.

The following changes in membership of the Technical Committees were approved by the EC:

### Seakeeping Committee

Dr. A. R. J. M. Lloyd found it necessary, for health reasons, to step down as Chairman of the Seakeeping Committee. Dr. Peter S-G Tan was appointed to succeed him.

### Manœuvering Committee

At Dr. Nikolaev's request, he was relieved of the duties of Chairman and Dr. Ian Dand, the Committee Secretary took on the additional post as Chairman. Dr. Nikolaev continues as an active member of the Committee.

## 2.3 Organization of the 20<sup>th</sup> ITTC

The hosts of the 20<sup>th</sup> ITTC are the American Towing Tank Conference and the University of California. A number of organizations, notably the U. S. Office of Naval Research and members of the marine industry, have assisted in sponsorship and will be listed in Volume II.

A technical program consisting of ten technical committee sessions, two workshop sessions and a poster session is planned. The

workshops will be held on two different days and on each day, there will be three parallel sessions. Additional general sessions are devoted to opening and closing ceremonies and presentations of workshop results. Social activities include a cocktail reception, day-long excursion to Historic Monterey and a banquet at a winery in the famous Napa Valley.

The technical sessions are scheduled to have a duration of one hour forty-five minutes divided as follows: thirty minutes for presentation of a summary of the committee's report by the chairman, one hour for presentation of individual contributions and fifteen minutes for a final summary from the committee. The Symbols and Terminology Group and Quality Control Group are combined into a single session with equal division of time between them. Persons desiring to present contributions to the committee report are required to inform the Committee Chairman of their intention prior to the Conference and to provide sufficient copies of their contribution for distribution at the session. Detailed instructions for preparing and submitting such discussions are to be found in a loose insert page to Volume I of these proceedings.

One member of the Executive Committee serves as chairman of the conference technical session at which the committee report is presented and discussed, and these assignments are as follows:

### Technical Committee

Resistance and Flow  
 Symbols and Terminology / Quality Control  
 Propulsors  
 Cavitation  
  
 Powering Performance  
 Manœuverability  
 High Speed Marine Vehicles  
 Seakeeping  
 Performance in Ice Covered Waters  
 Ocean Engineering  
 Workshop Presentation

### EC Committee Member

Prof. J. A. Aláez  
 Prof. W. C. Webster  
 Dr. M. W. C. Oosterveld  
 Dr. O. P. Orlov  
 (or Prof. Paulling)  
 Mr. D. C. Murdey  
 Mr. J. C. Dern  
 Mr. A. K. Hansen  
 Prof. S. Takezawa  
 Dr. H. G. Payer  
 Dr. M. E. Davies  
 Dr. W. B. Morgan

The workshop sessions will be devoted to the following topics:

- Computational Fluid Dynamics (CFD)
- Measurements and Validation
- Waterjet Propulsion
- Facilities, Instrumentation and  
Nontraditional Use of Facilities
- On-board Monitoring
- Hydrodynamics of Submersibles
- Sailing Yachts

It is intended that the discussion in each session will be initiated by a panel consisting of a chairman and two or three other members. After their introductory remarks, there will be open discussion from the floor. Discussors are requested to provide written copies of their

remarks for inclusion in the workshop summary report to be prepared by the session rapporteur.

#### **II.4 Proposed Host for the 21<sup>st</sup> ITTC**

Several invitations were received for hosting the 21<sup>st</sup> ITTC and, after considering all factors, the Executive Committee decided to recommend to the Conference that the invitation from the Norwegian Technical University and MARINTEK in Trondheim, Norway be accepted. They have proposed a meeting spread between two cities, Bergen and Trondheim with travel between the two by coastal passenger ship.