

## OPENING CEREMONY

The Opening Ceremony of the 15th ITTC was held on Monday 4 September 1978 in the Hall of Knights (Ridderzaal) at the Binnenhof. The Hall of Knights is the centre of political life in The Netherlands.

His Royal Highness Prince Claus of The Netherlands, Chairman of the COMMITTEE OF HONOUR of the 15th ITTC and many other members of the Committee of Honour, representatives of the Embassies of countries represented at the ITTC, distinguished guests from The Netherlands and last but not least the 15th ITTC participants were present at this meeting.

His Royal Highness Prince Claus and the other distinguished guests showed by their presence the interest and mental support of the Government and Industry in The Netherlands of the aims of the ITTC.

Speeches were given at the Opening Ceremony by:

- Mr. P.E.E. Kleyn van Willigen - Chairman of the Board of Directors of the NSMB
- Dr. W.F. van Eekelen - Parliamentary Under-Secretary of Defence
- Prof.Dr. J.D. van Manen - President of the 15th ITTC
- Dr. H. Edstrand - Member of the Executive Committee of the 15th ITTC

The Opening Ceremony was concluded by the first presentation of the film "FROM HOLLAND TO SCALE"



Dr. W.F. van Eekelen



Mrs. Thérèse Brard, Guest of Honour of the Executive Committee, accompanied by Prof. Dr. W.P.A. van Lammeren (left) and Mrs. A.A.W. van Manen (right)

SPEECH OF DR. W.F. VAN EEKELEN, Parliamentary Under-Secretary of Defence, AT THE OPENING CEREMONY

Your Royal Highness, Excellencies, Ladies and Gentlemen,

On behalf of the Netherlands government I have the honour to welcome you to The Netherlands, to The Hague and to this ancient Hall of Knights. I welcome you to The Netherlands, because we are proud that the fifteenth International Towing Tank Conference has returned to the country which took the initiative for the first conference 45 years ago. I pay tribute to the drive and energy of Professor Troost who organized that first meeting soon after the opening of the Netherlands Ship Model Basin in the early 1930's.

I welcome you to The Hague, with permission from Burgomaster Schols, because this city, although not called the capital of The Netherlands, for reasons only understood by Dutch people - is the seat of our government and - in 1932 - the place of your first meeting.

And I welcome you to this Hall of Knights because we associate it with the origins of our democratic system. When you look up you'll notice not only the flags of our provinces which together constituted The Netherlands, but also it was built in the form of a ship, a ship turned upside down.

This is perhaps illustrative for the pre-occupation of the Dutch with maritime matters. How and why it was done, I cannot say, but I am certain of one thing and that is that the shape of the construction was not tested in a towing tank.

Much has changed since those days. Also in the field of shipbuilding technology. For a long time designs were based on tradition; changes in design were only gradual and resulted from practical ex-

perience.

It was not possible to build ships beyond a certain size because of the limited strength of wood as construction material. The navigation of ships remained dependent on weather, wind and current, irrespective of the improvements made to the sailing capacity.

The application of iron and steel came as a breakthrough in shipbuilding and allowed for the construction of larger and more complicated ships and the introduction of steam engines resulted in the navigation of ships independent of weather conditions.

In this way a commercial trade on a regular and dependable basis became possible as an essential corollary of industrial development. The new possibilities of iron, steel and steam not only activated daring designers but also inspired science fiction authors like Jules Verne as your President, Prof. van Manen mentioned in his preface to the proceedings of this conference.

At that time only a few individuals understood the far reaching capabilities offered by experimental methods of shipbuilding research with scale models as introduced by the famous William Froude. They recognized the possibility to predict with this experimental method the speed and power of ships without the need to extrapolate the data of earlier similar ships.

At that early stage of shipbuilding research with scale models the Netherlands contribution was provided by Bruno Joannes Tideman. The experiments of this Chief Naval Constructor of the Netherlands Navy at the former Royal Dockyard at Amsterdam stimulated the introduction of experimental methods all over the Continent of Europe.

In the 45 years after your first conference the world has witnessed even more radical technological changes than the transition from wood to iron and steel and from sail to steam I just mentioned. Together with these technological changes a number of other problems have become apparent, for instance the transport of energy, fuel saving, the application of automation and the future possibilities of advanced ship types. Originality, imagination and inventiveness are needed, just as much as a hundred year ago, but today the need for Research and Development is more generally accepted as an essential tool for advanced ship design.

Industrial activity in The Netherlands has increased greatly since the last war and we have outgrown the agricultural basis of earlier years. Yet the spear-points of industrial development are concentrated in specific fields and specialised shipbuilding techniques remain one of them. The government therefore attaches great importance to the promotion of research and development in the area of shipping and shipbuilding as a part of our policy to stimulate the economy through technological innovation. In my opinion, this is a new - or let me say renewed - challenge for the industrial countries represented here at your conference, in particular against the background of the present development of industrial activities in the world. The high level technological know-how, built up in your R & D activities, should be brought to new and advanced applications. Just there, I think, will lie the most promising outlook for our respective countries in relation to the future international pattern of industrial activities.

My own field of responsibility is limited to defence programmes, but I clearly see a spin off to the civilian sphere as a result of the development of new materi-

als, new propulsion systems and the development of navigational and communication aids. Our building programs of naval ships includes twelve standard frigates of which the first is at present undergoing sea trials.

I may also mention the building of an improved type of a conventional submarine using special steel to withstand higher pressures. In addition, we recognize the growing need to be informed about the future possibilities of advanced craft as for instance hydrofoils, surface effect ships, SWATHS en planing craft. We fully realize that we cannot execute our building programs without the input of Research and Development to which your Conference plays such a prominent part.

As a last point of my speech, I should like to congratulate your conference with the long history of your international co-operation, now already forty-five years. Of course, we all know that science and research are international, because of their very nature. We should realize, however, that there are many forms and shades of international co-operation such as: personal contacts, exchange of information, co-ordination of activities, common projects and so on.

Here, at this conference, I stress the importance of international co-operation in the form of the sharing of research capacity. I mean the mutual use of hardware facilities in the institutes and laboratories. We can expect that the high investments, needed for high-level research facilities, will turn out to be too heavy a burden for one single nation. International co-operation could offer attractive prospects. I realize that a main factor in international co-operation of research and development is the state of international co-operation of the industry, in this case shipping, shipbuilding and ocean engineering industry. I would point out, however, the possibi-

lity of regarding research and development laboratories as industries by themselves, that is to say as "industries of knowledge". Besides their national function they could develop their own forms of international co-operation in producing and disseminating technological know-how.

Mr. Chairman, I offer you these thoughts as a subject for reflection. For this moment I wish you and all the participants assembled here - on behalf of the Netherlands Government - a most successful conference and a happy stay in our country.