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New ITTC Executive Committee Chairman

The newly elected EC Chairman Dr. Koh retired from NSWCCD in January of 2009 due to health reasons. This happened quickly, and presently, In-Young is doing well. At that point Dr. Jessup was nominated and selected to replace Dr. Koh as the AC member of NSWCCD and the Americas representative to the ITTC EC. The latter position is typically selected by the American Towing Tank Conference (ATTC) during its biannual conference. In this case the nomination and selection was done via e-mail from the participants of the ATTC conference in August 2007.

Dr. Jessup was a member of the Propulsor Committee of the 21st ITTC in 1996 which was combined with the Cavitation Committee to form the Propulsion Committee of the 22nd ITTC in 1999. There he served as secretary. Dr. Jessup was Chairman of the Propulsion Committee of the 23rd ITTC in 2002.

Dr. Jessup's background is in the area of Propulsors, working at NSWCCD since 1976. He has performed propeller designs for a number of U.S. Navy ships. He also conducted research developing LDV specifically to measure model propeller blade flows, including blade boundary layers, wakes and tip vortices. Dr. Jessup is currently the Naval Surface Warfare Center Senior Scientist for Hydrodynamics. He has received numerous awards, including the ASNE Gold Medal award, The SNAME Davidson Medal, and is a member of the National Academy of Engineering.

26th Conference Organisation



Preparation of the 26th ITTC Conference to be held 2011 in Rio de Janeiro is proceeding well. The Conference is being organised by LabOceano in cooperation with IPT, USP and UniCamp and with the support of the Arquimedes Network (coordinated by Petrobras).

The 26th ITTC Full Conference will take place from 28th August through 3rd September 2011, the venue being the sophisticated Windsor Barra Hotel, which is situated right in front of the famous Barra da Tijuca Beach. The local organising committee has been established with Dr. Antonio Carlos Fernandes as Chairman and Dr. Marcelo Neves as Co-Chairman (both from LabOceano (COPPE/UFRJ)). Dr. Carlos Padovezi of IPT has been appointed Secretary.

The conference logo has been designed as shown at the top of this entry.

Newsletter editor:

Mr Aage Damsgaard
FORCE Technology
Hjortekaersvej 99
2800 Kgs. Lyngby, Denmark

Published by:

ITTC Secretariat
26th International Towing Tank Conference
Tel.: +45 72 15 77 00 Fax: +45 72 15 77 01
E-mail: aad@force.dk
Web Site <http://ittc.sname.org>

Further information about the 26th ITTC Full Conference will be displayed on the ITTC website.

News from the Executive Committee

The Executive Committee held two meetings during the 25th Conference, the final meeting of the 25th ITTC and the first meeting of the 26th.

The main action of the last meeting of the 25th EC was to finalise matters for the Conference, including the final report of the EC, final amendments of the proposal for the new ITTC Rules, and selection of members and chairmen of the technical committees of the 26th ITTC.

The 26th EC saw a substantial number of new faces, including Prof. WENG from China representing East Asia, Susanne Abrahamsson from Sweden representing Northern Europe, Antonio Fernandes and Marcelo Neves from Brasil as organisers of the next Full Conference, and Prof. Strasser from Austria as AC Chairman. Subsequently, Dr. In-Young Koh and Dr. Bulgarelli have both retired and have been replaced by Stuart Jessup and Dr. Ranocchia as EC Chairman/Americas representative and Southern Europe representative, respectively.

In consequence of some of the discussions which took place during the Conference EC decided to set up three working groups addressing global warming (headed by Cornell Thill, DST), ice (headed by F. Mary Williams, NRC) and, finally, the structure of the ITTC technical committees (headed by Gerhard Strasser, Vienna Model Basin). The objective of the first two working groups would be to monitor the development in these areas of relevance to ITTC and develop Terms of Reference for new specialist committees, which may be considered for the 27th ITTC. The objective of the third working group should be to create a structure with less overlap between the committees and a more balanced workload. The working groups will report to the EC.

The next EC meetings are tentatively planned for Istanbul October 2009, Rio de Janeiro Fall 2010, Vienna Spring 2011 and again Rio de Janeiro at the 26th Full Conference.

AC Chairman's Comment

Having been elected as chairman of the Advisory Council of the ITTC one of the first questions is how are we going to proceed. Do we

need some change or is it sufficient to go on as before.

During the last periods the rules were put into a new shape and a big effort of the committees was put on the updating of the existing and the production of new ITTC Recommended Procedures. This was important with respect to improvement of quality and also useability. Partly, this was overloading the committees.

Procedures can only be produced if there is an accepted way of proceeding either in testing or in calculation. For both, validation to the full scale ship should be the criteria. I know that this is not easy to achieve and also a question of costs. Up to now, asking for procedures which we would like to have but which were not ready for general acceptance failed. To my opinion, this is somewhat different with guidelines which just point out the items of interest and caution. By the way, there has been guidelines published by committees in the proceedings and these were not published in the ITTC Recommended Procedures and Guidelines. In future, I think, we shall not produce as many new procedures as in the recent years (this does not mean that we are not going to update existing procedures according to necessity).

Some people stated that our work has changed. This, I deem, is with regard to more calculation before or during testing. However, the aim of our work has not changed: "To help our customers to improve the performance with regard to powering, manoeuvring, seakeeping, and safety of floating structures as best as we can, notwithstanding whether it be by calculation or by testing or just by experience".

The ITTC rules cover quite a big range of activities, amongst them: "Organising and encouraging meetings to review progress in the research". This was usually documented in the proceedings and should for sure be continued with some more esteem. The members of ITTC will receive the overview of the progress of the last three years. However, we have to make sure that we do not limit ourselves too much to special areas. Continuous improvement of standard test procedures does not really lead to too much innovation. As long as the validation has not improved, the increase of accuracy of these, by our clientele already now well accepted, standard procedures is not really of help.

ITTC has followed the trend to CFD and we are going to get a state of the art survey over calculation methods during the next conference. Still, we will have a discussion whether we are following the development in this and in other fields adequately, and if not, how to react. For sure, ITTC has to assure that the member organisations can be considered as up to date and as competent in all fields of hydrodynamics and should be preferred to competitors who only perform calculations without an adequate standard of validation.

The AC is open to contributions from all members.

Gerhard Strasser

News from the Advisory Council

The 25th Advisory Council held its final meeting in Fukuoka in connection with the Full Conference.

In addition to the past AC members the meeting was attended by the new AC member Neil Bose from Australian Maritime College as well as a number of new representatives for the 26th AC. These included Dr. F. Mary Williams from NRC, Prof. Yang from SJTU, Prof. Weng from CSSRC, Dr. Cornell Thill from DST, Dr. Ranocchia from INSEAN, Dr. Kawakita from MHI, Dr. Yamakita from Meguro and Dr. Sasaki from NMRI.

New Chairman of the AC is Prof. Gerhard Strasser, Vienna Model Basin, and Vice-Chairman is Dr. S.W.Hong, MOERI.

One of the main items of this AC meeting was the finalisation of the Terms of Reference for the new technical committees. The AC had been working on these using a systematic procedure introduced at the previous AC meeting, and the final hand was laid on them after having overheard the presentations and discussions at the Full Conference.

The AC Working Group structure introduced during this period to monitor the work of the technical committees had appeared to be a great success and will be further strengthened during the 26th ITTC. The Working Group structure and membership is shown in the tables below. Some of the AC members have later been replaced by others. New members will select their appropriate Working Group.

WG1	WG2	WG3	WG4
Resistance	Propulsion	Manoeuvring	Ocean engineering
Uncertainty	Wake scaling	Seakeeping	VIV
CFD	Surface treatment	Stability in waves	Flow measurements
		High speed craft	

AC Working Group structure

The QSG will report directly to the AC Chairman.

WG1	WG2	WG3	WG4
Abrahamsson	Mehmel	Hubregtse	Beck
Strasser	Yossifov	Itou	Kinoshita
Djigas	Sasaki	Yamakita	Hong
Caprino	Soininen	Bayliss	Stansberg
Bose	Friesch	Sand	Yang
Toda	Lee	Koh	Yamaguchi
Hélou	Wilczynski	Weng	Williams
Thill	Pustoshny		
Ranocchia	Sevilla		
	Atlar		
	Kawakita		

AC Working Group membership

Member News

BVT Surface Fleet is the new name of ITTC member VT Shipbuilding and the new representative to ITTC is Crispin Fetherstonhaugh, who has replaced Paul Tucker in this capacity. Andres Cura-Hochbaum, Chairman of the Manoeuvring Committee, has been appointed full professor at the Technical University of Berlin. Bassin d'Essais des Carènes has appointed a new representative to ITTC and AC, Thierry Benne-Darses, Head of Technical Division. He replaces Christian Hélou in the AC.

News from Technical Committees

Resistance Committee

The committee has held its first meeting in Madrid on 14-15 January, 2009, and its second meeting in Pusan on 15-16 September, 2009. Dr. Stephen Turnock, University of Southampton was appointed secretary. The work proceeds well according to the TOR given to the committee. The worldwide campaign on resistance measurements for facility bias continues. However, there is some confusion regarding the apparent disappearance of some of the data. This is being investigated.

The committee has asked the AC for clarification regarding the form factor concept. This will be discussed at the next AC meeting.

The next committee meeting is planned for May 2010 at ECN, France.

Propulsion Committee

The first meeting of the 26th ITTC Propulsion Committee was held during 11-13 of March 2009 at MOERI (Maritime and Ocean Engineering Research Institute) in Daejeon, Korea.

Eight members were present and one member was absent. Dr. Scott Black was elected as the Committee Secretary unanimously. At this meeting, the Terms of Reference given to the Committee were reviewed in detail. For each task and subtask, a lead and other supporting members were assigned and the action items for the next meeting were arranged. The web server for the communication of information and materials among members was settled. There are tasks which require liaison with other related ITTC Committees including the Resistance Committee and Specialist Committee on Uncertainty Analysis. The Chairman will coordinate with these Committees in due course in order to minimise duplication of effort.

The next meeting of the Committee is scheduled for 4-6 November 2009 at BEC (Bassin d'Essais des Carènes, France, hosted by Dr. Didier Fréchou.

Manoeuvring Committee

The committee has held two meetings, 21-22 January, 2009, at INSEAN, Italy, and 24-25 September at Shanghai Jiao Tong University, China. Dr. Frans Quidvlieg, MARIN, was appointed secretary. The committee chairman Andrés Cura-Hochbaum has moved from HSVA to TU-Berlin, where he has taken up a position as full professor and head of the department "Dynamics of Maritime Systems". He will continue in his function as committee chairman. The committee work proceeds well. Minor clarifications of the TOR have been made with AC.

During and after the first meeting held in Rome in January 2009 discussions on how to work out the given tasks related with review-

ing and developing ITTC procedures on Uncertainty Analysis (UA) for manoeuvring tests have taken place. The result of this and some exchange with members of the Specialist Committee on UA lead to the conclusion that the MC will be able to work out these tasks. Work on several other tasks has been started already and was presented and discussed during the 2nd meeting in Shanghai in September.

Seakeeping Committee

The first meeting of the committee was held on 14-15 January, 2009, at TU Delft, The Netherlands. Dariusz Fathi, Marintek, Norway, was appointed secretary. The next meeting is scheduled for October, 2009, in Shanghai. The work according to the TOR proceeds well, and just minor clarifications have been needed. The committee has close contact with ISSC, and a member of the ITTC Seakeeping Committee has been elected to the ISSC Environment Committee. A joint meeting between the two committees is being considered.

The Seakeeping Committee is planning to arrange a workshop on V&V of non-linear seakeeping analysis in October, 2010, at Seoul National University, Korea. This is partly in response to the task given by the TOR for the committee. The announcement of the workshop is appended to this ITTC News.

Ocean Engineering Committee

The first committee meeting was held on 30-31 March, 2009, at Newcastle University, UK, and the second is scheduled for 22-23 October, 2009, at MUN, Canada. The work proceeds according to the TOR. The committee is planning a workshop on wave run-up and vortex shedding from circular cylinders to be held in St. Johns, Canada, in 2010. For the development of a procedure for DP testing, the committee is seeking consultancy with MARIN and Marintek to supplement the committee experience.

Specialist Committee on CFD in Marine Hydrodynamics

The first meeting was held 7-8 January, 2009, at INSEAN, Italy, the second 8-9 September, 2009, at IIHR, USA. T. Hino was appointed secretary. The work is proceeding well and will benefit from the next workshop on CFD in ship hydrodynamics (Gothenburg 2010). The

committee is working on a questionnaire on application of CFD for marine hydrodynamics to be diffused among the ITTC members. The committee is furthermore developing a practical guideline for for CFD use in marine applications.

Specialist Committee on Surface Treatment

The committee has held one or two meetings, and the third is planned for February, 2010. An extensive literature study is ongoing to collect relevant information on the tasks given to the committee. The committee is considering the possibility of developing a new standard or guideline for skin friction measurements.

Mr. Dazheng Wang, Newcastle University, has left the committee for personal reasons. The committee has suggested that Prof. Mehmet Atlar, also Newcastle University, steps into the committee. This will be discussed at the next EC meeting.

Specialist Committee on Scaling of Wake Field

The first meeting of Specialists Committee on Scaling of Wakes was held on February 10-11, 2009 at CHEIPAR – Canal De Experiencias Hidrodinamicas De El Pardo in Madrid – Spain, hosted by M.J. Bobo. All committee members attended the meeting. A.C. Takinaci was selected as secretary.

The committee decided to poll member organizations on their current wake scaling procedures. An initial draft questionnaire was developed and is currently under revision. A distribution list of more than 50 e-mail contact addresses (ITTC Members, Universities and other special organizations) has been established. Two model wake experiment results have been accepted as the test cases. These cases will be part of the questionnaire. The questionnaire form, e-mail contact address, and test cases will be made available by web site, http://www.gidb.itu.edu.tr/staff/takinaci/26ITTC_SCSW.html.

At the meeting, current ITTC Procedures with references to wake scaling were identified. The five existing procedures that refer to the wake-field scaling are:

- Procedure 7.5-02-03-03.1: Model-Scale Cavitation Test Cavitation Induced Pressure

- Procedure 7.5-02-03-03.3: Fluctuations Model Scale Experiments
- Procedure 7.5-02-03-03.5: Cavitation Induced Erosion on Propellers, Rudders and Appendages Model Scale Experiments
- Procedure 7.5-02-03-03.6: Podded Propulsor Model-Scale Cavitation Test
- Procedure 7.5-02-03-01.4: Performance, Propulsion 1978 ITTC Performance Prediction - section 2.4.3

These five ITTC Procedures will be reviewed.

At the meeting, it was discussed that

- Procedures 7.5-02-03 -03.1, -03.3, -03.5, and -03.6 refer to scaled wakes. Will recommend those procedures be revised to refer to the wake scaling procedures being developed.
- Procedure 7.5-02-03-01.4, section 2.4.3 the scaling of the average wake is presented and what is needed for that procedure. It was decided to leave this procedure intact and develop the procedure necessary to scale the wake distribution.

Future meeting dates and locations were also decided:

- 2nd Meeting will be hosted by C. Johannsen at HSVA in Hamburg, GERMANY, the week of 26 October 2009
- 3rd Meeting will be in late June to early July 2010, hosted by J. Wang at MARIC in Shanghai, CHINA.
- 4th Meeting most likely in Jan/Feb 2011 location TBD.

Specialist Committee on High Speed Craft

A preliminary meeting was held at the 25th Conference, and the first ordinary meeting on 5-6 May, 2009, at the Brodarski Institute, Croatia. Dr. G. Thomas was appointed secretary. The second meeting is scheduled for 8-9 October, 2009, in connection with the FAST09 conference in Athens, Greece. A clarification of the TOR has been made, and the committee work proceeds well. The committee has

established a website for exchange of information and data.

Specialist Committee on Stability in Waves

The committee held its first meeting on 18-19 February, 2009, at Texas A&M, USA, and the second is planned for 4-6 November in Genova, Italy. Minor clarifications have been made of the TOR, and the work proceeds accordingly. The benchmark testing of numerical codes for the prediction of parametric rolling is being planned. It is likely that it will not be a blind test as some of the participants are likely to know the results of the physical model tests being used as reference.

Specialist Committee on Detailed Flow Measurements

The committee held its first meeting on 25-26 February, 2009, at INSEAN, Italy. The second meeting was held in conjunction with the attendance of the AMT'09 conference organised by the European Network of Excellence Hydro-Testing Alliance (HTA) in Nantes, France, on 1-2 September, 2009. There is a close relationship between the committee tasks and some of the activities of HTA, so it has been decided to work closely together on the subjects of state-of-the-art and state-of-practice reviews, guidelines for PIV applications, and experimental benchmark for SPIV applications. Sandy Day, University of Strathclyde, UK, was appointed secretary of the committee.

Specialist Committee on Vortex Induced Vibrations

The first meeting of the committee is planned to take place in Rome, Italy, on 12-13 November, 2009. Little progress has been made so far.

Quality Systems Group

The second meeting of the group was held in Annapolis, USA, on 9-10 July, 2009. L. Benedetti, INSEAN, Italy, has been appointed secretary of the group. WORD-files of the procedures to be updated by technical committees have been distributed to the committee chairmen along with the guidelines for procedures and reports to the conference. The work has started to prepare the Wiki-dictionary. Likewise, the definition of benchmark data has started and it is being investigated how benchmark data shall be stored and made accessible to the members.

ITTC website

The list of ITTC members and AC members has been updated with the latest known data. As member representatives change rather frequently and information about such changes is not always conveyed to the ITTC secretary there may still be unintentional mistakes in the lists. Members are advised to inform the ITTC secretary if such mistakes are found.

Proceedings from all the earlier ITTC conferences are now available on the website.

The ITTC website address is <http://itc.sname.org>.

1st Announcement and Call for Papers

Background

The International Towing Tank Conference (ITTC) is a voluntary association of worldwide organisations that have responsibility for the prediction of hydrodynamic performance of ships and marine installations based on the results of physical and numerical modelling.

The seakeeping analysis of ships is an essential element of the design process. As ships are getting bigger and faster than ever, the motion response and structural loads in waves become more important to the designer and operator. One of the aims of the ITTC is to develop standards and best practices for model testing and simulation that can be used to support seakeeping analysis. With the availability of non-linear time domain seakeeping analysis tools increasing, verification and validation (V&V) of these prediction tools is becoming more important. Thus, the need for a robust V&V procedure is required. The purpose of this workshop is to provide the means to discuss, by way of a comparative study, the approaches that are adopted in V&V activities of non-linear ship motion simulation software. In preparation for the workshop, participants will be provided with a dataset of benchmark test cases from which their V&V activities of their non-linear ship motion prediction methods can be understood. The ship geometry and the specific test conditions to be used for the workshop will be made available to the participants; it will also be possible to download a sample of the test results as they become available. The full set of test data including free test results will be made available for comparison and discussion at the workshop.

This workshop has been initiated by 26th ITTC Seakeeping Committee with a view to using the workshop to provide guidance on the development of procedures for verification and validation activities of linear and non-linear seakeeping codes.

Date and venue

October 19-21, 2010

Seoul National University, Seoul, Korea

Scope

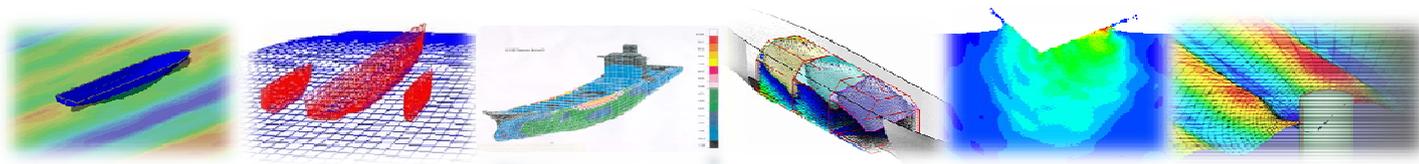
1. Comparative Session

Comparative study on the two selected models which will be announced later.

More attention will be given to the time-domain analysis, but not limited.

2. General Session

- Physics in motion responses of ships and offshore structures
- Frequency- and time-domain motion analyses
- Nonlinear motion analysis
- Wave-induced structural loads
- Nonlinear loads including sloshing, slamming, and springing
- Hull hydroelasticity including springing and whipping
- Motion control
- Seakeeping experiment
- CFD for seakeeping analysis



Call for papers

Scientists and engineers working on the related research areas are invited to submit abstracts by electronically at the website, <http://mhl.snu.ac.kr/itc2010> or send to yhwankim@snu.ac.kr. The abstract should be written in English and no more than 2 pages. The abstract should clearly state the purpose, procedure, results and conclusions of the full paper. Authors will be notified of preliminary acceptance within the specified deadline.

Technical Committee (tentative)

Beck, R. (Univ. of Michigan, USA)
Chen, X.B. (BV, France)
Choi, H.S. (Seoul National University, Korea)
Crossland, P. (Chair of ITTC Seakeeping Committee, QinetiQ, UK)
Fathi, D. (MARINTEK, Norway)
Faltinsen, O.M. (Trondheim University, Norway)
Hayden, D. (NSWC-CD, USA)
Hermanski, G. (National Research Council, Canada)
Huijsman, R.H.M. (Delft University, the Netherlands)
Kashiwagi, M. (Osaka University, Japan)
Keuning, J.A. (Delft University of Technology, The Netherlands)
Kim, Y. (Workshop Host, Seoul National University, Korea)
Kishev, R. (Bulgarian Ship Hydrodynamics Centre, Bulgaria)
Matsumoto, K. (Universal Shipbuilding Corporation, Japan)
Miao, Q.A. (China Ship Scientific Research Center, China)
Purtell, P. (ONR, USA)

Organizers

ITTC, Seakeeping Committee
LRET-Funded Research Center at Seoul National University (LRETC)

Sponsors

Seoul National University (SNU)
The Society of Naval Architects of Korea (SNAK)

Important Dates

Due date for paper abstract submission: October 15, 2009
Acceptance notice: November 30, 2009
Due date for paper submission: May 31, 2010
Due date for early registration: May 31, 2010
Due date for data submission for comparative study: June 30, 2010
Workshop: October 19-21, 2010

Contact Information

Any question can be sent to the workshop host, Prof. Yonghwan Kim of Seoul National University (yhwankim@snu.ac.kr, tel:82-2-880-9226).

