

Table of Contents

Volume II

The Specialist Committee on Computational Fluid Dynamics	
1. Introduction	337
2. Questionnaire	338
3. Physical Modelling	340
4. Numerical Modelling	345
5. Trendsin CFD for Naval Architechture Applications	354
6. Recommendations	368
7. References	368
The Specialist Committee on Scaling of Wake Field	379
1. Overview	379
2. Background	381
3. Review of Existing Wake Scaling Methods	384
4. Viscous Numerical Simulation of the Full-Scale Wake Field by Rans	391
5. Prediction of Ship Wake Pattern from Geosim Studies	398
6. Survey Results	401
7. Comparison of Methods	402
8. Experimental Methods for Full-Scale Wake Simulation	408
9. Recommendations to the Conference	412
10. Nomenclature	413
11. References & Bibliography	413
The Specialist Committee on Surface Treatment	419
1. Introduction	419
2. Test Procedure Recommendation	473
3. ITTC Rough Skin Friction Database	475
The Specialist Committee on High Speed Craft	483
1. Introduction	483
2. Review of State-of-the-Art	484
3. Benchmark Data	507
4. Procedures	508
5. Symbols	508
6. Conclusions	509
7. References	510



The S	pecialist Committee on Stability in Waves	523
1.	Introduction	523
2.	State of the Art Review	524
3.	Numerical Prediction of Capsize	528
	Procedure for Predicting the Capsizing of a Damaged Ship in Irregular Beam	533
	Seas	
5.	Parametric Roll Bench Marking Study	534
	Review of Numerical Techniques for Assessing Survival Time of Damaged	542
	Passenger Ships	
7.	Roll Damping Procedure	548
8.	Imo Liaison	548
9.	Conclusions and Recommendations	549
The S	pecialist Committee on Vortex Induced Vibrations	561
1.	Report from the Committee	561
2.	Review	562
3.	Technical Conclusions	569
4.	References	571
The S	pecialist Committee on Detailed Flow Measurements	575
1.	Introduction	575
2.	Scope	575
3.	Overview	575
4.	State-of-the-Art Review	578
5.	Current and Emerging Detailed Flow Measurement Techniques	591
6.	Current and Future Work	603
7.	Conclusions	614
8.	Recommendations	615
9.	References	615
The Q	Quality Systems Group	627
1.	General	628
2.	Tasks Performed	628
3.	Conclusions	634
4.	Recommendations to the Conference	635
5.	Recommendations for Future Work	635
6.	Appendix I	636
7.	Appendix II	637



Apper	ndix 1: Tasks and Structure of the 27 th ITTC Technical Committees and	645
	Groups	
1.	Structure of Technical Committees	645
2.	Terms of Reference for the General and Specialist Technical Committees and	645
	Groups	
3.	Mechanism for Identifying New Specialist Technical Committees	646
4.	Proposed Structure of the Technical Committees and Group for 27 th ITTC	646
5.	Tasks of the Technical Committees and Groups of the 27 th ITTC	647
Apper	ndix 2: Rules of the International Towing Tank Conference (adopted by the 25 th ITTC)	659
1.	Description	659
2.	Aims	659
3.	Activities	659
	Membership	660
	Full Conference	660
6.	Executive Committee	661
7.	Advisory Council	662
8.	Technical Committees	663
9.	Groups	665
	. Serving in More Than One Capacity	665
	. ITTC Secretary	665
	. Management of ITTC Funds	666
	. The Conference	667
	. Communications	668
	. Amex A	669
16	. Amex B	670
Annei	ndix 3: List of Member Organizations	675