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12th **International Ship Stability Workshop**

Proceedings
Edited by Vadim Belenky

Hosted by
*David Taylor Model Basin (NSWC/CD) and
SNAME Chesapeake Section*

12-15 June 2011 - Washington, D.C. USA

This publication contains the papers selected for the 12th International Ship Stability Workshop held on 12 to 15 June, 2011 at Hotel Monaco in Alexandria, Virginia.

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Preface

The 12th International Ship Stability Workshop is this year's event, in a longstanding series of international technical meetings in the field of stability of ships and ocean vehicles. This series consists of the STAB Conferences, which are held every three years (since 1975), and the International Ship Stability Workshops (ISSW), which are held in the years in between the conferences.

While the STAB Conferences cover a wide large range of issues related to stability of ships and ocean vehicles, the workshops are typically more focused on particular subjects that are especially important and are indicative of recent developments in the field. Recent interests are related to the development of new regulations, the appearance of new types of ships and predicting their behavior, current research challenges, stability accidents, and others. The format of the workshop entails in-depth discussions in an informal manner, resulting in an ideal environment for participants who are interested in current developments and provides an opportunity to ask questions on topics "you've always wanted to know."

The first STAB conference took place in Glasgow in 1975. Subsequent conferences were held in Tokyo, Japan (1982), Gdansk, Poland (1986), Naples, Italy (1990), Melbourne, Florida, USA (1994), Varna, Bulgaria (1997), Launceston, Tasmania, Australia (2000), Madrid, Spain (2003), Rio de Janeiro, Brazil (2006), and St. Petersburg, Russia (2009).

Previous International Ship Stability Workshops were held in Glasgow, UK (1995), Osaka, Japan (1996), Crete, Greece (1997), St. John's, Newfoundland, Canada (1998), Trieste, Italy (2001), New York, USA (2002), Shanghai, China (2004), Istanbul, Turkey (2005), Hamburg, Germany (2007), Daejeon, Korea (2008), Wageningen, the Netherlands (2010).

The 12th workshop is the third time, since 1975, that an event from this series has been held in the U.S. The workshop was sponsored by generous contributions from the U.S. Office of Naval Research (ONR), under the direction of Dr. L. Patrick Purtell, and the Society of Naval Architects and Marine Engineers (SNAME). Additional support was provided by the David Taylor Model Basin (NSWC/CD) and the SNAME Chesapeake Section.

The organization of this workshop heavily relied on the active role of the session organizers: P. Alman, H. Bruhns, M. J. Dipper, A. Francescutto, A. Jasionowski, J. O. de Kat, T. Katayama, M. Neves, A. Papanikolaou, L. Peres Rojas, J. Person, A. Peters, W. S Peters, A. M. Reed, K. Spyrou, A. Troesch, N. Umeda, D. Vassalos, F. van Walree. The website for the workshop was supported by J. Lin.

The next STAB conference will take place in Athens, Greece in September 2012.

Vadim Belenky

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