

3RD ENC STANDARDS MAINTENANCE WORKING GROUP (ENCWG) MEETING

Wollongong, Australia, 16 - 18 April

The Australian Hydrographic Office hosted the 3rd ENC Standards Maintenance Working Group (ENCWG) meeting in Wollongong, Australia from 16 to 18 April 2018.

Twenty three participants from 17 Member States and 17 participants from stakeholder organizations attended the meetings. Assistant Director Anthony Pharaoh represented the IHO Secretariat.



3rd ENC Working Group Meeting (Wollongong, Australia)

The main topics of discussion included; a report by a sub group on ENC display issues in ECDIS; the inclusion of High Density Bathymetry in ENCs; issues identified with the S-52 ECDIS Chart 1 dataset; the use of CATZOC in ENCs; the display of quality information in ENCs; the promulgation of T&P information and the possible extension to S-63 (IHO Data Protection Scheme) to make provision for authentication of ENC exchange set files. Presentations were also provided on the display of active submarine volcanos, the use of large format monitors for ECDIS and ECDIS S-Mode specification, currently being developed by an IMO Correspondence Group.

The meeting reviewed the status of documents for which the ENCWG is responsible. A proposal for a machine readable (e.g. xml) version of S-58 (Recommended ENC Validation Checks) was discussed. The Data Quality Working Group submitted a proposal for an encoding bulletin on the encoding of quality of bathymetric data. Proposals were also considered for the inclusion of new anchoring symbol instructions in S-52 and a few issues were identified with the new Edition 3.0.2 of S-64 (IHO Test Data Sets for ECDIS).

The date and venue of the next ENCWG meeting are still to be decided.



3RD S-100 WORKING GROUP (S-100WG) MEETING Singapore, 10-13 April

The Maritime and Port Authority of Singapore (MPA) hosted the 3rd S-100 Working Group meeting from 10 to 13 April 2018 in Singapore. Forty eight participants from 22 Member States and 13 Stakeholder organizations attended the meetings. Assistant Director Anthony Pharaoh and Technical Standards Support Officer Jeff Wootton represented the IHO Secretariat.



Participants to the 3rd S-100 Working Group Meeting.

The primary focus of the meeting was to finalise proposals for the new Edition 4.0.0 of the S-100 standard. The new edition will make provisions for new bSplines geometry types, a new (Lua) scripting language for conditional symbology procedures, a specification for data streaming and a generic data protection and authentication mechanisms which are now available for the definition of all S-100 based Product Specifications. Updates to the Part 10c (HDF5 data encoding format) of the S-100 document were also approved by the meeting. As Edition 4.0.0 will not be completed before the 10th Hydrographic Services and Standards Committee (HSSC) meeting, the WG decided to request endorsement via HSSC Circular Letter, after which it will be circulated for Member States final approval.

During the meeting, breakout groups were convened to complete a new Edition 2.0.0 of the S-102 (Bathymetric Surface) Product Specification and to work on the new generic data protection and authentication section that will be included in S-100 Edition 4.0.0.

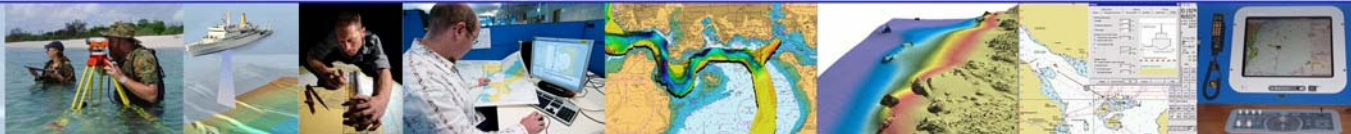
Progress reports were provided on the S-121 *Maritime Limits and Boundaries*, S-129 *Under keel Clearance Management* and the S-101 *Electronic Nautical Chart - ENC* Product Specifications.



Reports were also provided by the Data Quality Working Group on a proposed methodology for the display of quality information and the World-Wide Navigational Warning Service Sub-Committee on the S-124 (Navigational Warnings) Product Specification.

Following an action resulting from the 2nd S-100WG meeting, the IHO Secretariat reported that the Maritime Resource Names (MRN) domain urn:mrn:iho: had been assigned to the IHO and is now registered within the Marine Resource Name Registry of IALA. This enables registration of any relevant entity of the IHO domain as element of this Registry.

The next S-100WG meeting is scheduled to take place in Aalborg, Denmark during the week starting 4 March 2019.



18TH MEETING OF THE NORTH INDIAN OCEAN
HYDROGRAPHIC COMMISSION

Goa, India, 9-12 April

Contribution to the IHO Work Programme 2018

Task 3.2.1.8	Attendance of the North Indian Ocean Hydrographic Commission Conference
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The 18th meeting of the North Indian Ocean Hydrographic Commission (NIOHC) was held in Goa, India, from 9 to 12 April, under the chairmanship of Vice-Admiral Vinay Badhwar, Chief Hydrographer of India. Participants were welcomed at the opening ceremony by Vice Admiral Girish Luthra, Flag Officer Commander-in-Chief Western Naval Command of India.

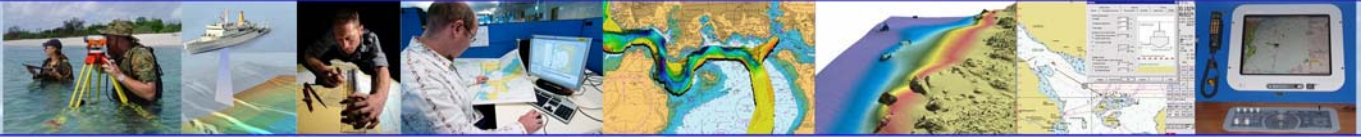


NIOHC Member State representatives from Bangladesh, Egypt, India, Indonesia, Myanmar, Saudi Arabia, Sri Lanka, Thailand and the United Kingdom (UK) attended the meeting together with representatives of Associate Members from France, Mauritius and Oman. The Russian Federation was represented as an Observer State. A representative of the Intergovernmental Oceanographic Commission of UNESCO and several industry stakeholders also attended as invited observers. Director Mustafa Iptes and Assistant Director David Wyatt represented the IHO Secretariat.



Director Iptes addressing the opening ceremony of the NIOHC18

The NIOHC received reports from Member States, Associate Member States and the IHO Secretariat as well as summary reports on the first meeting of the IHO Council and last meetings of the IHO Hydrographic Services and Standards Committee and the Inter Regional Coordination Committee. The meeting also received reports on progress and issues related to the work of the IHO Marine Spatial Data Infrastructures Working Group, relevant activities that had taken place in the International Maritime Organization, including relevant outcomes of the 5th



meeting of the IMO Sub-Committee on Navigation, Communications, and Search and Rescue (NCSR 5) and an up-date from the NAVAREA VIII coordinator.

A comprehensive CB plan was developed for submission to the 16th meeting of the IHO Capacity Building Sub-Committee (CBSC16).

The meeting included a number of presentations from industry representatives. These highlighted technologies and training opportunities available to the region. Industry representatives were keen to emphasise their willingness to engage with the NIOHC and its members to assist the development of hydrographic and cartographic capability within the region.

The UK, the current Vice-Chair of the NIOHC, will assume the Chair of the NIOHC within the next four months in accordance with the Statutes of the Commission. The NIOHC elected Sri Lanka to assume the Vice-Chair position for the next period. Oman indicated they would investigate the hosting of the 19th meeting of the Commission in Muscat, Oman, with proposed dates being 25-28 March 2019. It was agreed to hold an INT Chart Coordination Working Group meeting prior to NIOHC19.



NIOHC18 in plenary session



NEW HYDROGRAPHER OF BRAZIL



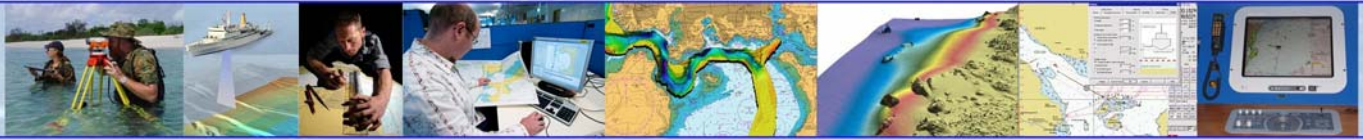
Vice Admiral ANTONIO FERNANDO GARCEZ FARIA

1. PERSONAL DATA

Date of Birth	06/20/1962
Place of Birth Marital Status	Rio de Janeiro
Marital Status	Married
Spouse's Name	Cláudia Valéria Pereira Sardinha
Daughter	Milena

2. CAREER

Midshipman	12/13/1983
Ensign	08/31/1984
Lieutenant (Junior Grade)	08/31/1986
Lieutenant	08/31/1989
Lieutenant Commander	08/31/1995
Commander	04/30/2001
Captain	12/25/2006
Rear Admiral	03/31/2012
Vice Admiral	03/31/2016



3. COMMISSIONS

- Directorate of Hydrography and Navigation (Head) Directorate of Education (Head)
- Naval War College (Director)
- Naval General Staff (Deputy Chief of Budget and Planning) Office of the Commander of the Navy (Deputy Chief)
- Directorate of Hydrography and Navigation (Deputy Director Interim)
- Hydrographic Navy Center (Director)
- Third Naval District (Chief of Staff)
- Oceanographic Ship "Antares" (Commanding Officer)
- Brazilian Naval Commission in Washington (Student of the Course: "Operational Oceanography")
- Oceanographic Support Ship "Barão de Teffé"
- Hydrographic Ship "Canopus"
- Ship-School "Custódio de Melo" (Midshipman)

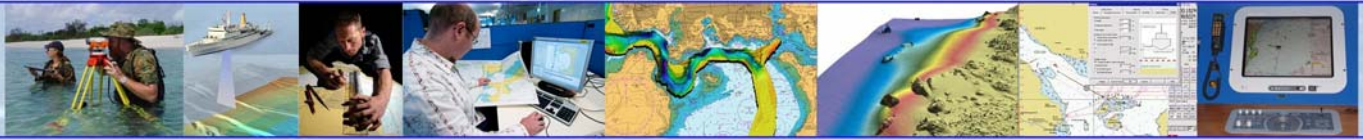
4. COURSES

- Naval Academy
- Hydrography for Officers (International Hydrographic Organization CAT A Course)
- Masters of Sciences in "Operational Oceanography" - Naval Postgraduate School (EUA)
- Philosophy Doctor in "Physical Oceanography" - Naval Postgraduate School (EUA)
- Staff to Senior Officers - Naval War College
- Politics and Maritime Strategy - Naval War College



5. AWARDS

- Defense Merit Order (Degree of Officer)
- Naval Merit Order (Degree of “Comendador”) Army Merit Order (Degree of “Comendador”)
- Air Force Merit Order (Degree of “Comendador”) Military Justice Merit Order (Degree of “Alta Distinção”) Victory Medal
- Marechal Cordeiro de Farias Merit Medal Military Gold Medal (Platinum Ribbon) Peacemaker Medal
- Santos Dumont Merit Medal
- Tamandaré Merit Medal
- Commander Vital de Oliveira Award Medal
- Sea Service Merit Medal (Two Anchors)
- Cartographic Merit Order (Degree of “Comendador”)



NEW HYDROGRAPHER OF JAPAN



Vice Admiral Yukihiro KATO (Ph.D)

1. Date of Birth: 3rd October 1961

2. Education:

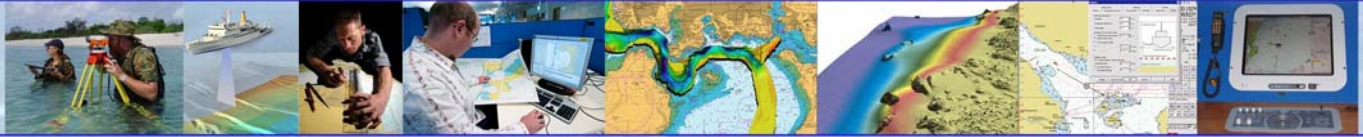
PhD Science, Kyushu University in March 1997 Master Degree (Geology), Graduate School of the Hokkaido University in March 1986

3. Assignment History:

- April 2018: Chief Hydrographer of Japan
- April 2016: Director of Technology Planning and International Affairs Division, JHOD (Hydrographic and Oceanographic Department, Japan Coast Guard)
- April 2014: Chief of Owase Coast Guard Office, 4th Regional Coast Guard Headquarters
- April 2013: Director of Oceanographic Data and Information Division,
- JHOD April 2010: Director of Hydrographic Survey Division, JHOD April 2009: Director of Chart and Navigational Information Division,
- JHOD April 2007: Director of Continental Shelf Surveys Office, JHOD April 1987: Joined Hydrographic Department of Japan Maritime Safety
- Agency (Predecessor of JHOD)

4. Interests / Hobby:

Walking



NEW HYDROGRAPHER OF MALAYSIA



First Admiral Hanafiah BIN HASSAN

QUALIFICATIONS/EDUCATION

- 1992 : Certificate of Hydrographic Surveyor Category B (Hydrographic Department Japan Maritime Safety Agency, Tokyo)
- 1998 : Certificate of Hydrographic Surveyor Category A (National Hydrographic School, Goa India)
- 2002 : International Oceanographic Data Exchange, Japan
- 2003 : Diploma (Defense Strategic) Universiti Malaya
- 2004 : International Oceanographic Data Exchange (Ocean Teacher), Belgium
- 2013 : Master (Defence Strategic), Defence College
- 2016 : Defence Studies, National Defence University Beijing

WORK HISTORY

- Jan 1989 - Feb 1990 : Navigation & Executive Officer, KD KELEWANG
- Feb 1990 – Mar 1991 : Welfare Officer, MWL 1
- Mar 1991 – Jan 1995 : Field Surveying Officer, KD MUTIARA
- Jan 1995 – Feb 1997 : Exchange Officer, RNZN



Feb 1997 – Feb 1999 : Staff Officer 3, RMNHD
Feb 1999 – Jan 2000 : Staff Officer 2, RMNHD
Jan 2000 – Dec 2001 : Senior Hydrographer, KD PERANTAU
Dec 2001 – Jan 2003 : Executive Officer, KD PERANTAU
Jan 2003 – Jan 2004 : Staff College (HIGATE)
Jan 2004 – Apr 2005 : Staff Officer 2 Planning
Apr 2005 – Aug 2006 : Staff Officer 1 Oceanography
Aug 2006 – Jan 2008 : Staff Officer 1 Hydrography
Jan 2008 – Jan 2010 : Commanding Officer, KD MUTIARA
Jan 2010 – Jan 2011 : Defence College
Jan 2011 – Jul 2011 : Director Of Hydrography
Jul 2011 – Apr 2018 : Senior Director of Hydrography
Apr 2018 - Now: Director General of NHC

PUBLICATIONS & PAPERS

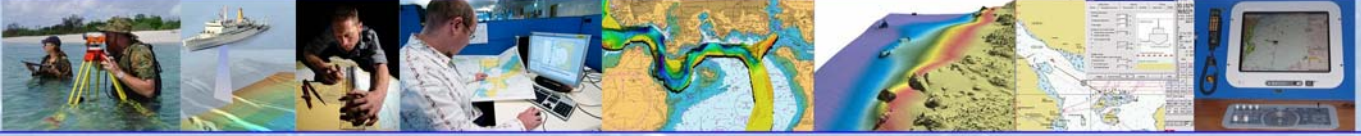
Oct 2004 : The Electronic Navigational Chart (ENC) - It's Impact on Surveying, Charting and Safety of Shipping at Sea. North Indian ENC Symposium 2002. New Delhi, India.
Apr 2005 : Privatisation Concept for Hydrographic Ships. Special Paper to Armed Forces Council.

LANGUAGES

Melayu : Excellent (Writing, Speaking and Listening)
English : Good (Writing, Speaking and Listening)

ACCREDITATION

1999 : Excellent Service Award
2004 : Excellent Service Award



ORDERS, DECORATIONS & MEDALS

- Warrior of Military Service (2012)
- Companion of the Crown of Selangor (2012)
- Officer of Military Service (2007)
- Malaysian Service Medal (2006)



NEW HYDROGRAPHER OF MAURITIUS



Commander, IN Rahul Hitesh Bhatt

1. **Details of Family**

- (a) **Name of Spouse** : Uttara Bhatt
- (b) **Children** : Siddhant Bhatt (08 Yrs)
Saaransh Bhatt (03 Yrs)

2. **Education Qualification** :

<u>Academic Degree / Diploma Certificate</u>	<u>Main Field of Study</u>	<u>From</u>	<u>To</u>	<u>Name and Location of Institution of Learning</u>
Bachelor of Sciences	Naval Sciences	Jul 2001	Jun 2004	Naval Academy, Goa / Goa University
Cat 'B' course	Hydrography	Jun 2006	Dec 2006	National Institute of Hydrography
Master of Science / CAT 'A' certification recognised by the International Hydrographic Organisation (IHO)	Hydrography	Mar 2011	Mar 2012	National Institute of Hydrography / Goa University



3. Professional Experience:

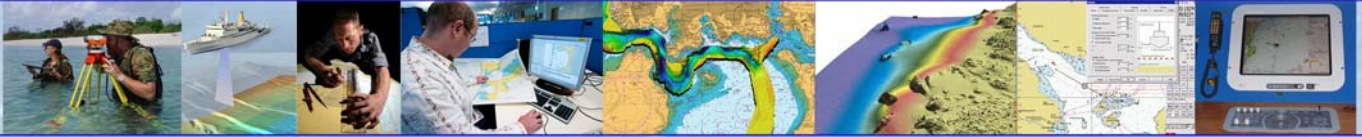
<u>Employee / Name of Organization</u>	<u>From till date</u>	<u>Title of Post</u>	<u>Nature of duties</u>
IN Ship Sarvekshak	Dec 06 – Jul 09	Watch Keeping Officer	Assistant Hydrographer and Navigating Officer, Communications Officer and other miscellaneous duties
National Defence Academy	Jul 09-Mar 11	Divisional Officer	Training Officer-cadets in Naval subjects and in their overall development
National Institute of Hydrography	Mar 11 – Mar 12	Student Officer	Student Officer
IN Ship Jamuna	Mar – Sep 12	Watch Keeping Officer	Senior Hydrographic Surveyor
IN Ship Makar	Sep 12 – Nov 14	Watch Keeping Officer	Senior Hydrographic Surveyor
IN Ship Makar	Nov 14-Oct 16	Executive Officer	Second in Command of ship, Logistic Officer duties and other miscellaneous duties
National Institute of Hydrography	Oct 16	Nov 17	Imparting instructions on Hydrographic Practices
Mauritius Hydrographic Unit	Dec 17	Till Date	Officer-in-Charge

4. Achievements and Innovations.

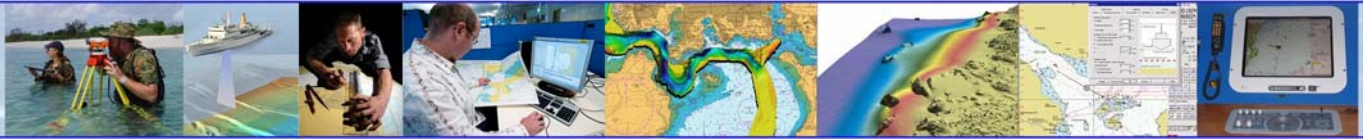
(a) As a commissioning crew of the first of its class twin Hull catamaran Ship INS Makar, I was involved in commissioning and acceptance trials of advance survey equipment like Autonomous Underwater Vehicle (AUV), hull mounted Sub Bottom Profiler, magnetometer, ship fitted Multibeam Echo Sounding system etc.

(b) Preparation and documentation of detailed Standard Operating Procedures of all the Survey Equipment (including advanced survey equipment suite) and software's supplied to the ship

(c) As the executive officer of the INS Makar, numerous modifications were undertaken for improvement in the design aspects of the ship towards enhancing efficiency, safety and habitability of the ship's crew.



(d) As an Instructor at NIH, I was involved in preparation of documents which covered theory, concepts and operational procedures of the state of art equipment like Autonomous Under Water Vehicle and Remotely Operated Vehicle. In addition a hand book on Global Navigation Satellite System and Side Scan Sonar was also prepared.



NEW HYDROGRAPHER OF URUGUAY



Captain Pablo A. TABAREZ

Captain Pablo Andrés TABAREZ is currently serving as Head of the Oceanographic, Hydrographic and Meteorological Office of the Navy (SOHMA).

He joined the national Navy of Uruguay in 1987, graduating from the Naval Academy in 1991.

He served as Junior Officer in the Naval Fusiliers Corps, Oceanographic, Hydrographic and Meteorological Office of the Navy (on many occasions as Head of Division, Head of Department, Deputy Chief and Consultant). He also serviced on board the scientific vessel “Oyarvide”, Maritime Traffic Directorate, Coordinating Office for the project of the Continental Shelf; he was a military Observer in the Democratic Republic of Congo.

He studied the specialization of Hydrography at the International Maritime Academy of Trieste (Italy) followed by the Hydrographic Data Management Course in the same Academy.

He was based in the Oceanographic, Hydrographic and Meteorological Office of the Navy (SOHMA), carrying out hydro-oceanographic surveys on the Río Uruguay, Río de la Plata, Río Negro, and the Atlantic Ocean and in the waters of the Antarctic Peninsula.

On board the vessel “Oyarvide” he carried out, amongst other tasks, the required hydrographic surveys to collect basic information to be submitted to the United Nations Commission, for the project related to the extension of the Continental Shelf.

He has been a member of national and international Commissions, representing the SOHMA, the national Navy and the national Defence Ministry as a consultant and delegate. He is still actively involved in them.



OBITUARY



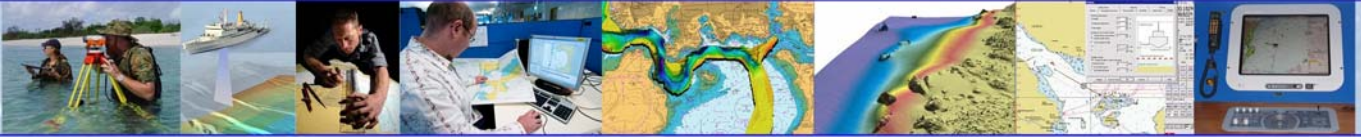
Commander Kulwant Bir Singh Wadhwa was commissioned as a Sub-Lieutenant in the Indian Navy in October 1959 and underwent the Hydrographic Surveying Officers Course at the Hydrographic School in December 1961. During his 24 year-long Professional Naval Career, Cdr. Wadhwa participated in several challenging Hydrographic Surveys, off either coast of India and outlying Islands, first as Officer-in-charge of the Survey Teams on board IN surveying ships Sutlej, Jamuna and Investigator, and subsequently, as Charge Hydrographer, when he was in Command of IN Surveying ship Jamuna from 1979-80.

Cdr. Wadhwa was heading the Naval Hydrographic School at Kochi since 1977, when the School was relocated to the present location at Vasco Da Gamma Goa, where Cdr. Wadhwa continued to head the Hydrographic School, now known as National Institute of Hydrography (NIH). It was due to the dedicated efforts and professional approach of Cdr. Wadhwa and his successors that the Hydrographic School has risen to its present stature. The foundation of UNDP Assistance for Augmentation of Training facilities in India was laid during his tenure as Officer In-Charge of the Hydrographic School.

Cdr. Wadhwa also served on the staff of Chief Hydrographer to the Government of India twice, between 1967-68 and later during 1973-76, where he was coordinating and overseeing the issuance of Maritime Safety Services and Notices to Mariners in addition to being responsible for setting up of QA/QC processes of Hydrographic Data acquired by the surveying ships prior to its incorporation in Indian Hydrographic Charts.

Post premature retirement from active services in 1982, Cdr. Wadhwa briefly sailed as a Master Mariner before returning to Delhi where he worked as Manager in the most reputed Indian Offshore Survey Company Elcome Surveys for nearly a decade, before finally calling it a day as an active Hydrographer.

Cdr. Wadhwa was married to late Mrs. Surjit Wadhwa and is survived by his daughter Mrs. Pamita Oberoi (pamitakauroberoi@yahoo.in)



The Hydrographic community will always remember and recall Cdr. Wadhera as a professional par excellence, and a gentleman to the core, who was always willing to contribute to professional and social cause. His contribution to the growth of the Hydrographic profession in India during his various appointments with the Indian Hydrographic Surveying service in the Indian Navy shall always be remembered.