

MYANMAR NAVAL HYDROGRAPHIC CENTRE (MNHC)



NATIONAL REPORT

14th NORTH INDIAN OCEAN HYDROGRAPHIC COMMISSION CONFERENCE

HYDROGRAPHIC DEPARTMENT, ROYAL THAI NAVY-HDRTN

BANGKOK, THAILAND

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1. MNHC's 2013 International Relationship:

In year 2013, the distinct Hydrographic activity of MNHC was the hosting 13th NIOHC meeting at Park Royal Hotel, Yangon, Myanmar as very first time in the whole period of being NIOHC membership. This cooperative event promotes good friendship, working relationship and cooperation in regional and global Hydrographic community. The discussion on capacity building requirement was highlighted during 13th meeting, thus a NIOHC capacity building program was considered for MNHC. MNHC received an indication of a training program from NIOHC's CB project; Caris S-57 Composer training which will be held at Yangon in March 2014.



2. Hydrographic Surveys Activities

2.1 **Hydrographic Surveys:** During 2013, MNHC emphasized more on developing harbor areas. There are two harbor developing areas; Kyauk Phyu Deep Sea Port at Arkan State located on west coast of country and Dewai Port which is located at lower part of country. Both areas have existing paper charts since more than 20 years ago and those were produced from MNHC's previous days' surveys. MNHC made decision to carry out resurvey at Kyauk Phyu deep sea port area where MNHC's 24a and 24b nautical paper charts are existed. This survey will be later promulgated as new edition of those existing paper charts and subsequently to be ENC's.

No	Year of Survey	Type of Survey	Area	Remark
1.	2013-2014	Harbor Approach/ Order 1a	MNHC's 24a	For New Edition
2.	2013-2014	Harbor Approach/ Order 1a	MNHC's 24b	For New Edition

2.2 **Procurements in 2013:** Myanmar Naval Hydrographic Centre-MNHC has been making successful procurements for Hydrographic Equipments in year 2013. The list of equipments procured were as follow-

- (a) LEICA RTK GPS Receivers (9) – Nos
- (b) Bathy-500 MF Single Beam Survey Echo Sounder – (2) Sets
- (c) Dkart Office Software – (5) Licenses
- (d) CONTEX HD A0 size Scanner – (1) set
- (e) Navi-sailor 1400 Dual ECDIS for HO use- (1) set
- (f) Current Meters – (2) Nos
- (g) ATG – (2) Nos
- (h) Shallow water used side scan sonar (1) No

- 2.3 **New Survey Ships:** Coastal/offshore survey vessel “Innya” and Coastal survey vessel hull No (115) have been recently reorganized and equipped as survey vessels and came into hydrographic service in early 2013. Both vessels are conducting hydrographic surveys in Kyauk Phyu Area, west coast of the country.

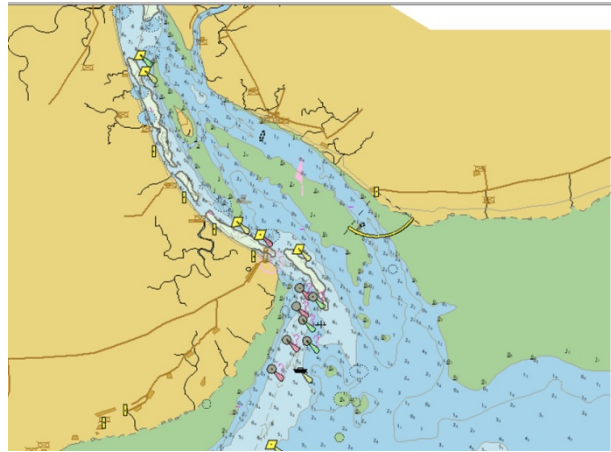


- 2.4 **Difficulty encountered:** MNHC is still at the developing stage and it hasn't had the multi beam facility, thus the difficulty occurs for 100% sea floor coverage and the achievement of special order (Sp-44).

3. **New Charts and New Editions**

- 3.1 **New Charts:** No new chart was schemed and promulgated in year 2013 as MNHC had many other activities such as IR, ENC production, New Edition of existing charts which were spotted by high demands. Thus MNHC has put more efforts on those activities and no new paper chart was produced for year 2013.
- 3.2 **Update Paper Charts:** MNHC paper chart number 24a and 24b are to be updated into new editions.
- 3.3 **ENCs:** In 2012, MNHC had an opportunity to send an officer to UKHO for attending specialism in marine cartography and ENC production course which was arranged by the sincere well attention of Nippon Foundation and IHO; this opportunity was taken as a reward for MNHC given by HIO in year 2012. As the benefit of this training, MNHC could pay more attention on ENC production in 2013. MNHC has procured necessary instruments and software for ENC production. Though the process of ENC production was highlighted and come into force, still more trainings for ENC production are required for MNHC to upgrade its human resources and later to be the development of organization itself.

MNHC's first two ENC cells are now at the final stage and MNHC aims to distribute them to commercial shipping services soon. But again, there are many requirements for MNHC to maintain standard ENC production process.



3.4 RNCs: Nil.

3.5 INT Charts: Nil.

3.6 Difficulty Encountered: For safety of Navigation goal, MNHC requires the followings-

(a) More cartographic training.

(b) Participation in IHO working groups.

(c) Cooperation with other HOs in the form of on-job training.

4. **New Publications and Updates**

4.1 **New Publication:** Tide tables for Myanmar coastal waters are published annually and Notices to Mariners have been issued regularly. 2014 tide tables have been promulgated and distributed to concerns.

4.2 **Mean of Delivery e.g. Paper / Digital:** Paper.

4.3 **Problems Encountered:** Nil.

5. **Maritime Safety Information (MSI)**

5.1 More than (100) Notices to Mariners were distributed in 2013. MNHC sent NtMs to regional and other Hydrographic Offices. MNHC mostly obtains the MSI information from other local governmental organizations such as MOFA, MPA and Ministry of Oil, Gas and Energy.

5.2 **GMDSS** has been operated in Myanmar since 1998 by Myanmar Five Stars Shipping Line, under the Ministry of Transport.

5.3 **Problems Encountered:** More information is required for MIS and further for chart updating process. MSDI regulation has not been well established between country's governmental organizations.

6. **C-55 Latest Update**

6.1 **Status of Hydrographic Surveying:**

A = percentage which is adequately surveyed.

B = percentage which requires re-survey at larger scale or to modern standards.

C = percentage which has never been systematically surveyed.

	A	B	C
Depth < 200m	40%	60%	-
Depth > 200m	-	-	-

6.2 Status of Maritime Safety Information:

6.2.1 Navigational Information

Service	Yes	No	Partial	Remark
Local Warning	✓			
Coastal Warning	✓			
NAVAREA Warning	✓			India
Port Information			✓	Myanmar Port Authority

6.3 National Priorities for International and/or Regional Cooperation or Assistance:

6.3.1. **International or regional project in Myanmar waters:** MNHC has sent official request letter to Indian National Hydrographic Office for Joint hydrographic surveys where MNHC has small scale charts scheme. This request has been sent through India Embassy, Yangon.

6.3.2 Priorities for co-operation or assistance:

(a) **Projects meriting IHO liaison with international funding agencies:**

(i) **Regional co-operative projects:** Nil.

(ii) **National Projects:** Feasibility studies and technical transfer through joint surveys.

(b) **Requirement of training assistance:**

(i) **Hydrographic Surveying:** Continued CAT 'A' and CAT 'B' Hydrography Courses at regional focal point or others.

(ii) **Cartographic Course:** Basic and Advanced.

(iii) **MSI:** Encourage other Myanmar governmental organizations to participate MSI process.

(c) **Requirement for assistance with procurement of equipment:**

(i) **Technical advice on procurement options:** Required

(ii) **Transfer of equipment:** Required

7. Capacity Building

7.1 Training received (2013)

- (a) Category A in hydrography, India - (2) Officers (Regional Coordinator's program)
- (b) Category B in hydrography, India - (1) Officer (Regional Coordinator's program)
- (c) Survey Recorder III course, India – (2) sailors (Regional Coordinator's program)
- (d) Navigation Instrument Engineering Course, China – (1) Sailor
- (e) As the kindest result of 13th Meeting's CB discussion, Caris S-57 Composer training has been allotted for MNHC and it will be held in March 2014 at Yangon, Myanmar.

7.2 Training Requirements

- (a) Cooperation/ training assistance in ENC production capability.
- (b) Training for GIS paper chart production.

8. Oceanographic activities

8.1 General: Two oceanographic activity were cooperated in 2013 as follow-

- (a) Cooperation on oceanographic research cruise by Japanese vessel.
- (b) Cooperation on oceanographic research on living stocks at sea by Norwegian vessel.

8.2 Tidal Recording and Prediction: Tidal prediction based on (11) standard ports for annual tide table production.

8.3 Tide gauge network: Nil

8.4 New equipment: ATG – (2) Nos

8.5 Problems encountered: The office needs assistance in trainings and updating of oceanographic facilities including reset up to a network of tidal stations in the coastal area for tidal observation and Tsunami Warning System.

9. Other activities: Nil

10. Conclusion

Myanmar has a long sea coast line of about (2279) km with a large number of estuaries and islands. The EEZ as physical features is about 470,000 sq km. It shares common boundaries with Bangladesh and India in the Bay of Bengal and with India and Thailand in Andaman Sea. For its sizeable area with vast availability of natural resources it may be necessary to carry out data collection on the sea coast, in particular on maritime navigation safety and marine environment protection, preservation, marine resources exploration, exploitation, and defense of coastal area.

MNHC was out of community from IHO for the period from 1982 to 2003. Again rejoined to IHO in 2003 and now MNHC is looking forward to enhancing knowledge and upgrading the organization and infrastructure. To strengthen this period, the office is in need of assistance in term of training and. Furthermore, it may be stressed that faster transfer of

technical knowledge and experience can be attained through joint updating surveys and feasibility studies for ports and harbours development in Myanmar waters with cooperation from IHO and now with NIOHC.