



SULTANATE OF OMAN

**NATIONAL REPORT TO 12th NORTH INDIAN
OCEAN HYDROGRAPHIC COMMISSION
MEETING**

REPUBLIC OF SRI LANKA - COLOMBO

20 - 24 MARCH 2012

OMAN NATIONAL HYDROGRAPHIC OFFICE

BAIT AL FALAJ CAMP

P.O. Box.: 113 Muscat, P.O.100

Department of which the Hydrographic Office is part	Royal Navy of Oman
Principal functions of the O.N. H.O.	<ul style="list-style-type: none">• To provide the nautical data required for safety of life at sea and enable maritime trade and other operations.• To provide sufficient nautical data and products to support naval operations in defence for Royal Navy of Oman vessels.• To support merchant ships and private sector on hydrographic, cartographic products and all issues related to safety of navigation.• To provided hydrographic services in the National Interest. These include surveys or nautical products which are not conducted in support of the safety of navigation or defense but are still essential to the development of Oman.• To support maritime boundary delimitations including the continental shelf project and enforcement of the provisions of the United Nations Convention on the Law of the Sea, (UNCLOS).
National Days	18 th November
Telephone Fax E-mail	+968-24-312350 +968-24-312460 nhooman@omantel.net.om
Date of Establishment and Relevant National Legislation	4 th April 1995
Name and Rank of the Director or Head	Thani Harith al Mahrouki Head
Tonnage	28,000 (as at 10 th November 2011)
Staff employed	12 officers 15 ratings
No. of Charts publish	25
Surveying Vessels	RNOV Al Mabrukhah RNOV Al Seeb RNOV Al Makhirah

Hydrographic Department in the Royal Navy of Oman

The Hydrographic Department is under Royal Navy of Oman which consists of :

- **Hydrographic Survey Unit.** This unit is set up to cover the Sultanate's requirements for hydrographic surveys by undertaking coastal and large scale surveys. Other duties include but not limited to carrying out all beach surveys, establishing tidal stations and building tidal database for the entire Sultanate's coastline as well as following up, maintaining and calibrating tidal equipments installed within the main ports of the Sultanate. This unit has a very dedicated section for data processing and analysis to support charts production. It is capable of processing and analysing, amongst others, Multibeam Echo Sounder data.

- **Oman National Hydrographic Office(ONHO).** This Office is set up to compile and issue charts covering Omani waters to the International Hydrographic Organization standards and specifications. . It also provides assistance and advice on all matters related to safety of navigation of all Omani waters, maintaining the hydrographic archive which includes all the data of the surveys carried out in the sultanate.

- **Survey vessels**

- RNOV AL MABRUKA, RNOV AL SEEB and RNOV AL MAKHIRAH. These are hydrographic vessels which carry out the hydrographic surveys.

1. Hydrographic Service.

The ministry of Transport and Communications, being the authority responsible for the safety of navigation in the territorial sea, has agreed that the Ministry of Defence represented by the Royal Navy of Oman undertakes issues related to the management of and supervision over the Hydrographic Authority. The Royal Navy of Oman is responsible of all the hydrographic surveys and related tasks, charting and issuing of hydrographic publications.

2. Surveys.

- HI 112 (Sohar) , HI 114 (Al Halaniyat) and HI 109 (Ad Duqm port approaches) completed.
- The outer approaches for Ad Duqm port are carried out by Royal Navy of Oman vessels. Further surveys tasks were carried out for Port Salalah task and Taqah during this year.

3. New charts & updates.

ENC's

RNO is currently converting the existing paper charts to ENC's. Dates to publish ENC's are yet to be confirmed.

RNCs

Not applicable -ONHO charts are in vector format only.

INT charts

The following Omani charts in medium and large scales are published as "INT" charts in AREA "J" Indian Ocean (see annex A for more details) :

INT 749	OM1	The Sultanate of Oman	November 2004
INT 7173	OM250	Approaches to Port Salalah	November 2009
INT 7191	OM254	Eastern Approaches to Muscat	July 2004
INT 7192	OM255	Western Approaches to Muscat	June 2003
INT 7201	OM257	Approaches to Port Sohar	October 2011
INT 7200	OM301	Sur to Qalhat	June 2006
INT 7172	OM1201	Port Salalah to Bandar Janjari	October 2004
-----	OM1219	Ra's Daba to Khawr Al Habalayn	April 2011
-----	OM252	Port Ad Duqm	October 2011
-----	OM1207	Approaches to Port Ad Duqm	January 2012
-----	OM1207	Approaches to Port Ad Duqm	January 2012
INT 7186	OM1212	Ras Al Had to Abu Da'wud	January 2012
INT 7198	OM1216	Sohar to Ras Daba	January 2012
INT 7188	OM3505	Muscat to Lima	January 2012

National Paper charts

In total ONHO has produced 25 paper charts in different scales, out of scheme of 52 charts. Since NIOHC11 meeting, new charts were produced (OM252, OM1207, OM1212*, OM1216* and OM3505*). New editions of OM257 was published. Charts OM 1215 and OM 1214 are at final production stage and new editions of charts OM 509, OM1208 and OM 100 are planned in 2012.

**Limits and names of these charts were changed and therefore new charts were published accordingly to the latest NMs.*

Other Charts

A large number of special **military** and **civil** products were made to meet the requirements of the military and other public and privates sectors.

4. New publications & updates.

ONHO issued the 8th edition of the annual Oman Maritime Book. The information contained in the book is intended to provide the mariner with comprehensive information regarding tide and wrecks in Oman, as well as navigational lights and radio signal information and distance table for Oman and selected adjacent waters. It is planned to produce the book in a digital format when appropriate.

4.1 Marine Spatial Data Infrastructure(MSDI)

- The Oman National Hydrographic Office (ONHO) is the principle national organization which taking the responsibility of archiving all the hydrographic data and it is in the phase of starting to establish a national database for all the data collected by all the parties in the nation.

5. Maritime Safety Information (MSI).

- MSI provides services such as drafting and broadcasting the Navigation warning through Muscat Radio, covering sea of Oman and Arabian Sea. Oman Operating with One NAVTEX station Located at Watayah remotely controlled from Al Amirat in Muscat Area.

- The Ministry of Transport and Communications is the authority for GMDSS in Oman. The Telecommunications Regulations Authority (TRA) is responsible to the Ministry of Transport and communications for all radio and satellite communications aspects of GMDSS. The Royal Air Force of Oman operates the rescue coordinate centre and is responsible for coordinating search and rescue operations in Oman

6. C-55 latest update (Tables)

Survey coverages (see annex B for more details), where;

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.

Depth	A	B	C
< 200 m	51 %	10 %	44 %
> 200m	21 %	10 %	69 %

7. Capacity Building

- Training of hydrographic technicians is being undertaken 'in-house'. Currently there are two groups of trainees at different levels of training. This is a big commitment for a small office but there is no alternative. Most of the senior rates of the hydrographic department were sent for a diploma level course in Malaysia.
- Use is made of other Oman institutions for relevant parts of the training, for instance foundation course subjects where the new survey technicians sent to colleges of technology for the math, sciences, English and AutoCAD courses.
- One of our cartographic officers received a 15 weeks cartography and ENC course in UKHO in 2011.
- One officer attended CAT A course at FOST-HM in UK in 2011.
- LOS workshop for RSAHC funded by IHO CB was carried out in Oman in February 2012.

- One officer attended on CAT B course at FOST-HM in UK in 2011.
- One officer attending now on CAT B course in hydrography at UTM in Malaysia.
- New team of ENC section received short courses in Caris composer, dcart Editor, dcart publisher and system management.
- For all of the training we are short of instructors, so any outside assistance that can be given, possibly by visiting trainers, would be immensely useful.
- RNO is always keen to search for suitable courses in different countries to bring up the experience and knowledge level of Hydro specialists.

7.2. **Training needed:**

1. CAT A & B in hydrography.
2. CAT B (Cartography) needed for the new joining officers.
3. Post graduate courses.
4. ENC training.
5. Multibeam – on job training.
6. CAT B in Marine Cartography.

8. **Oceanographic activities.**

No oceanographic activities exist yet in Oman.

9. **Other activities.**

Publicity

The national press in Oman printed several articles highlighting World Hydrographic Day with the assistance of the ONHO. A hydrographic meeting of RSAHC chaired by Oman was held in the Sultanate of Oman between 20 - 21 March 2011 which was attended by many international and regional hydrographic-related organizations and personnel.

New Equipment

A new hydrographic vessel of catamaran class added to the two hydrographic ships. New workstations and softwares of dcart editor, dcart publisher and Caris composer added to the ONHO for ENC and paper charts production replacing the old systems.

Participate in IHO Working Group

- A member of S23 WG.
- A member of WEND WG.

10. Conclusions.

Hydrographic Service in Oman continues to develop and gain experience in the latest hydrographic and cartographic technologies. Oman NHO produced 25 paper charts, converting existing Omani paper charts to ENC's and is planning to produce new ENC's.