

SULTANATE OF OMAN

NATIONAL REPORT TO 11th NORTH INDIAN OCEAN HYDROGRAPHIC COMMISSION MEETING

REPUBLIC OF INDIA – NEW DELHI

1 - 2 MARCH 2011

Executive summary

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

• <u>Hvdrographic Survey Unit</u>. 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 maters 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.

• RNOV AL MABRUKA and RNOV AL SEEB. These are hydrographic vessels which carry out the hydrographic surveys.

The Roles of National Hydrographic Services in Oman are:

- 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 defence 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).

1. <u>Hydrographic Service.</u>

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 Hydragraphic Authority. The Royal Navy of Oman is responsible of all the hydrographic surveys and related tasks, charting and issuing of hydrographic publications.

2. <u>Surveys.</u>

- HI 84 (Wudam to Sohar), HI 113 (Approaches to Southern Naval Base) and HI 109 (Ad Duqm port approaches) completed.
- Approaches surveys to the new port of Ad Duqm were carried out by UK Royal Navy. The outer approaches are now carried out by Royal Navy of Oman vessels.

3. New charts & updates.

ENC's

No Omani ENCs produced yet. However, RNO is currently studying the options for converting the existing paper charts to ENCs. ENC capability in the process of being worked, Dates to produce ENCs 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 published as "INT" charts in AREA "J" Indian Ocean :

INT 749	OM1	The Sultanate of Oman	Edition November 2004
INT 7173	OM250	Approaches to Port Salalah	Edition November 2009
INT 7191	OM254	Eastern Approaches to Muscat	Edition July 2004
INT 7192	OM255	Western Approaches to Muscat	Edition June 2003
INT 7201	OM257	Approaches to Mina Sohar	Edition March 2008
INT 7200	OM301	Sur to Qalhat	Edition June 2006
INT 7172	OM1201	Port Salalah to Bandar Janjari	Edition October 2004
INT 7186	OM1212	Ras Al Had to Abu Da'wud	Edition August 2004
INT 7198	OM1216	Sohar to Ras Daba	Edition November 2005
INT 7188	OM3505	Muscat to Lima	Edition June 2004

National Paper charts

ONHO has produced 21 paper charts in different scales, out of scheme of 52 charts. Charts OM 1219, OM 1218, OM 1215, OM 1214, OM 252 and OM 1207 are at final production stage). Intend to produce the following new charts OM 1202, OM 101 and OM 251 and new editions of charts OM 257 and OM 100 in 2011.

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. <u>New publications & updates</u>.

ONHO issued the 7th 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 next year.

5. <u>Maritime Safety Information (MSI)</u>.

- 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 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. <u>S-55</u> latest update (Tables)

Survey coverage, 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	Α	В	С
< 200 m	50 %	10 %	45 %
> 200m	20 %	10 %	70 %

7. <u>Capacity Building</u>

- 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.
- All these groups except one have received a 2 week basic marine cartography course in early March, which was presented by two visiting trainers from the UKHO as part of the close co-operation between the two offices within the bi-lateral agreement. The last group will be given this course in March 2011.
- 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 technicians received a 5 weeks ENC course in UKHO in 2010.
- One officer on HM (H) CAT B course at FOST-HM in UK.
- FOST HM MBES training by MBM will be given in March 2011 by a visiting lecturer.
- 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.

8. <u>Oceanographic activities.</u>

No oceanographic activities exist yet in Oman.

9. <u>Other activities.</u>

Publicity

The national press in Oman printed several articles highlighting World Hydrographic Day, with the assistance of the ONHO. A hydrographic meeting of RSAHC is going to be held in the Sultanate between 20 - 21 Mach 2011 which is going to be attended by many international and regional hydrographic-related organisations and personnel.

<u>Equipment</u>

Fugro SeaSTAR and OmniSTAR DGPS added to the two hydrographic ships replacing the old systems. Valeport Tidemeter and tide gauges also are replaced in the two main ports in the sultanate.

Participate in IHO Working Group

- Attend 2nd HSSC meeting in Rostock in October 2010.
- Attend 10th Hydro2010 conference in Rostock November 2010.
- Formally an associated member of the NIOHC.
- A member of S23 WG.

10. <u>Conclusions.</u>

Hydrographic Service in Oman continues to develop and gain experience in the latest hydrographic and cartographic technologies. Oman NHO produced 21 paper charts and no Omani ENC's produced yet. However, we are currently studying the options for converting our existing paper charts to ENC's.