# INTERNATIONAL AIDS TO NAVIGATION

An extensive network of lighthouses, beacons and marine buoys is operated by MENAS in order to ensure safety of navigation in the Gulfs waters

MENAS maintain lighthouses, beacons and buoys outside of harbour approaches within the Gulf area. MENAS Services include:-

- The ownership, upkeep and maintenance of international buoys in the Arabian Gulf region.
- Discharge of the responsibility attached to its appointment as Sub-Area Co-ordinator of the IMO Global Navigation Area IX (NAVAREA IX), as requested by the Area Co-ordinator in 1976.
- Maintenance of aids to navigation owned by governmental and other authorities/companies within the Gulf which are considered essential to international shipping.
- MENAS owned and operated DGPS System.



## NAVTEX SERVICE

NAVTEX is an international automated medium frequency (518 kHz) direct-printing service for delivery of navigational and meteorological warnings and forecasts, as well as urgent marine safety information to ships

MENAS is the Sub-Area Co-ordinator for NAVAREA IX co-ordinating a NAVTEX service within the framework of the WWNWS system established jointly by the International Hydrographic Organisation (IHO) and the International Maritime Organisation (IMO). NAVTEX is an international automated direct-printing service for promulgation of navigational and meteorological warnings and urgent information to ships. The system fulfils an integral role in the Global Maritime Distress and Safety System (GMDSS) developed by the International Maritime Organization (IMO).

MENAS, through its role as a NAVTEX Co-ordinator, has a direct operational link with maritime community within the Gulf region.

Standards: IMO NAVTEX Manual

IMO 951E

Frequency: 518 kHz
Bandwidth: 500 Hz
Transmission Identifier: B
Station: (A9M)

Transmission times: 0010UTC 0410UTC

0810UTC

1210UTC 1610UTC

2010UTC

Publication: IMO NAVTEX



## NOTICES TO MARINERS

MENAS maintains a leading role in the gathering and promulgation of nautical publication information to the world's hydrographic offices

MENAS Notices to Mariners promulgate navigational information of a permanent or semi-permanent nature received from governmental nautical authorities, ports and harbour authorities, oil companies and others engaged in maritime operations. This includes information received from ships' masters and other sources. Each Notice specifies the source of the information and refers to the British Admiralty Chart(s) affected by the Notice.

MENAS has a long history of co-operation with the United Kingdom Hydrographic Office (UKHO) and has established a bilateral cooperation agreement.

MENAS promulgates a Monthly Summary of Notices to Mariners which ensures dissemination of information to all major hydrographical offices worldwide. MENAS maintains close operational links with the world's hydrographic offices in ensure all nautical publications are updated in a timely manner.

# DIFFERENTIAL GPS NETWORK

MENAS was responsible for the introduction of the Differential Global Positioning System (DGPS) in the Gulf. The universally and freely accessible system, which is maintained and operated by MENAS, provides the means of fixing a navigational position with an accuracy to within one metre both at sea and on land throughout the Gulf region.

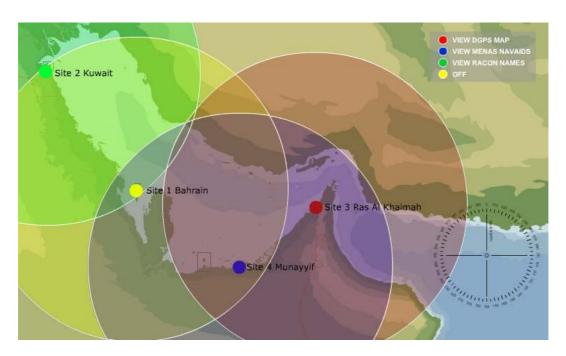


Fig 1: MENAS DGPS Network

## **NAVIGATION WARNING NOTIFICATION**

# MENAS MARITIME OPERATIONS CENTRE NAVAREA IX Sub-Area Co-ordinator

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All MENAS service users are requested to pass on valid navigational hazard information using comms methods above. MENAS is committed to maritime safety in the region and MENAS support the standards of marine operations recommended by IMCA, the International Marine Contractors Association. As part of our process of continual improvement of services to the maritime community, we are continually amending / updating our mailing lists. Please reply to this mail address should you require any additional email addresses added to the direct NAVTEX and/or Gulf Notices to Mariners circulation lists.

Please also find latest navigational situation information at <a href="https://www.menas.org">www.menas.org</a> By being on the MENAS Maritime Operations Centre mailing lists, you will receive maritime safety information, in real time, as it arrives. MENAS publish a regular summary of 'in-force' NAVTEX warnings being transmitted by A9M, Bahrain.