SAUDI ARABIA HYDROGRAPHIC OFFICE

by

The General Authority for Survey and Geospatial Information

for

20th NIOHC

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www.gasgi.gov.sa

Introduction

- General Authority for Survey and Geospatial Information (GASGI) (formerly General Commission for Survey) was established in the Kingdom of Saudi Arabia on 13 February 2006.
- Saudi Arabia is surrounded by Red Sea and Gulf of Aqaba on western coastline while Arabian Gulf on eastern side respectively. The combined coastline stretching over 4,673 km.
- Since its establishment, GASGI has surveyed 100% of the 200,000 km² in Red Sea and Gulf of Aqaba.

Hydrographic Survey Platform

Survey Vessel AA Sultan with integral boats

- Length – 43.7 m
- Breadth – 10.0 m
- Weight – 497 ton
- Draught – 2.80 m
- Speed – 10 knots
- Endurance – 30 days
- People Onboard – 24

Survey Launch for Training

- Length – 16.0 m
- Breadth – 6 m
- Weight – 37 ton
- Draught – 1.0 m
- Speed – 12 knots
- Endurance – 3 days
- People Onboard – 9

Survey Boat (2) Onboard AA Sultan

- Length – 8.4 m
- Breadth – 2.9 m
- Weight – 3.9 ton
- Draught – 0.60 m
- Speed – 14 knots
- Endurance – 14 hours
- People Onboard – 5

Nautical Charts in Red Sea and Gulf of Aqaba

Purpose	Scale	ENC	PNC
General	1:500,000	3	3
Coastal	1:150,000	17	17
Approach	1:50,000	58	58
Harbor	(1:10,000 – 1:15,000)	8	8
Total		**86**	**86**

Hydrographic Data Management (HDM)

- GASGI has successfully completed the implementation of Hydrographic Data Management (HDM) System at Central Office, Riyadh.
- The HDM consists of three major components, namely the Bathymetry Database, Hydrographic Production Database and Oceanographic Database built under the CARIS structure environment as shown in the diagram.

Oceanographic Activities

- GASGI operates a National Tide Gauge Network in the Red Sea and Gulf of Aqaba for real time Tide and Meteorology data since 2012.
- There are seven (7) Tide Gauge Stations along the Western Coastline of Saudi Arabia.

SAMPLE – TWIN SEAMOUNTS

SAMPLE – DRYING REEF

SAMPLE – COMPLEX GEOLOGY

SAMPLE – PAPER NAUTICAL CHART (Red Sea)

Thanks