

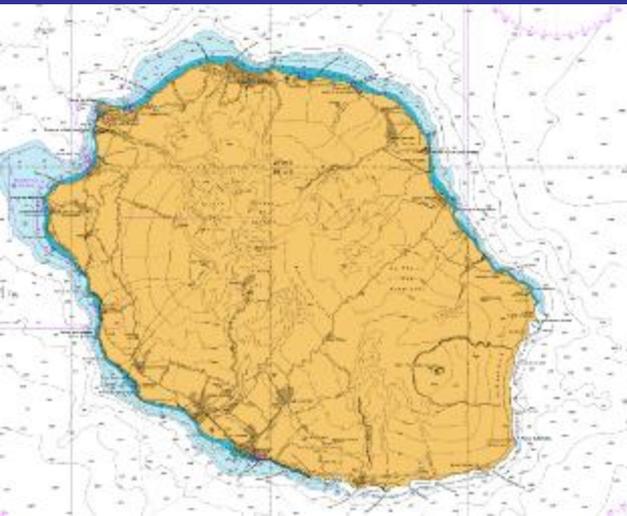


THE UNITED KINGDOM
HYDROGRAPHIC OFFICE



The Importance of Accurate Nautical Information

Presented by UKHO



The Importance of Accurate Nautical Information



Outline

- Context
- Nautical information
- Liabilities
- Conclusion

Realities of Shipping Today



Shipping pressures for accurate nautical information

- Ships may be tempted by economic pressures to take a short cut to save fuel and time, or to achieve pilot RV
- Tour operators may be tempted to go to new, increasingly exotic, places – Antarctica provides a classic example with the ever-increasing size of cruise vessels



Shipping pressures for accurate nautical information

Seaborne trade is vital to a nation's development.



International trade is almost exclusively via the ports of the state

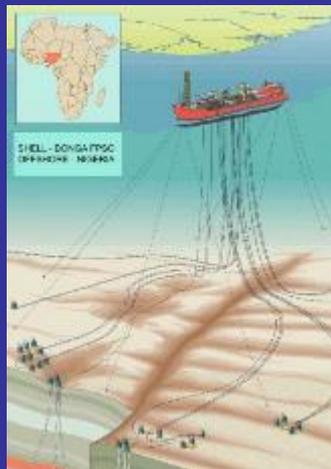
Protection of the Marine Environment



Coastal Zone Management



Exploration for, and Exploitation of, Marine Resources



The Digital Ship

Digital charts ENC/ARCs



Digital Publications

Internet services



Nautical Information

- What is nautical information?
- Why is it important?
- Who provides it?
- Timeliness, Accuracy, Availability

What is nautical information?

- Depths
- Navigational Aids
- Hazards
- Ports
- Offshore energy sources
- Tides
- Lights, etc

Why is nautical information important?



- economic stagnation
- environmental impact
- liability and litigation

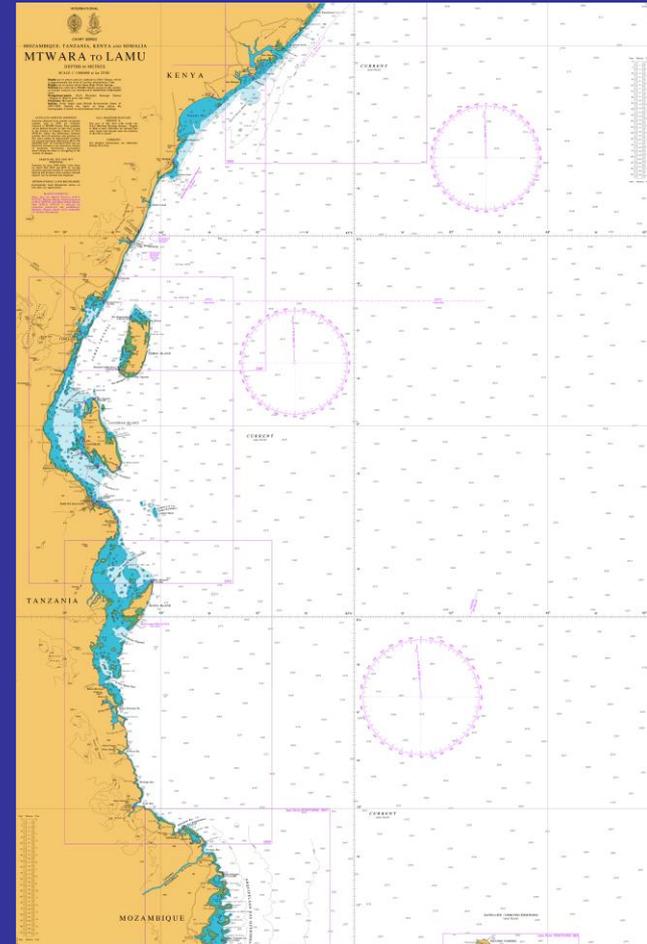
Penalties for inactivity

- risk of accidents increased
- shipping loses confidence in port
- international trade declines



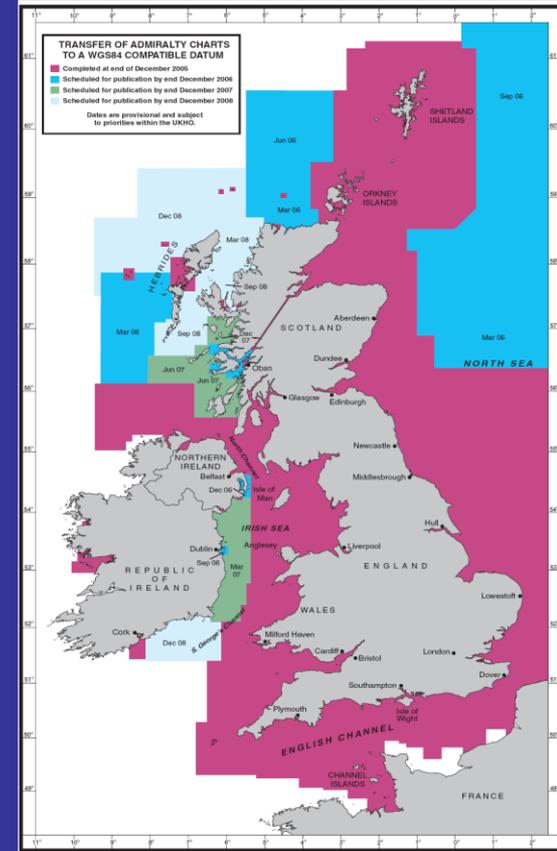
Why accurate nautical information?

- Risk reduction
- Modern charting
- Confidence in charts and publications
- Cost benefits
- Increase in trade
- Heightened profile
- Safety of navigation



What information is required for charts, publications and services?

Positions – Latitude and Longitude
Datum – Horizontal and Vertical
Horizontal Datum – WGS84
Positioning Systems
Plans and Drawings
Photographs



Examples of the need for accurate nautical information

- Area is unsurveyed
- Seabed is mobile
- New ports open
- Navigation aids change
- Ships operate on new routes
- Ship is wrecked

Who provides nautical information?

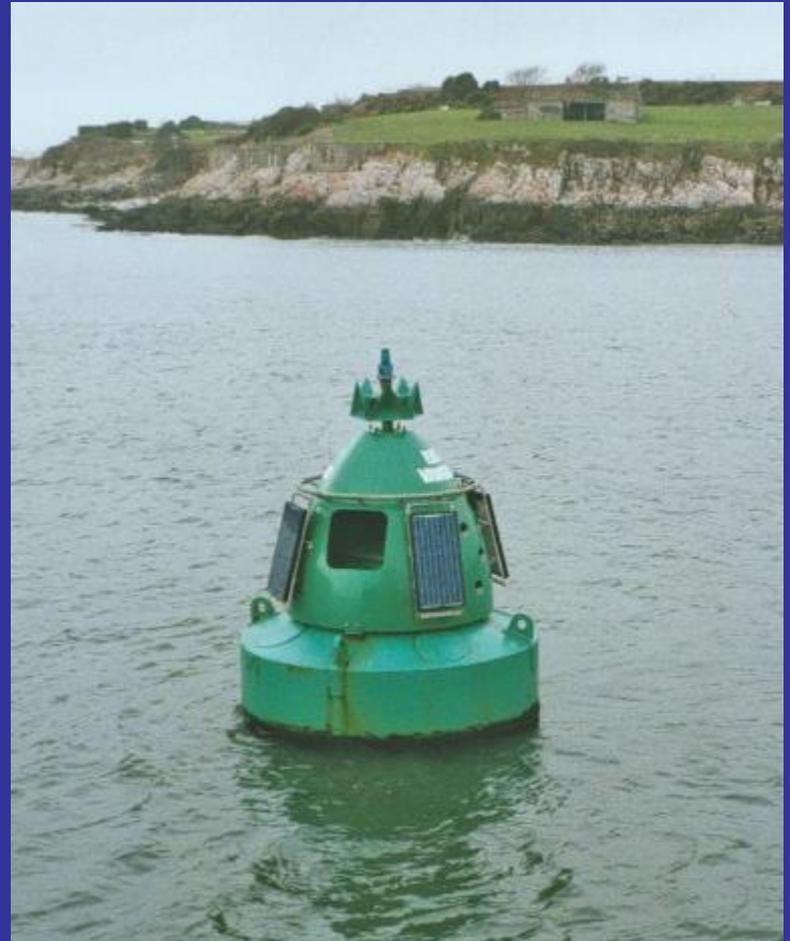
Only local authorities can ensure prompt collection and timely distribution of important navigational information.



Changes or Defects in Aids to Navigation

Buoys

- Position
- Colour
- Topmark
- Date
- Lit/Unlit



Changes or Defects in Aids to Navigation Lights

- Position
- Light description
- Height
- Range
- Fixture
- Date
- Other information



Changes or Defects in Aids to Navigation

Conspicuous Features

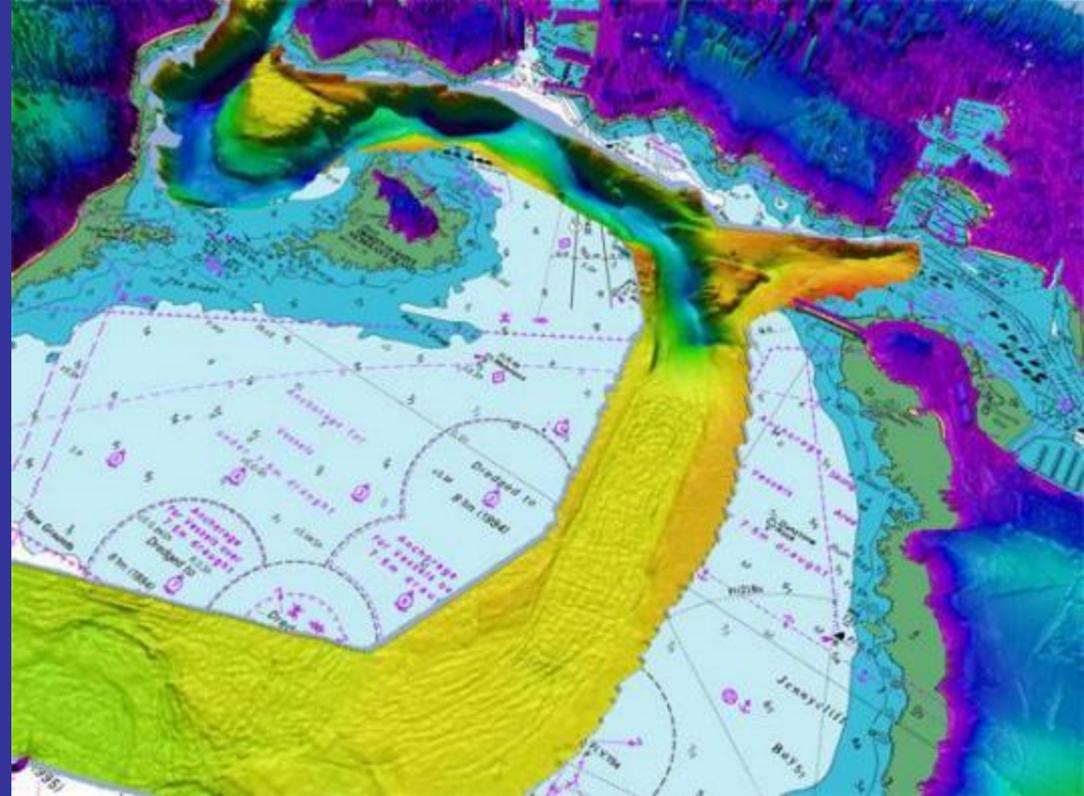
- Position
- Height
- Type
- Distinguishing Features
- Date



Hazards

Dangers Revealed in new Surveys

- Shoals
- Dangerous Rocks
- Obstructions
- Positions
- Depths
- Date
- Type if known
- Echo Sounder Trace?



Hazards

Wrecks

- Position
- Depth/Height
- Orientation
- Vessel Type
- Size



Offshore Platforms etc

- Type – Oil/Gas etc
- Name & Position
- Exclusion Zones
- Regulations
- Lit/Unlit
- Anchorages
- Pilot Boarding



Port and Coastal Developments

- New construction
- New ports
- Berths
- Breakwaters
- New fairways
- Dredged channels
- New or changed navigational aids
- Preliminary information



Photographs

Five Types

- Pilotage
- Panoramic
- Aerial Oblique
- Close up
- Portrait.

Less than 10 years old for
Sailing Directions



Available – Get the message out there!

- E-Mail
- Internet
- FAX
- Telephone
- Text
- Posters
- Leaflets



New nautical information

What do you do?

- Obtain the details noted earlier
- Make sure all are correct
- Issue local Notice to Mariners
- Send the information to charting organisation to inform the rest of the shipping world
- Remember it is as important to know what has gone as what is new

New Incident

What do you do?

- Phone the NAVAREA coordinator
- Give details. Include positions, the nature of the incident and any restrictions in place
- Follow with N to M or TNM if dangers are to remain for some time.

Liabilities

- National Legislation variable
- Contract
- **Duty of care** / negligence
- Consumer legislation

Duty of care

- Chart user must know that charts cannot contain errors or omissions – mobile seabed, delay in promulgation of new navigational aids, etc.
- Admiralty Annual Notice to Mariners No. 9
“HYDROGRAPHIC INFORMATION: POLICY FOR THE PROMULGATION AND SELECTION OF NAVIGATIONAL SIGNIFICANT INFORMATION FOR CHARTS”
- Duty of those who have new information to ensure it is made available to mariner accurately and in a timely manner
- Incident investigations look more widely than the incident itself

Obligation of the hydrographer

“The obligation of the hydrographer resides in the care, the competence and the diligence he must show in the exercise of his profession. ... survey ...to the required professional standards ...changes ...brought to the attention of mariners in a reasonably short lapse of time.”

IGA J.N. Pasquay

CAPACITY BUILDING TECHNICAL WORKSHOP, MAPUTO, 5 JUNE 2006

Professional Conscience

“...all hydrographers are fully aware of the danger to which they might expose mariners as a result of any negligence ... their work is meticulous ...”

IGN J.N. Pasquay

Importance of Accurate Nautical Information



Conclusions

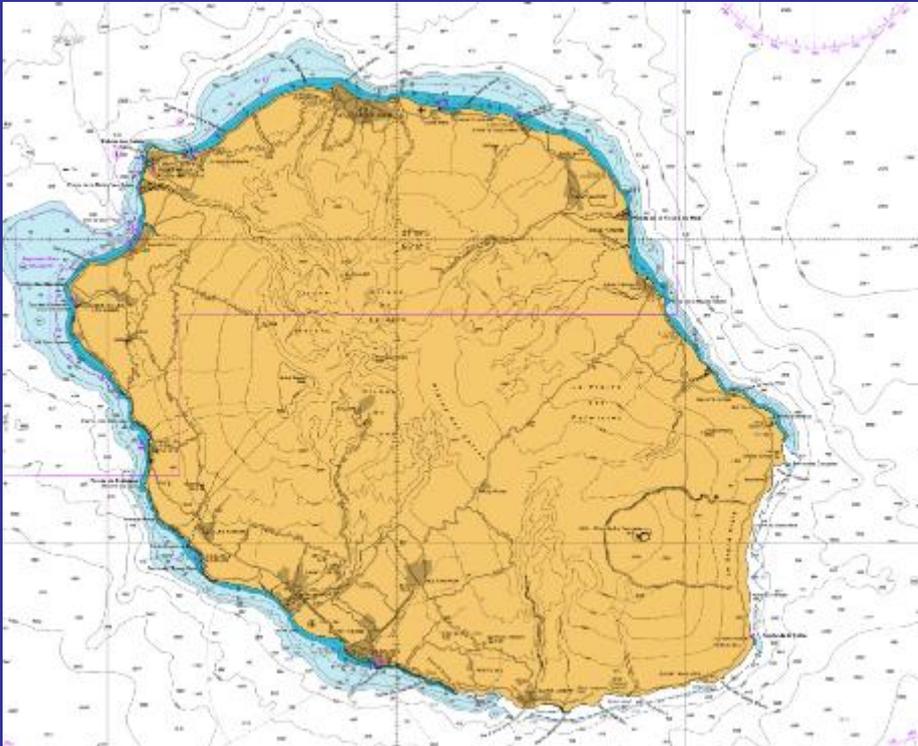
- Analogue and Digital worlds have the same basic requirements for accurate nautical information
- The digital world (S-57 and S-100) makes us resolve problems we could avoid in the analogue world

... and to finish with a reminder

Accurate

Timely

Available



Thank you!