

2nd NCWG MEETING
IHB, Monaco 26-28 April 2016

Paper for Consideration by NCWG
Wave Glider

Submitted by:	UK
Executive Summary:	Wave Gliders
Related Documents:	Numerous available on Internet
Related Projects:	None

Introduction / Background:

1. UKHO received the following Hydrographic Note:

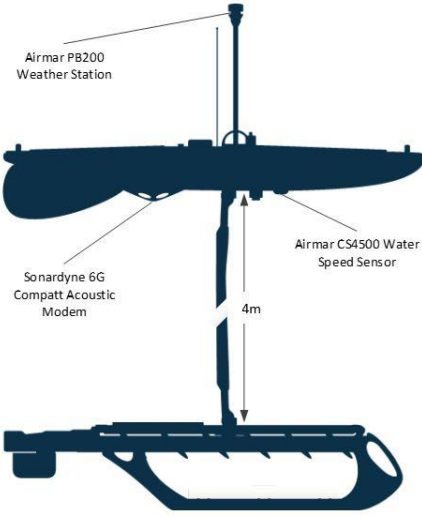
Reporting information affecting Admiralty Products

For new information affecting Admiralty Charts and Publications forward to sdr@ukho.gov.uk

To report issues related to ENCs or their display forward to customerservices@ukho.gov.uk

This form H.102 and instructions are available online at www.ukho.gov.uk/msi

Date	28 Oct 2015	Ref. Number			
Name of ship or sender	Detail removed				
IMO number if applicable					
Address	Detail removed				
E-mail/Tel/Fax of sender	Detail removed				
General Locality	TEN Oil Fields Ghana, Gulf of Guinea West Africa				
Subject	Notice to Mariners				
Position (see Instruction 2)	Latitude	4.62656	Longitude	-3.20698	
	Latitude	4.62656	Longitude	-3.08905	
	Latitude	4.44688	Longitude	-3.08905	
	Latitude	4.44688	Longitude	-3.20698	
	GPS		Datum	WGS84	Accuracy
Admiralty Charts affected	1383		Edition		
Latest Weekly Edition of Notice to Mariners held					
Replacement copy of Chart No (see Instruction 3)	IS / IS NOT required				
ENCs affected					

Latest update disk applied	Week:	
Make, model and or age of ECDIS if applicable		
Publications affected (NP/DP number, Edition No.)		
Date of latest supplement/update, page & Light List No. etc		
<p>Details of anomaly / observation: From Dec 2015 through to June 2016 There will be a small remote met and data buoy 'Wave Glider vehicle', navigating within the above co-ordinates: Detection may be achieved by: Radar (X band) ASIS Visual : may be showing all round white light at ≤ 1.5meter The acoustic transmit frequency on the Wave Glider is low to medium frequency i.e. between 14 and 19 kHz</p> 		
<p>Hazards: Subsurface powered fins at 4meters</p> <p>Lithium-Ion batteries Anti fouling paint</p> <p>Instructions - Do not tow</p>		

2. The Wave Glider® autonomous marine vehicle (AMV) is a remotely piloted, renewably powered, unmanned platform. It uses wave power for propulsion and solar power for recording and transmitting data. With mission durations on a weekly basis or over numerous months, the Wave Glider is proving a step change in data recovery and delivery for various marine applications. By integrating a series of sensor payloads, the Wave Glider AMV can be configured into several models that solve particular oil and gas exploration and production requirements and many other data collection applications. [Extracted and adapted from Liquid robotics Oil + Gas website]
3. Much more information about the use of Wave Gliders can be found on the Internet, including its use by NOAA.

Analysis / Discussion:

4. It is assumed these wave riders, being mobile, cannot be charted, although it is possible they could be programmed to remain on station as an ODAS. It may occasionally be useful to announce their deployment within limited areas, possibly by (T)NM.

Action required of NCWG:

5. The NCWG is invited to:

Note the existence of 'Wave Glider' AMVs.