

PILOTAGE ADVISORY COMMITTEE

Proposed Changes of Navigation Aids for Marking Adamasta Rock

Purpose

This paper aims to seek members' endorsement on the proposal of :

- (i) replacing two existing lateral buoys, currently marking the boundaries of the shoal around Adamasta Rock, by two cardinal buoys at nearby locations (i.e. the northern and southern extremities of the Adamasta Rock shoal) as shown in Diagram 2 below; and
- (ii) changing the light character of the beacon at Adamasta Rock from "Single-flashing" to "Group-flashing (2)", and painting the beacon with black and red horizontal bands.

Background

2. At present, three navigation aids are established in accordance with the International Association for Marine Aids to Navigation and Lighthouse Authorities (IALA) Maritime Buoyage System (MBS)¹ (Region A) for guiding vessels to navigate along the Adamasta Channel thus passing the Adamasta Rock safely, i.e. the green conical shape buoy laid at the northwest of Adamasta Rock shoal; the red can shape buoy laid at the southeast of Adamasta

¹ The IALA MBS states that lateral marks to be used in conjunction with a "Conventional Direction of Buoyage" and are generally employed for well defined channels. These marks indicate the port and starboard sides of the route to be followed.

Rock shoal; and the light beacon erected at Adamasta Rock. These navigational aids and the traffic lanes in the vicinity of Adamasta Rock are shown in Diagram 1 below.

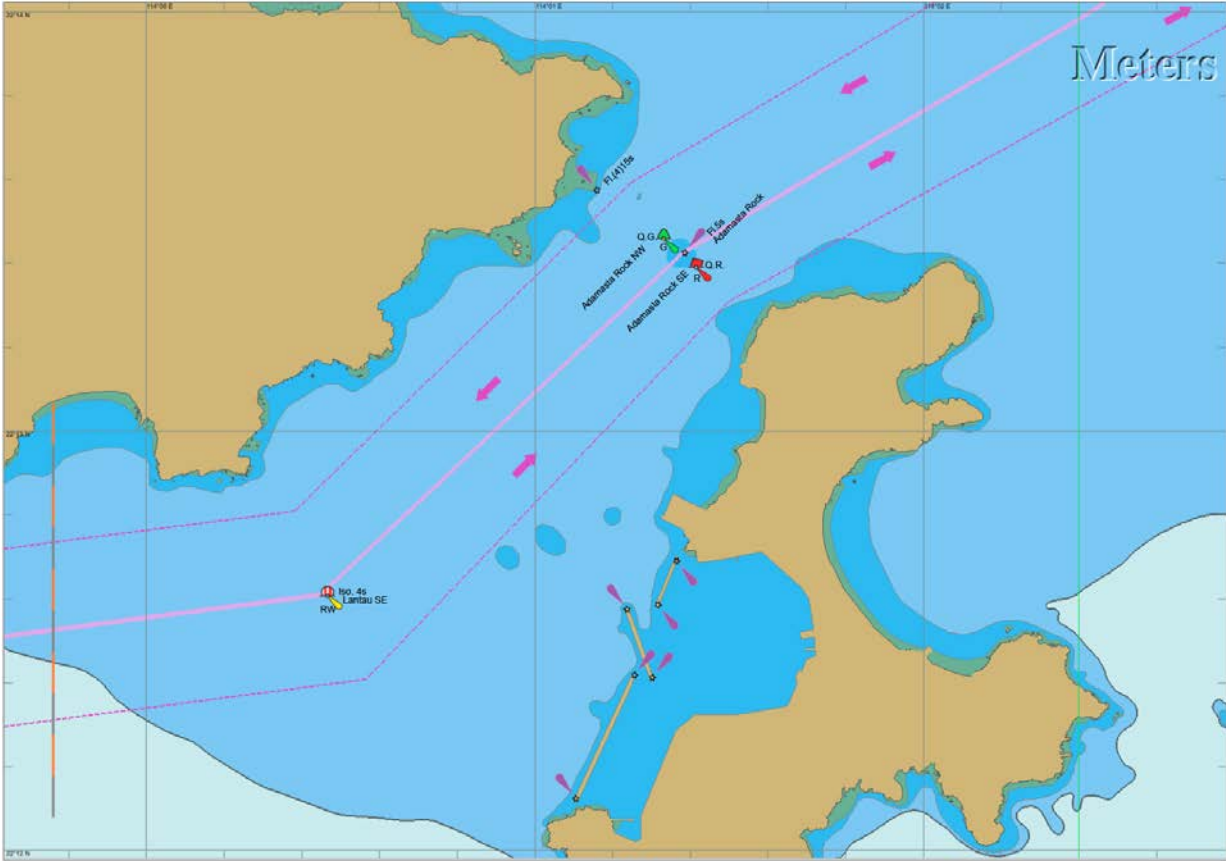


Diagram 1: Navigational aids and traffic lanes in the vicinity of Adamasta Rock

Justification

3. An internal review on the existing navigational aids was conducted for identifying improvements to navigational safety around Adamasta Rock. It is noted that the green conical shape buoy and the red can shape buoy are presented as a pair of lateral buoys laid at the extremities of the Adamasta Rock shoal of about 200 metres apart. As there is a perception that a pair of lateral marks, i.e. the green and red buoys, are laid to mark the two sides of a waterway, mariners who are not familiar with the Conventional Direction of

Buoyage at the Adamasta Channel may consider to travel between the two buoys, in case that they are also not aware of the existence / meaning of the light beacon at Adamasta Rock.

The Proposal

4. Taking consideration of the above findings, the review proposed to replace the existing two lateral buoys by two cardinal buoys² at nearby locations, i.e. a cardinal buoy with northern top mark at position of Latitude 22° 13.47' North, Longitude 114° 01.36' East (in WGS 84 Datum) and a cardinal buoy with southern top mark at position of Latitude 22° 13.38' North, Longitude 114° 01.39' East (in WGS 84 Datum), where are the northern and southern extremities of the Adamasta Rock shoal. The light characters of the proposed northern and southern cardinal buoys are "Quick-flashing" and "Quick-flashing (6) followed by a long-flash" respectively. Given the distance between these two buoys is about 200 metres apart, it is also proposed to indicate more clearly the isolated danger characteristic of the beacon at Adamasta Rock by changing the light character of the beacon to "Group-flashing (2)", and painting the beacon with black and red horizontal bands. The proposed navigational aids for marking Adamasta rock are shown in Diagram 2 below.

² The IALA MBS states that cardinal marks are used to indicate that the navigable water in the area lies to the named side of the mark, i.e. to indicate the safe side (with the use of the ship's compass) on which to pass a danger and to draw attention to a feature in a channel, such as the extremity of a shoal.

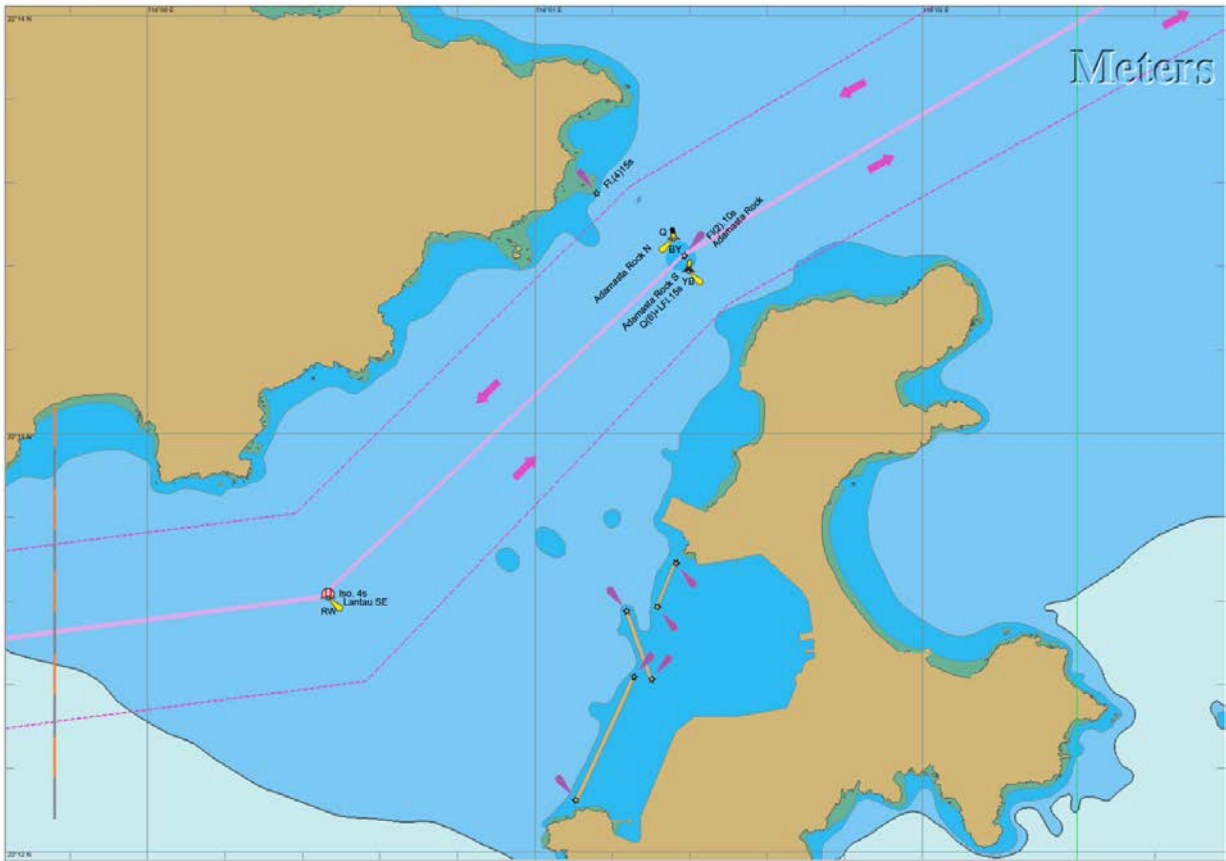


Diagram 2 : Proposed Navigational Aids for Marking Adamasta Rock

5. Upon conducting navigation simulations by utilizing the full mission ship simulator in the Marine Department’s Training Centre, it is evaluated and concluded that the above proposal is a better option for guiding vessels navigating in the vicinity of Adamasta Rock.

Public Views on Existing Navigational Aids for Marking Adamasta Rock

6. In the light of the grounding incidents occurred at Adamasta Rock, the press has expressed the public concern on navigational safety around Adamasta Rock and reported the local marine community’s view that the existing lateral buoys might confuse mariners to travel

between them. As three grounding incidents³ have occurred in the vicinity of Adamasta Rock since 2010, it is expected that the local marine community would welcome the proposal to be implemented as soon as possible.

Implementation of the Proposal

7. The proposal will be implemented upon obtaining the endorsements from the members of various Marine Department's consultative committees, including Local Vessels Advisory Committee, High Speed Craft Consultative Committee, Pilotage Advisory Committee, and Port Operations Committee. Prior to the implementation, a Marine Department Notice will be issued to notify port users.

Advice Sought

8. Members' comments and endorsement are sought on the above proposal.

**Vessel Traffic Section
Marine Department
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³ Three grounding incidents, involving three Mainland river trade vessels, occurred on 29 January 2010, 8 May 2011, and 2 June 2014. It is understandable that those Mainland mariners might not be familiar with the Conventional Direction of Buoyage at the Adamasta Channel.