## INTERNATIONAL HYDROGRAPHIC ORGANIZATION

## INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

## **UNDERSEA FEATURE NAME PROPOSAL**

(See IHO-IOC Publication B-6 and **NOTE** overleaf)

Note: The boxes will expand as you fill the form.

Name Proposed: Narra Saddle			Ocean or Sea:		Phi	Philippine Sea		
Geometry that best of Point	Line Line	ture (Yes/No) : Polygon	Multiple points	Multiple li	ines*	Multiple polygons*	Combination of geometries*	
Yes		Yes				p = .7 g =	90000000	
* Geometry should be	e clearly distin	guished when pro	viding the coordina	ites below.				
			_at. (e.g. 63°32.6'N	)		Long. (e.g. (	046°21.3'E)	
Coordinates:		18° 3.16'N 18° 6.73'N 18° 3.87'N 18° 3.38'N 18° 5.81'N 18° 7.60'N 18° 8.08'N 17° 56.69' 17° 58.24' 17° 57.51' 17° 52.23' 17° 52.18' 17° 56.79' 18° 1.49'N 18° 4.54'N	I (boundary I I I I I I I I N N N N N N N N N N N	()	126° S 126° S	17.15'N 3.40'E 3.26'E 9.90'E 12.47'E 15.72'E 18.67'E 20.13'E 23.28'E 24.01'E 16.68'E 15.08'E 8.83'E 1.27'E 55.88'E 54.14'E 55.16'E	(depth) (boundary)	
		18° 6.73'N	l (bounda	iry)	126 、	3.40'E	(boundary)	
	Maximu	m Depth:	5,120.93 m	Steep	ness :	3°		
Feature	Minimum Depth :		4,259.37 m	Shape:			egular	
Description:	Total Relief:		861.56 m	Dimension/Size :		ize: 30	,805.79 m x ,323.73 m	
Associated Featur	es:	Philippine	e Rise (Benham F	Rise), Narr	a Spur			
Chart/Map References:		Shown U	Shown Named on Map/Chart: Shown Unnamed on Map/Chart:			Chart 4726A		
		Within A	rea of Map/Chart	•	Char	t 4726A		
Reason for Choice of Name (if a person, state how associated with the feature to be named):		the many thing It is tall, so their dem storms, the	Narra is the national tree of the Philippines. The Narra tree is a symbol of many things. It is tall and symbolizes the lofty ideals of the Filipino people. It is tall, strong, enduring and signify the persistence of the Filipinos in their demand for freedom. While other trees are bent or uprooted by storms, the narra usually withstands such disaster. It may strip its leaves or break off smaller branches, but the tree itself remains upright. As the					

Narra has resisted the tempest, so has the Filipinos fought his oppressors.
The feature was first named in the Philippine submission of an extended
continental shelf in the Philippine Rise (Benham Rise) Region.

Discovery Factor	Discovery Date:	June 27, 2010		
Discovery Facts:	Discoverer (Individual, Ship):	NAMRIA		
Supporting Survey Data, including	Date of Survey:	May 6, 2008; June 9,14-15, 17-18, 2008; September 6-7, 2008; July 1, 2009; June 24-25, 27, 2010		
	Survey Ship:	BRP HYDROGRAPHER PRESBITERO		
	Sounding Equipment:	Seabeam 2112		
Track Controls:	Type of Navigation:	GPS with IMU		
	Estimated Horizontal Accuracy, in nautical miles (M):	0.027 nm (50 m)		
	Survey Track Spacing:	5.13 nm		
	Supporting material can be submitted as Annex in analog or digital form.			

Proposer(s):	Name(s):	Usec. PETER N. TIANGCO, PhD		
	Date :	August 2018		
	E-mail:	pntiangco@namria.gov.ph		
	Organization and Address:	National Mapping and Resource Information Authority (NAMRIA) Lawton Avenue, Fort Andres Bonifacio, Taguig City, Philippines 1854		
	Concurrer (name, e-mail, organization and address):	Department of Foreign Affairs (DFA), Roxas Boulevard, Pasay City, Philippines 1300 moao.div2@dfa.gov.ph		
		Department of National Defense (DND), Camp Emilio Aguinaldo, Quezon City, Philippines 1110		

	The proposal was prepared by the Technical Working Group on Undersea
Remarks:	Feature Names of the Hydrography Branch of NAMRIA, in cooperation with the
	National Institute of Geological Sciences – University of the Philippines and
	Mines and Geosciences Bureau.

NOTE: This form should be forwarded, when completed:

- a) If the undersea feature is located <u>inside the external limit</u> of the territorial sea:
  - to your "National Authority for Approval of Undersea Feature Names" (see Publication B-6) or, if this does not exist or is not known, either to the IHO or to the IOC (see addresses below);
- b) If at least 50 % of the undersea feature is located <u>outside the external limits</u> of the territorial sea:
  - to the IHO or to the IOC, at the following addresses :

International Hydrographic Organization (IHO) Intergovernmental Oceanographic Commission (IOC) 4b. Quai Antoine 1er **UNESCO** B.P. 445 Place de Fontenoy 75700 PARIS MC 98011 MONACO CEDEX Principality of MONACO France Fax: +377 93 10 81 40 Fax: +33 1 45 68 58 12 E-mail: info@iho.int E-mail: info@unesco.org Web: www.iho.int Web: http://ioc-unesco.org/

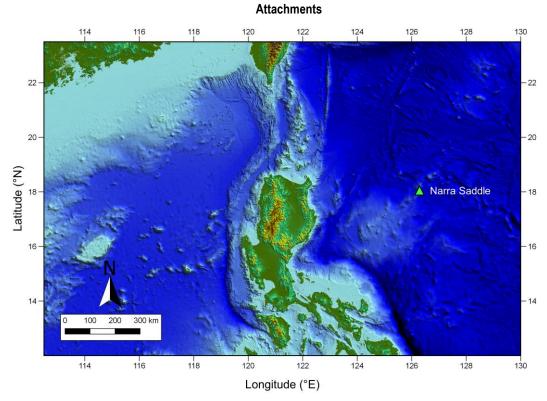


Fig. 1. Index map showing the location of Narra Saddle.

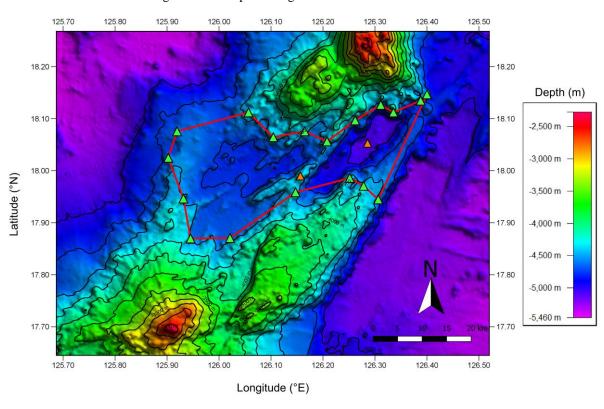


Fig. 2. Bathymetric map of the Narra Saddle. Contour interval is 250m.

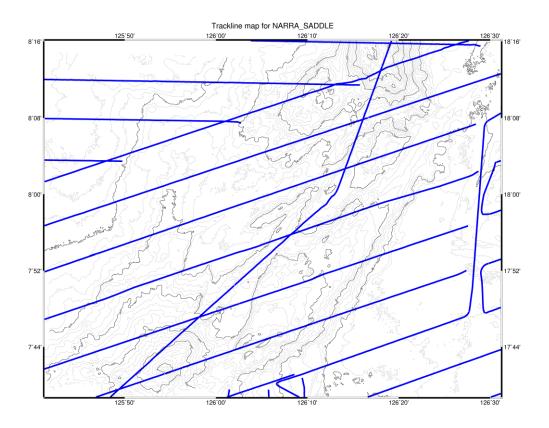
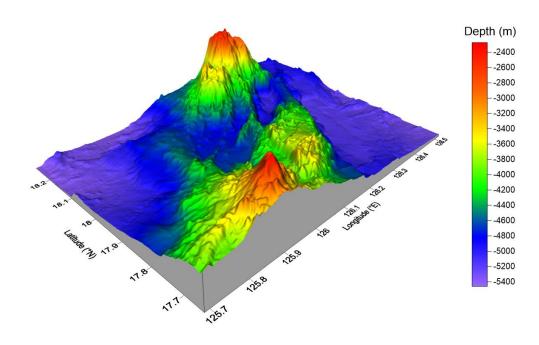


Fig 3. Bathymetric map of Narra Saddle showing track lines.



 $Figure\ 3.\ 3D\ bathymetric\ map\ of\ the\ Narra\ Saddle.\ View\ looking\ northeast.$ 

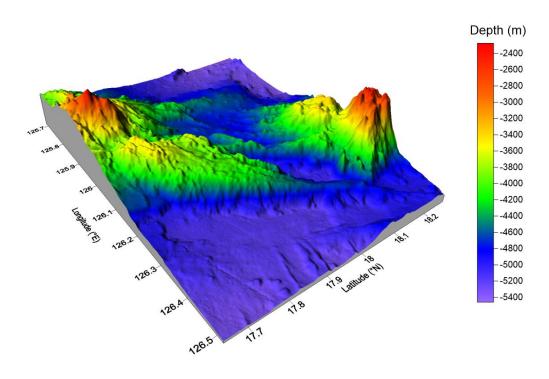


Figure 4. 3D bathymetric map of the Narra Saddle. View looking northwest.

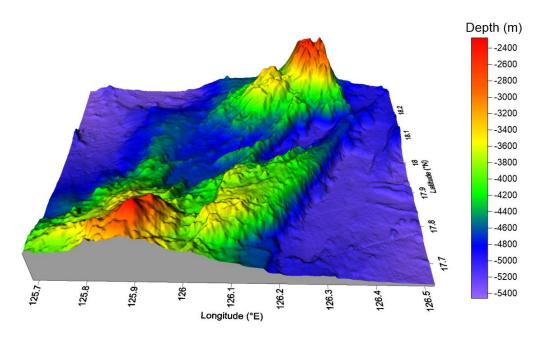


Figure 5. 3D bathymetric map of the Narra Saddle, view looking north.

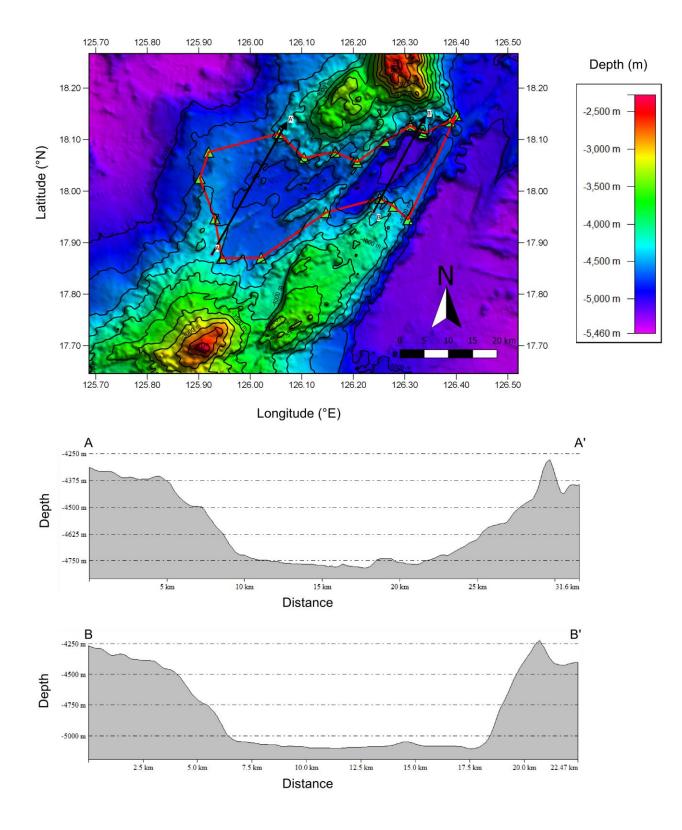


Figure 6. Profiles of Narra Saddle from the southwest to northeast edges (A-A') and (B-B'). Vertical exaggeration is 4.