INTERNATIONAL HYDROGRAPHIC ORGANIZATION

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

July 3, 2010

NAMRIA

UNDERSEA FEATURE NAME PROPOSAL

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

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

fines the fea	ture (Yes/No) :						
······································	ture (Yes/No) :						
	Polygon	Multiple points	Multiple I	ines*	Multip		Combination of geometries*
Yes	Yes				polygo		geometries
<u>i</u>		oviding the coordina	ites below.				. <u>L</u>
		Lat. (e.g. 63°32.6'N	l)		Long. (e	.g. 046	6°21.3'W)
	18° 1.7'N 18° 24.7' 18° 36.6' 18° 49.9' 18° 49.3' 18° 33.8' 18° 24.1' 18° 18'N 17° 42.8' 17° 2.2'N	N (shallow) I (bounds) N N N N N N N N N N N N N N N N N N N		125° 126° 126° 126° 126° 127° 127° 126° 126° 126°	54.1'E (bo 3.3'E 7.6'E 3'E 32.8'E 57.7'E 7.4'E 2.1'E 54.4'E 33.3'E 12.4'E 3.6'E	unds)	
Movimu	m Donth:	5511 87 m	Stoon	noss:			
						Spea	r Shape
Description: Total Relief :		4365.66 m	Dimension/Size :		Size:	202,	003.54m x 983.35m
					•		
3:	Philippir	ne Rise (Benham F	Rise)				
	h.h.						
		Shown Named on Map/Chart:			Chart 4726A		
Chart/Map References:		Shown Unnamed on Map/Chart:					
•		Within Area of Map/Chart:		Chart 4726A			
Reason for Choice of Name (if a person, state how associated with the feature to be named):		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.					
	Minimur Total Re	18° 1.7'N 18° 12.9' 18° 36.6' 18° 49.6' 18° 49.6' 18° 49.3' 18° 33.8' 18° 24.1' 18° 18'N 17° 42.8' 17° 2.2'N 17° 32.8'	18° 32.3'N (shallow) 18° 1.7'N (bounds) 18° 12.9'N 18° 24.7'N 18° 36.6'N 18° 49.9'N 18° 49.6'N 18° 49.3'N 18° 33.8'N 18° 24.1'N 18° 18'N 17° 42.8'N 17° 2.2'N 17° 32.8'N (bounds) Maximum Depth: 5544.87 m Minimum Depth: 1179.27 m Total Relief: 4365.66 m S: Philippine Rise (Benham F Shown Vamed on Map/Charlotter Shown Unnamed on Map/Charlotter Within Area of Map/Charlotter Name (if a many things. It is tall and short is tall, strong, enduring a their demand for freedom. storms, the narra usually wor break off smaller branch Narra has resisted the terr The feature was first name.	18° 1.7'N (bounds) 18° 12.9'N 18° 24.7'N 18° 36.6'N 18° 40.9'N 18° 49.3'N 18° 33.8'N 18° 24.1'N 18° 18'N 17° 42.8'N 17° 2.2'N 17° 32.8'N (bounds) Maximum Depth: 5544.87 m Steep Minimum Depth: 1179.27 m Shape Total Relief: 4365.66 m Dime S: Philippine Rise (Benham Rise) Shown Named on Map/Chart: Within Area of Map/Chart: Within Area of Map/Chart: Within Area of Map/Chart: Within Area of Map/Chart: Total Relief is tall, strong, enduring and signify their demand for freedom. While others storms, the narra usually withstands or break off smaller branches, but the Narra has resisted the tempest, so he The feature was first named in the P	18° 32.3'N (shallow)	18° 32.3'N (shallow)	18° 32.3'N (shallow)

Discovery Date:

Discoverer (Individual, Ship):

Discovery Facts:

Supporting Survey Data, including Track Controls:	Date of Survey:	March 19-20,29, 2008; April 11-13, 2008; May 3-6, 2008; June 8-18, 2008; September 3-7, 2008; July 1-3, 2009;		
	Survey Ship:	June 24-28, 2010; July 3, 2010 BRP HYDROGRAPHER PRESBITERO		
	Sounding Equipment: Type of Navigation:	Seabeam 2112 GPS with IMU		
	Estimated Horizontal Accuracy, in nautical miles (nm):	0.027 nm (50 m)		
	Survey Track Spacing:	5 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 1634		
	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 MC 98011 MONACO CEDEX 75700 PARIS Principality of MONACO France Fax: +377 93 10 81 40 Fax: +33 1 45 68 58 12 E-mail: info@unesco.org E-mail: info@iho.int Web: www.iho.int Web: http://ioc-unesco.org/

Attachments

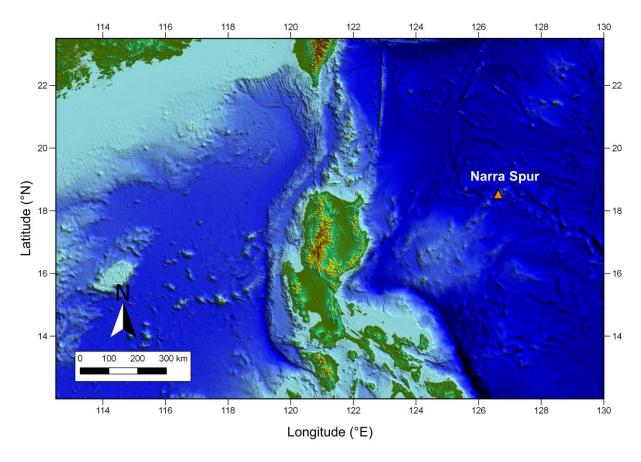


Fig. 1. Index map showing the location of Narra Spur.

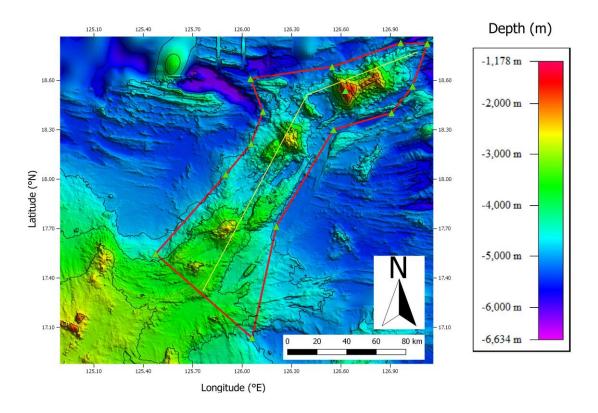


Fig. 2. Bathymetric map of the Narra Spur. Contour interval is 800 meters. Yellow line showing the connection of spur to a bigger area, the Benham Rise region.

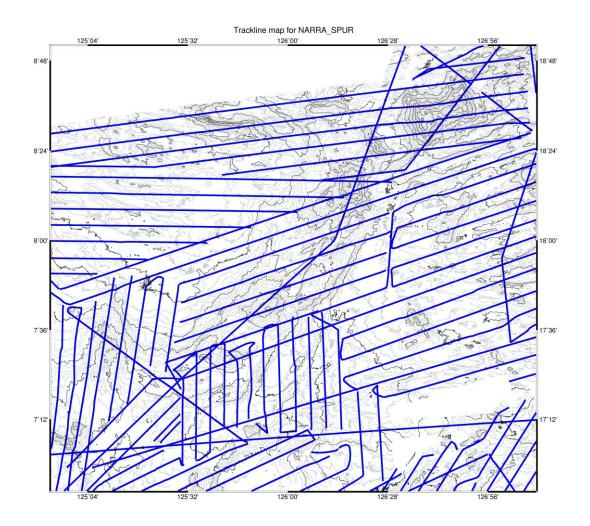


Fig 3. Bathymetric map of Narra Spur showing track lines.

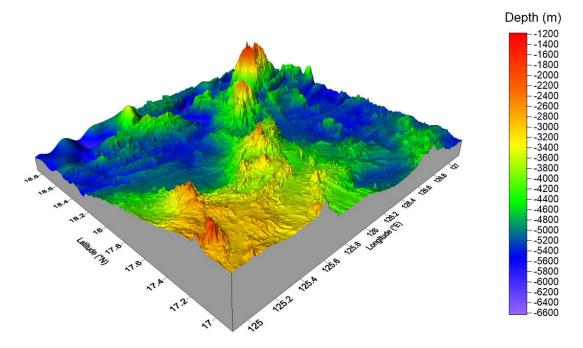


Figure 4. 3D bathymetric map of the Narra Spur. View looking northeast.

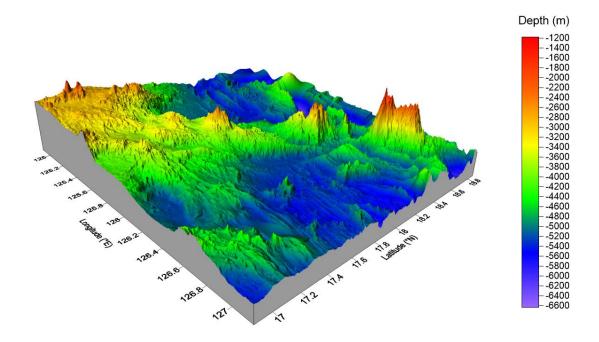


Figure 5. 3D bathymetric map of the Narra Spur. View looking northwest.

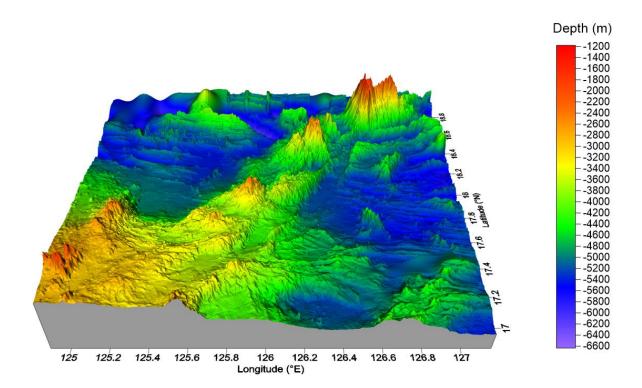
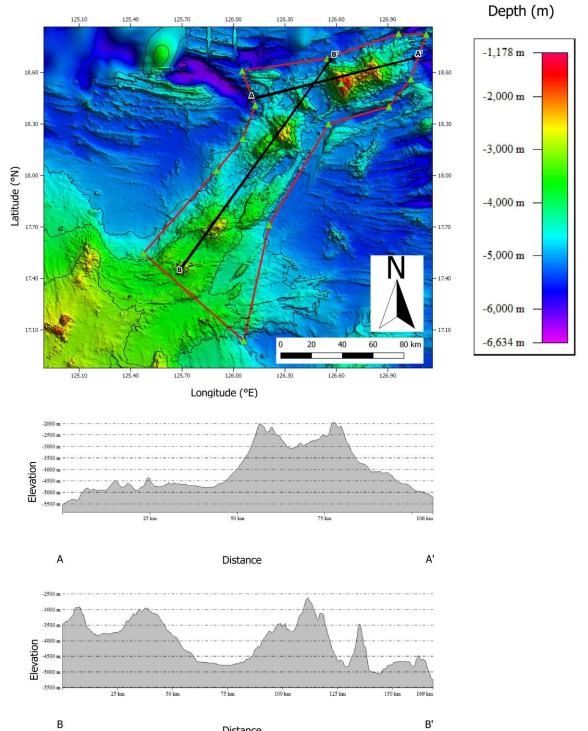


Figure 6. 3D bathymetric map of the Narra Spur, view looking north.



B Distance B Figure 7. Profiles of Narra Spur from the southwest to northeast edge (A-A') and southwest edge to northeast edge (B-B').