

June 24, 2016

R/PMEL

International Hydrographic Bureau (IHB)  
4, Quai Antoine 1er  
B.P. 445  
MC 98011 MONACO CEDEX  
Principality of MONACO

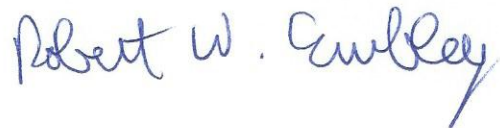
Dear IHB,

Enclosed is a proposal package for naming an undersea feature in the NW Pacific, Mariana Arc. NW Rota-1 is an active, volcanic seamount located near the island of Rota. The seamount was mapped and named during the 2003 research expedition, Submarine Ring of Fire (funded by NOAA Office of Exploration/NOAA Vents Program), on the R/V Thomas Thompson using a EM300 multibeam mapping system and GPS navigation. At that time, no name was associated with this seamount. NW Rota-1 has subsequently been mapped using higher precision mapping systems (1-m accuracy) and directly observed using unmanned submersibles on numerous research expeditions.

This package includes maps, reprints and a reference list of published, peer-reviewed articles related to NW Rota-1.

Please contact me if you have any questions regarding this proposal.

Sincerely,



Robert W. Embley  
NOAA PMEL Earth-Ocean Interactions Program

Enclosures

## **NW Rota-1 Feature Name Proposal Documents:**

1-International Hydrographic Organization Undersea Feature Name Proposal

2-NW Rota-1 Location Map

3-Mariana Arc Map from 2003 Submarine Ring of Fire Expedition Cruise Report (Figure 2; p.24)

4-Mariana Arc Map from 2009 Resing et al., *Geochemistry Geophysics Geosystems*, (Fig. 1)

5-NW Rota-1 Select Reference Listing

6-Reprints (4):

*Exploring the Submarine Ring of Fire, Mariana Arc – Western Pacific*, 2007 Embley et al., *Oceanography*

*Direct video and hydrophone observations of submarine explosive eruptions at NW Rota-1 volcano, Mariana Arc*, Chadwick et al., 2008 *Journal of Geophysical Research*

*Eruption-fed particle plumes and volcanoclastic deposits at a submarine volcano: NW Rota-1, Mariana Arc*, 2008 Walker et al., *Journal of Geophysical Research*

*Venting of acid-sulfate fluids in a high-sulfidation setting at NW Rota-1 submarine volcano on the Mariana Arc*, Resing et al., 2007 *Economic Geology*