

June 24, 2016

R/PMEL

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

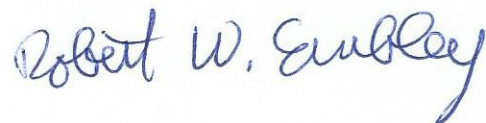
Dear IHB,

Enclosed is a proposal package for naming an undersea feature in the NE Pacific, Axial Seamount. Axial Seamount is an active, volcanic seamount located 250 nautical miles due west of the Oregon-Washington coastline. Axial was first mapped and named during a 1981 research expedition aboard the NOAA Ship Surveyor using a SeaBeam classic (16-beam) sonar system and satellite navigation. Axial Seamount has subsequently been studied and mapped using higher precision mapping systems (relative accuracy or 1-meter) and ultra-short baseline transponder navigation (absolute accuracy of 35 meters) and directly observed using submarines and unmanned submersibles on numerous research expeditions.

This package includes maps, reprints and a reference list of published, peer-reviewed articles related to Axial Seamount.

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

Sincerely,

A handwritten signature in blue ink that reads "Robert W. Embley". The signature is written in a cursive style with a large, prominent 'R' and 'E'.

Robert W. Embley
NOAA PMEL Earth-Ocean Interactions Program

Enclosures

Axial Seamount Feature Name Proposal Documents:

1-International Hydrographic Organization Undersea Feature Name Proposal Form

2-Axial Seamount Location Map

3-Axial Seamount Select Reference Listing

4-Reprints

Delaney, John R., H. Paul Johnson and Jill L. Karsten (1981): The Juan de Fuca Ridge—Hot Spot—Propagating Rift System: New tectonic, geochemical and magnetic data. *Journal of Geophysical Research*, 86(B12), 11757-11750.

Chase, R.L., J.R. Delaney, J.L. Karsten, H.P. Johnson, S.K. Juniper, J.E. Lupton, S.D. Scott, V. Tunnicliffe, S.R. Hammond, and R.E. McDuff (1985): Hydrothermal vents on an axis seamount of the Juan de Fuca Ridge, Canadian American Seamount Expedition. *Nature*, 313(5999), doi: 10.1038/313212a0, 212-214.

Axial Seamount, Reprinted from the *Journal of Geophysical Research*, vol. 95, B8, August 10, 1990, 12689-12966.

Chadwick, Jr., W.W., D.A. Clague, R.W. Embley, M.R. Perfit, D.A. Butterfield, D.W. Caress, J.B. Paduan, J.F. Martin, P. Sasnett, S.G. Merle, and A.M. Bobbitt (2013): The 1998 eruption of Axial Seamount: New insights on submarine lava flow emplacement from high-resolution mapping. *Geochem. Geophys. Geosyst.*, 14(10), doi: 10.1002/ggge.20202, 3939-3968.