UNITED STATES BOARD ON GEOGRAPHIC NAMES UNDERSEA FEATURE NAME PROPOSAL

NAME PROPOSED: Dill Hills

LOCATION: Offshore Central California Coast Ocean or Sea: Pacific Ocean

Coordinates:

Point feature or center point:	Lat.37 05N	Long. 123 35 W
Linear feature (from):	Lat.	Long.
Linear feature (to midpoint or turning point):	Lat.	Long.
Linear feature (to):	Lat.	Long.
Areal Feature – Northeast corner:	Lat. 37 15N	Long. 123 20W
Southeast corner:	Lat. 36 55N	Long. 123 20W
Southwest corner:	Lat. 36 55N	Long. 123 50W
Northwest corner:	Lat. 37 15N	Long. 123 50W

DESCRIPTION:

Feature type: Hills

Size and Shape: These are an arcuate group of hills caused by deposition of material debouching from the mouth of Pioneer Canyon. They are of the order of 60-100 meters in height, twenty to thirty miles in length, and present a plan view showing a horseshoe pattern southwest of Pioneer Canyon and Pioneer Seamount. Depth: (max. and min.) 3000 – 3500 meters

Steepness, etc. – These features show dune structure with the downslope side (relative to the continental slope) being significantly steeper than the upslope side of each hill.

Associated features: Pioneer Canyon, Pioneer Seamount, Guide Seamount

CHART OR MAP REFERENCE:

Name and feature shown on:

Feature shown but not named on: NOAA EEZ bathymetric map LM-135, Pioneer Canyon Map.

REASON FOR CHOICE OF NAME:

This feature is named for Dr. Robert F. Dill (1927-2004), marine geologist, who was a pioneer investigator of submarine canyon processes, stromatolites, submersibles, scuba diving for scientific purposes, sea level history, and other subjects. Dr. Dill was co-author of "Submarine Canyons" with Dr. Francis P. Shepard of Scripps Institution of Oceanography. Dr. Shepard is commemorated by the name Shepard Meander which is approximately 60 miles to the south of Dill Hills. Thus there names will be linked in perpetuity. Dr. Dill passed away on January 25, 2004.

DISCOVERY FACTS:

Date: 1986 Discoverer (individual, ship): Surveyed by the NOAA Ship DISCOVERER as part of NOAA EEZ mapping project. Sounding equipment used: Sea Beam Navigation Type: ARGO/GPS calibration Estimated horizontal accuracy: <u>+</u>.04 km Track/Spacing, crossing: Full bottom coverage

SUPPORTING MATERIALS: NOAA EEZ Map LM-135 which is can be found digitally at <u>http://www.ngdc.noaa.gov/mgg/bathymetry/maps/area4.html</u> on the National Geophysical Data Center Bathymetric Mapping website. Also see: <u>http://www.photolib.noaa.gov/htmls/theb3854.htm</u> and <u>http://www.photolib.noaa.gov/htmls/theb3853.htm</u> <u>http://www.ngdc.noaa.gov/mgg/bathymetry/maps/previews/LM-135.pdf</u> <u>http://www.photolib.noaa.gov/bigs/ship3180.jpg</u> http://www.photolib.noaa.gov/htmls/ship3180.htm

SUBMITTED BY: Captain Albert E. Theberge, Jr., NOAA Corps (ret.) Organization and address: NOAA Central Library 1315 East West Highway Silver Spring, Maryland