

**UNDERSEA FEATURE NAME PROPOSAL**  
(Sea NOTE overleaf)

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

<b>Name Proposed:</b>	Herrmann Canyon	<b>Ocean or Sea:</b>	Southern Ocean
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<b>Geometry</b> that best defines the feature (Yes/No) :						
Point	Line	Polygon	Multiple points	Multiple lines*	Multiple polygons*	Combination of geometries*
<b>Yes</b>						

\* Geometry should be clearly distinguished when providing the coordinates below.

<b>Coordinates:</b>	Lat. (e.g. 63°32.6'N)	Long. (e.g. 046°21.3'W)
	69°48.6' S	2°06.9' E
	69°46.35' S	2°08.6' E
	69°43.75' S	2°14.6' E
	69°40.3' S	2°11.3' E
	69°35.65' S	1°57.2' E
	69°23.3' S	1°44.2' E
	69°15.6' S	1°28.0' E
69°06.0' S	1°18.7' E	

<b>Feature Description:</b>	Maximum Depth:	3750 m	Steepness :	steep sides, >25°
	Minimum Depth :	1500 m	Shape :	continuous trough
	Total Relief :	> 1000 m	Dimension/Size :	length ~ 90 km

<b>Associated Features:</b>	Baeyer Canyon; Fimbul Canyon, Kraul Canyon
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<b>Chart/Map References:</b>	Shown Named on Map/Chart:	Nautical Chart INT 905
	Shown Unnamed on Map/Chart:	Canyon System Bathymetry off Fimbulisen; 1:250 000 Lazarev Sea, Antarctica
	Within Area of Map/Chart:	GEBCO 5.18 and 5.16, IBCSO

<b>Reason for Choice of Name</b> (if a person, state how associated with the feature to be named):	Dr. Ernst Herrmann (1895-1970) was the geologist and geographer for the 3rd German Antarctic Expedition aboard the M.V. Schwabenland (December 1938-April 1939). He obtained a PhD in Geology from the university in Berlin, then became a voluntary teaching assistant at the Mineralogical and Petrographic Institute in Berlin. He had strong polar interests and organised geological and glaciological expeditions to Sweden, Norway and Iceland between 1924 and 1934. In summer 1938 he used the new slow-flying Fieseler Storch aircraft to undertake a photographic exploration of the geography of Svalbard, publishing a travel report as a popular book, and making the first coloured aerial movie in the Arctic. Herrmann also had a special interest in volcanoes, and was appointed a member of the Santorin-Expedition to investigate the eruption of one of the volcanoes of the Mediterranean island of Santorini, in 1925-26. He later participated in expeditions to volcanoes in Iceland and Italy (in 1932, 1936, 1937, and 1939). Herrmann described himself as a teacher and polar researcher. Having been wounded during the first World War, he was exempt from military service in the second. As a member of the Freemasons he was not a member of the National Socialist Party and as a consequence was never promoted as teacher. In addition to teaching, he published books and papers and gave
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lectures and radio broadcasts on geology and geography. His later books included "Die Pole der Erde" (The Poles of the Earth; 1950) and "Die Werkstatt Vulkane" (The Volcano Workshop; 1963). In 1947 he became docent of geography in Bederkesa and at the teacher training college in Celle, and later in Osnabrück.

Herrmann was responsible for the echo-sounding on the Schwabenland, which was only the second ship after the Meteor to carry out echo-sounding in the South Atlantic (Discovery-II was doing so at about the same time). From these novel soundings Herrmann was able to draw a bathymetric map of the Antarctic continental margin seawards of the ice shelf between longitudes 17°E and 5°W and from 68°S to 71°S, showing prominent channels >3000m deep at 8-9°E and >4000m deep at 2-3°W. This was the first ever mapping of what were probably submarine canyons off the Antarctic coast. The map was published in 3 reports:-

1. Herrmann, E., 1939, Die geographischen Arbeiten. Annalen der Hydrographie und Maritimen Meteorologie, VIII Beiheft 23-26.
2. Herrmann, E., 1940, Zeitschrift für Erdkunde zu Berlin 8 (17/18), p. 431.
3. Herrmann, E., 1941, Deutsche Forscher im Südpolarmeer. Safari Verlag, Berlin, 184 pp.

Herrmann (1941) also was the first to realise that the mid-Atlantic Ridge was of volcanic origin, and published extensively on the bathymetry and geology of the South Atlantic in a work little recognised today:

Herrmann, E., 1948, Tektonik und Vulkanismus in der Antarktis und den Benachbarten Meersteilen. Petermanns Geographischen Mitteilungen, 1. Quartalsheft, 1-11 (note – manuscript submitted April 1943).

Note that there is one Antarctic Canyon named after the ship (Schwabenland Canyon), and another after the expedition leader (Ritscher Canyon), but so far no acknowledgement of Herrmann's major scientific role on the expedition, nor of his contribution to Antarctic marine geology.

<b>Discovery Facts:</b>	Discovery Date:	<b>1991, 1992, 2002</b>
	Discoverer (Individual, Ship):	<b>Polarstern: ANT IX/3, X/2, XIX/2</b>

<b>Supporting Survey Data, including Track Controls:</b>	Date of Survey:	<b>div.</b>
	Survey Ship:	<b>Polarstern</b>
	Sounding Equipment:	<b>Multibeam Hydrosweep DS-2</b>
	Type of Navigation:	<b>GPS</b>
	Estimated Horizontal Accuracy (nm):	<b>0.2</b>
	Survey Track Spacing:	<b>variable</b>
	Supporting material can be submitted as Annex in analog or digital form.	
Bathymetric Chart: Canyon System Bathymetry off Fimbulisen 1:250 000		
	<b>AWI</b>	

<b>Proposer(s):</b>	Name(s):	<b>Dr. Colin Summerhayes</b>
	Date:	<b>June 1, 2010</b>
	E-mail:	<b>cps32@cam.ac.uk</b>
	Organization and Address:	<b>Emeritus Associate, Scott Polar Research Institute Cambridge University Lensfield Road Cambridge CB2 1ER, UK</b>
	Concurrer (name, e-mail, organization and address):	<b>none</b>

**Remarks:**

**NOTE :** This form should be forwarded, when completed :

- a) **If the undersea feature is located inside the external limit of the territorial sea :-**  
to your "National Authority for Approval of Undersea Feature Names" (see page 2-9) or, if this does not exist or is not known, either to the IHB or to the IOC (see addresses below);
- b) **If at least 50 % of the undersea feature is located outside the external limits of the territorial sea :-**  
to the IHB or to the IOC, at the following addresses :

International Hydrographic Bureau (IHB)  
4, Quai Antoine 1er  
B.P. 445  
MC 98011 MONACO CEDEX  
Principality of MONACO  
Fax: +377 93 10 81 40  
E-mail: [info@ihb.mc](mailto:info@ihb.mc)

Intergovernmental Oceanographic Commission (IOC)  
UNESCO  
Place de Fontenoy  
75700 PARIS  
France  
Fax: +33 1 45 68 58 12  
E-mail: [info@unesco.org](mailto:info@unesco.org)