INTERNATIONAL HYDROGRAPHIC ORGANIZATION

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

IHO/IOC Form No. 1

UNDERSEA FEATURE NAME PROPOSAL

(See NOTE overleaf)

Ocean or Sea:_**Arctic Ocean**_____ Name proposed _**Hjalmar Johannsen Seamount**

Coordinates : **A** - of midpoint or summit : **Lat. 82°57'N , Long. 3°40'W**

_**600**_ kilometres in ___**NW**_____ direction from _**Spitzbergen**

and/or **B** - extremities (if linear feature) :

Lat. _____ } to { Lat. _____

Long. _____ Long. _____

Description (kind of feature) : ___Seamount.

Identifying or categorizing characteristics (shape, dimensions, total relief, least depth, steepness, etc.):

Elongate volcanic/tectonic seamount at the intersection of Gakkel Ridge and Lena Trough in Nansen Basin, rift mountain generated by Gakkel Ridge. The entire mountain is about 25km long and 10 km wide with a minimum depth of about 1100m. It rises above the basin of Lena Trough at a depth of 4800m for a total relief of over 3500m.

Associated features : Umberto Cagni Seamount (see accompanying proposal)

Chart reference :

Shown with name on chart No. _____

Shown but not named on chart No. _____

Not shown but within area covered by chart No. _____

Reason for choice of name (if a person, state how associated with the feature to be named) : _Hjalmar Johannsen was a Fram expedition member under Fridtjof Nansen, and accompanied him on his attempt to reach the North Pole in 1894.

Discovery facts :

Date: 29.7.2004 by (individuals or ship) _PFS Polarstern, Alfred Wegener Institut for Polar and Marine Research, Germany.

By means of (equipment) : _Hydrosweep DS-2 multibeam sonar echosounder

Navigation used : _GPS

Estimated positional accuracy in nautical miles : _0.01

Description of survey (track spacing, line crossing, grid network, etc.) : 2 crossing Hydrosweep tracks near the summit.

Nature and repository of other survey activities (dredge samples, cores, magnetics, gravity, photographs, etc.) : Dredge haul PS66-214 at 82°58.38'N, 4°55.44'W on nearby Cagni seamount contained mid-ocean ridge basalt pillow fragments with glassy rims. Material is archived at Alfred Wegener Institut, Bremerhaven and Max-Planck Institut für Chemie, Mainz

Supporting material : enclose, if possible, a sketch map of the survey area, profiles of the features, etc., with reference to prior publication, if any :

Slopes are visible in map published by Michael, P.J. et al., 2003. Magmatic and amagmatic seafloor spreading at the slowest mid-ocean ridge: Gakkel Ridge, Arctic Ocean. Nature (London), 423: 956-961. See attached maps from Polarstern ARK XX-2.

Submitted by:

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Concurred in by (if applicable) : _____

Address : _____

_____

National Authority (if any) : _____

Address : _____

_____

NOTE : This form should be forwarded, when completed :

a) **If the undersea feature is located in territorial waters** :-
to your "National Authority for Approval of Undersea Feature Names" or, if this does not exist or is not known, either to the International Hydrographic Bureau or to the Intergovernmental Oceanographic Commission (see addresses below);

b) **If the undersea feature is located in international waters** :-
to the International Hydrographic Bureau or to the Intergovernmental Oceanographic Commission, at the following addresses :

International Hydrographic Bureau
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

Intergovernmental Oceanographic Commission
UNESCO
Place de Fontenoy
75700 PARIS
FRANCE
Fax: +33 1 45 68 58 12
E-mail : info@unesco.org

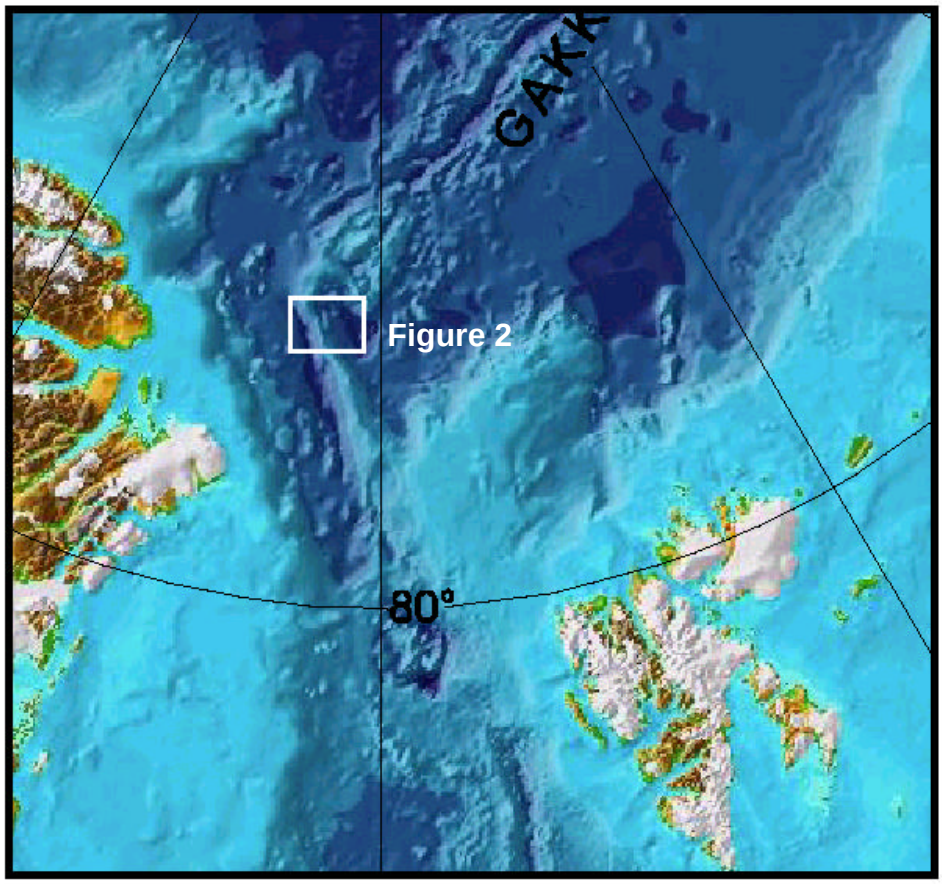

Figure 1: General location of Cagni and Johannsen seamounts. Excerpted from IBCAO beta map of the Arctic Ocean (Jakobssen et al 2000). Light box shows area of Figure 2.

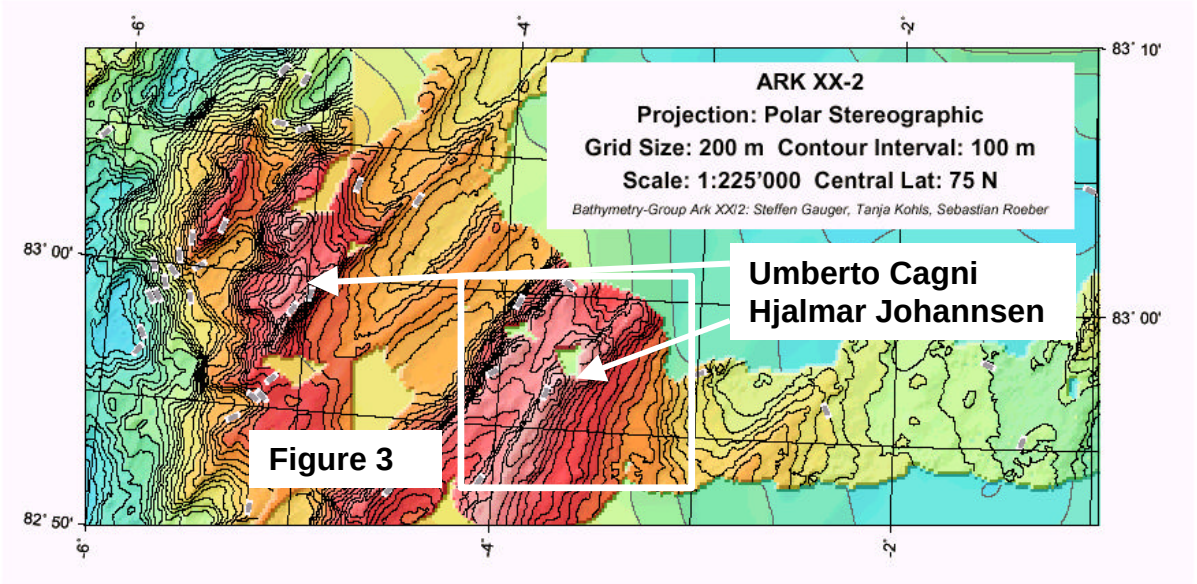

Figure 2: Detail of intersection of Gakkel Ridge and Lena Trough. Locations of Umberto Cagni and Hjalmar Johannsen Seamounts shown by light arrows. Light box shows area of Figure 3. Bathymetric data from PFS Polarstern cruise PS66 (ARK XX-2, 2001) and PS59 (ARK XVII-2, 2004), background data from IBCAO (2000).

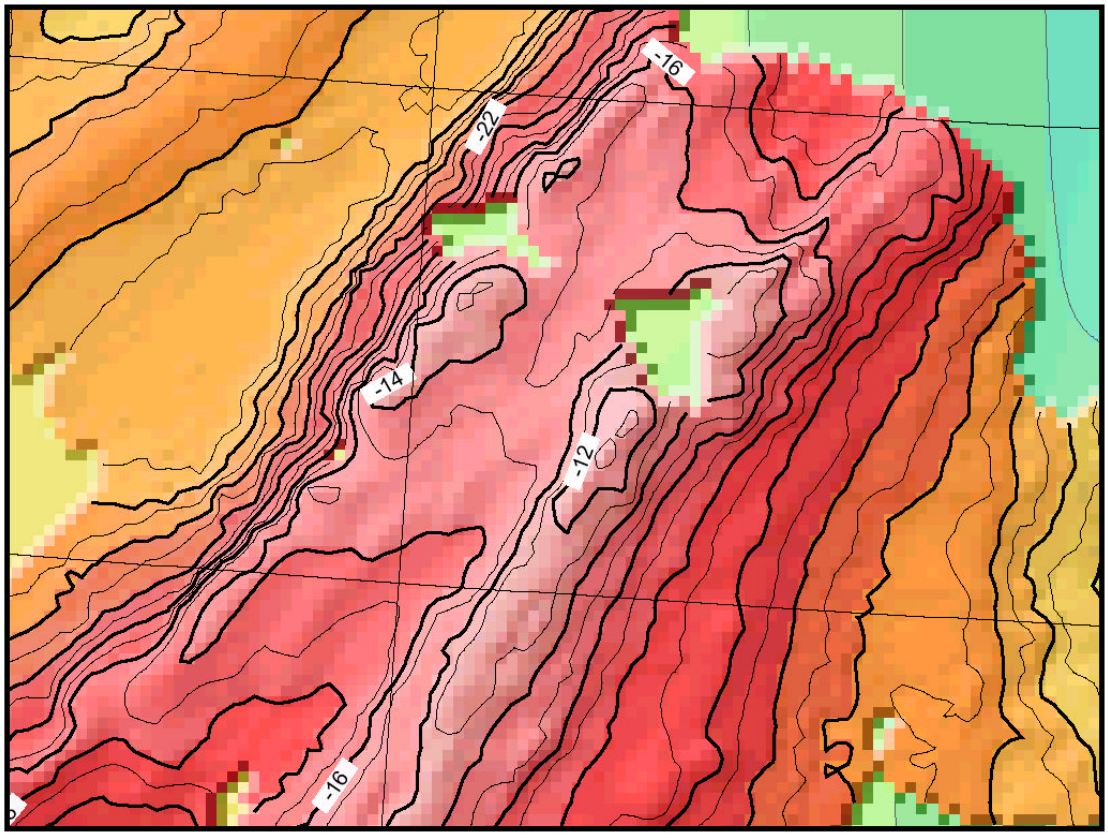

Figure 3: Detail of Hjalmar Johannsen Seamount.