SCUFN21-05D

GEBCO SUB-COMMITTEE ON UNDERSEA FEATURE NAMES (SCUFN) 21st Meeting, Jeju Island, Rep of Korea, 19-22 May 2008

Comments from Dr. R.L. Fisher on SCUFN-19 and SCUFN-20 Reports

I. <u>Excerpts from Dr. Fisher's letter to the SCUFN Secretary (M. Huet), dated 2&5 May 2008</u>

On a first brief reading of the SCUFN XX Final Report, I wish to comment (recommend?) on two items:

Page 11 – Item 5.1.4.2 (in which you mention having consulted me) William's Seamount(s).
 I recommend that the name "William Seamounts" be dropped from the GEBCO – SCUFN database B-8. I believe it is a Lamont personal in-group family (child's?) name.

2. Page 54 – Annex 8 : Revision of B-6 Terminology

a. Through vs Trench : definitions

A "Trench" is an asymmetric steep walled exceptionally deep depression; people do agree today that "Trenches" customarily are formed at ocean-island arc (or ocean-continent) subduction zones and hence are characterized by seismic activity – Exceptions are rare (e.g. Romanche Trench, Vema Trench).

A "Trough" Characteristically is almost symmetrical in cross-section and generally almost ---- to completely ---- flat-floored, ordinarily through sediment fill (or, rarely, solidified magma). The slopes may/may not be faulted.

- b. A "Hill" is not necessarily smaller than a "Knoll": The difference is that a "Knoll" has a rounded off or flattish summit while a "Hill" can have a sharper summit. Both have less relief than a "Seamount". Neither one is a "mud volcano".
 "Mud Volcano" is someone's pet feature, and quite rare undersea.
- c. Both "Guyot" and "Tablemount" (ACUF's preference) are terms for flat-topped seamounts. In both cases the flat top customarily is taken (i.e. genetically) to indicate erosion by wave action when the summit was near the sea surface. Hence the usage chosen is merely agency preference (tradition).
- d. Certainly the five terms "Abyssal Hills", "Continental Margin", "Continental Rise", "Median Valley", and "Mid-Oceanic Ridge" should be retained both on historical and implied genetic implications.

Now, on a subject much nearer to my heart, one that is an affront to my lifelong experience, my expertise, and my professional standards : the use/acceptance in GEBCO SCUFN's B-8 Gazetteer/digital database of the name "EMDEN TRENCH" for the major topographic-tectonic depression more properly – traditionally – less chauvinistically – internationally CALLED THE PHILIPPINE TRENCH. In the enclosure [*By M. Huet: see Section II*]I send to you today (four pages) I set forth the compelling reasons why SCUFN now – at your Jeju Island (Korea) GEBCO SCUFN XXI – should behave in a non-jingoistic way and give this internationally/scientifically – used feature its proper name. If SCUFN wishes to continue to advertise the 1925 passage, call this trench's deepest point "Emden Deep"; SIO's R/V

Thomas Washington (1980) won't object. Existing examples of gracious, non-chest beating usage for the world's trenches :

"Marianas Trench", not 'Challenger Trench" (but "Challenger Deep" world accepted).

"Tonga Trench", not "Horizon Trench" (but "Horizon Deep" world accepted).

"Izu Ogasawara Trench", not "Ramapo Trench".

"Kuril Trench", not "Takuyo Trench".

"Yap Trench", not "Yokosuka Trench".

"New Britain Trench", not "Planet Trench".

"Peru-Chile Trench" not Akad-Kurchatov Trench".

"Middle America Trench", not "EPCE(R) 857 Trench".

II. <u>Excerpts from Dr. Fisher's letter to the GEBCO Secretary (B. Whitmarsh), dated 10 April</u> 2008 [Enclosure to his letter of 2&5 May to the SCUFN Secretary]

As you know, in my two-plus decades on - and chairing - SCUFN (and its predecessor) I fought to keep it knowledgeable and historically rigorous and fair, not merely nationalistic and jingoistic (ACUF never did trust me completely; its Secretary Dirk Randall was before your time). SCUFN should avoid politics.

As, plainly, now an outsider, I do remain concerned about two matters :

- 1. The indicated current or incipient unhappiness with the terminology section of B-6 <u>Standardization of Undersea Feature Names.</u> The surprisingly short list of generic names (type/class or entity) and their definitions were established from careful and prolonged and intensive discussions by field-experienced expeditionary/publishing research scientists from several nations and also including on-site contributions from agency hydrographers (specifically SHOM). They were familiar with and respected the international literature and its evolution. The criteria (dimensions were accepted only sparingly) and occurrences cited (i.e. "type examples") resulted from careful evaluation. I must trust the presently-designated wisemen : J.L. Frias S., Hyun-Cheol Han, Y. Ohara (Chair), W. Reynoso –Peralta and A. Theberge, will be operating from an equally strong critical background.
- 2. As a half-century on-site afficionado of trenches, I remain deeply bothered by the continued acceptance -- in the SCUFN GAZETTER B-8 of the name "EMDEN TRENCH" for the major topographic and tectonically significant depression extending from 3°N to 15°N along the east side of the Philippine archipelago with its deepest region off Mindanao.

The elongated depression was known to be very deep before Emden's passage in 1925, but that vessel's difficult but erroneous bathymetric values, obtained audibly, were given wide report. I have no objection to SCUFN calling the deepest "Emden Deep", although the actual deepest point has been established by PDR (by SIO's Thomas Washington in 1980) some considerable distance north - northwest of Emden's 1925 position/maximum "audible return".

Names for the world's other trenches have been accepted amiably in all other occurrences to recognize and relate to their geographic position, i.e. their nearby significant neighbor (e.g. Aleutian, Mariana, Tonga, Puerto Rico, Middle America, South New Hebrides). So, I once more call on SCUFN to show statesmanship, to recognize and cite this huge topographic feature as the "PHILIPPINE TRENCH" (with proper end point and mid point coordinates), and the best-established deepest locality --- wherever SCUFN thinks it is ---as Emden Deep.

Incidentally, you can find my "quantitative analysis of that (a nd other) deepest-point question in the final (7 July 1997) update of my "Maximum Depths/Soundings of Principal and Notable Ocean Deeps", an erstwhile tabulation, I'll enclose several pages.