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COMMISSION (of UNESCO)



INTERNATIONAL
HYDROGRAPHIC
ORGANIZATION



*Twenty Second Meeting of the GEBCO
Sub-Committee on
Undersea Feature Names (SCUFN)*

Brest, France
22-26 September 2009

REPORT

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- Notes:** 1) Paragraph numbering is the same as in the agenda (Annex C)
 2) All documents referred to in these minutes are available from the SCUFN page of the IHO website (http://www.iho-ohi.net/mtg_docs/com_wg/SCUFN/SCUFN22/SCUFN22Docs.htm)

Annexes:

- A List of Documents
- B List of Participants
- C Agenda
- D List of Actions arising from SCUFN22
- E Transfer of Bathymetric Data to the IHO DCDB – Summary of Discussions
- F SCUFN Generic Terms: List of Allowed Geometries
- G List of Acronyms used in this Report

1. OPENING AND ADMINISTRATIVE ARRANGEMENTS

- Docs: SCUFN22-01A List of Documents (also Annex A)
 SCUFN22-01B List of Participants (also Annex B)
 SCUFN22-01C SCUFN Membership and Observers List

The twenty second meeting of the GEBCO Sub-Committee on Undersea Feature Names (SCUFN) met in the Gaillard Meeting Room at the headquarters of the Service Hydrographique and Océanographique de la Marine (SHOM) in Brest, France under the chairmanship of Dr. Hans Werner SCHENKE, AWI, Germany.

Ing. en Chef Henri DOLOU, of SHOM, opened the meeting. He welcomed all participants on behalf of Ing. General Gilles BESSERO, Director of SHOM, who was unable to be there as he was attending a meeting of the IHO Mediterranean and Black Sea Hydrographic Commission. He wished the sub-committee a successful and productive meeting. Administrative arrangements were explained by Ing. en Chef Yves-Henri RENHAS, also of SHOM. The Chairman thanked Ing. en Chef DOLOU for his kind words and expressed his thanks to SHOM for hosting the meeting. He stated that for the first time the meeting would last five days, in order to provide the necessary time to cover the lengthy agenda.

The Chairman welcomed Dr. Vaughan STAGPOOLE and Cdr. Ana Angelica ALBERONI as new SCUFN members from New Zealand and Brazil, respectively. It was reported that the newly appointed SCUFN member, Cdr. Muhammad BASHIR, Pakistan, would be unable to attend, as he could not obtain a visa in time. In addition, SCUFN members José Luis FRIAS Salazar, Mexico, and Walter REYNOSO Peralta, Argentina, were both unable to attend due to a lack of financial support. As a result, nine out of twelve SCUFN members were in attendance.

Attendees included SCUFN chairman, Dr. Hans-Werner SCHENKE (AWI, Germany), SCUFN secretary, Mr. Michel HUET (IHB, Monaco), and sub-committee members Cdr. Ana Angelica ALBERONI (DHN, Brazil), Cdr. Harvinder AVTAR (NHO, India), Mr. Norman Z. CHERKIS (Five Oceans Consultants, USA), Dr. Ksenia DOBROLYUBOVA (GINRAS, Russia), Dr. Hyun-Chul HAN (KIGAM, Rep. of Korea), Dr. Yasuhiko OHARA (JHOD, Japan), Dr. Vaughan STAGPOOLE (IGNS, New Zealand) and Ms. Lisa A. TAYLOR (NOAA, USA).

Observers included Ms. Darma BENNETT (NGA, USA), Mr. Trent PALMER (NGA & BGN/ACUF, USA), Prof. Hyo Hyun SUNG (EWhA, Rep. of Korea), Mr. Brede GUNDERSEN (NHS, Norway), Ing. Général Etienne CAILLIAU (SHOM, France), Ing. en Chef Henri DOLOU (SHOM, France), Mr. Young Tae LIM (KHOA, Korea), Ms. In Young PARK (KHOA, Korea), Mr. Shigeru KASUGA (JHOD, Japan), Dr. Kunio YASHIMA (JHA, Japan), and Prof. Shaohua LIN (NMDIS, China).

Outcome:

- The sub-committee noted the documents introduced.

2. APPROVAL OF AGENDA

Docs: SCUFN22-02A Agenda (also Annex C)

The Chairman stated that now that new SCUFN Terms of Reference and Rules of Procedure have been approved and new members have been appointed, it was time to elect a vice chairman to the sub-committee. This was agreed, and as a result a new agenda item 4 was added to allow for the election of the SCUFN vice-chairperson. At the request of K. DOBROLYUBOVA, it was agreed to add a new item 6.1 to review and approve the report of SCUFN21. The Secretary suggested adding a new agenda item under Any Other Business to review the reserve section of the Gazetteer (74 names), which was agreed. He stated that some of the names had been in reserve for over 10 years and that there was a need to decide on how to resolve the pending actions for each feature name.

The revised agenda, as in Annex C, was approved.

Outcome:

- The sub-committee approved the agenda, as amended (see Annex C).

3 SCUFN TERMS OF REFERENCE AND RULES OF PROCEDURES

Docs: SCUFN21-03A Terms of Reference and Rules of Procedures for SCUFN (Secretary)

The Chairman stated that the SCUFN Terms of Reference and Rules of Procedures were approved in 2008 by the IHO member states and by the IOC at its Assembly in June 2008. This document is a very important foundation for the sub-committee's work.

Outcome:

- The sub-committee noted the paper.

4 ELECTION OF THE VICE-CHAIRPERSON

The Chairman requested nominations for the position of SCUFN Vice-Chairperson. The chairman (IOC) pointed out that according to the terms of reference, the SCUFN Chair and Vice-Chair should come from different parent organizations. He nominated Lisa TAYLOR (IHO). There were no other nominations. L. TAYLOR was elected vice-chair by acclamation.

Outcome:

- Mrs. Lisa TAYLOR (USA) was nominated and elected unopposed as Vice-Chairperson of SCUFN.

5 STANDARDIZATION OF UNDERSEA FEATURE NAMES: IHO-IOC PUBLICATION B-6

5.1 PUBLICATION B-6 IN VARIOUS LANGUAGES

*Doc: SCUFN22-05.1A Draft new edition of B-6 (English-French)
SCUFN22-05.1B Draft new edition of B-6 (English-Japanese)
SCUFN22-05.1D Draft new edition of B-6 (English-Russian)
SCUFN22-05.1E Draft new edition of B-6 (English-Korean)*

The secretary reported that, following the publication of B-6 (English/French) in 2008, translations have been completed for English/Japanese, English/Korean and English/Russian versions, which are now available from the GEBCO and IHO websites. The chairman expressed his sincere thanks to the Japanese, Korean and

Russian members for this important achievement. Completion of the English/Spanish version was still pending; the two native Spanish speaking members were not in attendance to report on this item. The secretary noted that a caveat has been included on the front page of the English/Japanese, English/Korean and English/Russian versions of B-6 indicating that the IHO does not have the ability to check these translations.

H-C. HAN reminded the sub-committee that at the last meeting the possibility of linking generic term definitions to graphics illustrating the associated feature (e.g., a typical guyot) was discussed. It was agreed that this should be done. Members were requested to send appropriate graphics (e.g., colour shaded relief images and feature profiles) to the IHB. Subject to sub-committee approval, the secretary will then establish the links in B-6.

Outcome:

- **Action SCUFN22/1: All members** to submit appropriate graphics depicting clear examples of generic feature types (e.g., colour shaded relief images and feature profiles) to the secretary for inclusion via links in B-6.
- **Action SCUFN22/2: Secretary** to establish links to approved graphics in B-6.

5.2 FUTURE IMPROVEMENTS OF B-6

Doc: SCUFN22-05.2A Flaws in the English Version of B-6, 4th Edition (Y. OHARA)

Y. OHARA, reported that during the process of translating the B-6 to Japanese, a number of flaws were identified in the English text. He submitted a report listing 17 specific problems. The sub-committee reviewed the list as follows:

1) Inconsistency of reference to SCUFN and the GEBCO Guiding Committee

It was agreed to adopt the following references:

- IHO/IOC GEBCO Sub-Committee on Undersea Feature Names (SCUFN)
- IHO/IOC GEBCO Guiding Committee (GGC)

2) Inconsistency of reference to naming authorities

Currently the following references appear in B-6: authorities, appropriate national authority, national and international organizations concerned with nomenclature, appropriate authorities, national boards of geographical names and undersea features, national names authorities, agencies, national authority, national naming authority, and national institutions.

The sub-committee agreed that the current situation is confusing and needs to be remedied. Y. OHARA and V. STAGPOOLE kindly volunteered to address this issue.

3) Inconsistency of reference to publications

At present, B-6 refers to professional journals and scientific publications. The sub-committee agreed to refer only to scientific publications.

4) Unclear term definitions

The following terms were discussed. Some changes were agreed upon as reflected in the table below.

Current B-6 Wording	Agreed Revised B-6 Wording
Marine scientists and <u>other</u> persons in their country	Marine scientists and <u>others</u>
Ocean maps	Maps
The deep seafloor	No change
Abyssal depth	No change
Oceanic depths	Deep seafloor
Low water line	No change

5) Inconsistency in referencing the GEBCO Gazetteer

At present, B-6 includes the following references: an international and worldwide IHO-IOC Gazetteer, the IHO-IOC GEBCO Gazetteer, and the GEBCO gazetteer of Undersea Feature Names (Publication B-8). It was agreed that the first time the GEBCO Gazetteer is mentioned in B-6, it should be referred to as the IHO/IOC GEBCO Gazetteer of Undersea Feature Names (Publication B-8). Subsequently, it should be referred to as the Gazetteer.

6) Inconsistency in referencing B-6

At present, B-6 includes “internationally agreed guidelines for the standardization of undersea feature names” and “these guidelines”. It was agreed that both references should be “this publication”.

7) Confusion in the use of terms and names

At present, B-6 includes “terms (or names)”. It was agreed to delete “(or names)”. It was also agreed to include the following sentence immediately before section II.A. “A specific term followed by a generic term make up a feature name”.

8) Incorrect reference to Emperor Seamounts

B-6 incorrectly refers to Emperor Seamounts instead of Emperor Seamount Chain. This was corrected.

9) Undefined acronym

B-6 lists UNCSGN as an undefined acronym. This was corrected to read “United Nations Conference on the Standardization of Geographical Names (UNCSGN)”.

10) Consistency in reference to the territorial sea

On page 2-9 of B-6, reference is made to “located in a territorial sea” in the title and to “located inside the external limit of a territorial sea” in the following text. The sub-committee decided that there was no need to change this, as the title appropriately provides a more concise version of the full reference.

11) Lack of clarity in the definition of some generic terms

The sub-committee considered the definitions of caldera, fan and trough.

- a. CALDERA. Y. OHARA’s view was that the existing definition (i.e., A collapsed or partially-collapsed SEAMOUNT, commonly of annular shape) was not accurate. He and HC. HAN offered to prepare an improved definition.
- b. FAN. The sub-committee agreed that the expression “CANYON or canyon system” should be changed to “CANYON(s)”.
- c. TROUGH. The sub-committee discussed the appropriateness of including the term “steep sided” in the definition. It was agreed to leave the definition unchanged.
- d. MEDIAN VALLEY. The sub-committee agreed that the expression “the MID-OCEANIC RIDGE system” should be changed to “a MID-OCEANIC RIDGE”.

12) Generic terms that have geological implications

The use of words with genetic implication, like depositional and unconsolidated, in the definitions of FAN, LEVEE, and SHOAL(S) was questioned by Y. OHARA. After discussion, the sub-committee agreed to keep these descriptive words, as they provide useful information. In addition, the word “natural” in the definition for LEVEE was considered superfluous, so was deleted.

13) Inconsistency in reference to features

The following changes were accepted by the sub-committee:

- “All selected names” changed to “All selected undersea feature names”.
- “submarine topographic features” changed to “undersea features”.
- “Specific terms for other features” changed to “Other specific terms”.
- Remove “e.g.: Gardner Pinnacles”, currently included as an example within the definition for PINNACLE. There is currently no pinnacle(s) in the Gazetteer.
- “Specific elements of names” changed to “Specific terms”.

Outcome:

- The sub-committee noted the paper.
- **Action SCUFN22/3: Y. OHARA and V. STAGPOOLE** to review B-6 in detail to check for consistency in reference to 'Naming Authorities' and make recommendations to the next meeting.
- **Action SCUFN22/4: Y. OHARA and H-C. HAN** to compose an improved definition for caldera for submission to the next SCUFN meeting.

6 MATTERS REMAINING FROM PREVIOUS MEETINGS

Doc: SCUFN22-06A List of Actions from SCUFN-21 and Status (Secretary)

- Notes:
- 1) Numbers in the 1st left column in the table below refer to corresponding paragraphs in SCUFN-21 Report.
 - 2) The status of actions arising from previous meetings are classified as follows:
 - DONE
 - PENDING (Additional work is needed to complete the action.)
 - 3) The status of proposed undersea feature names are classified as follows:
 - ACCEPTED
 - NOT ACCEPTED
 - PENDING (The proposed feature name/feature will be put in the reserve section of the GEBCO gazetteer database pending the provision of additional information, e.g. supporting bathymetry or biographic information.)

6.1 REVIEW OF ACTIONS ARISING FROM SCUFN21

The secretary reviewed the list of actions from SCUFN21 and reported on the status of each action. The outcome of the review is summarized in the table below:

Agenda Item	SCUFN21 Action	Details	Responsible	Status
4.1 & 4.2	21/1	Monitor the approval of the 4 th edition of B-6 (English/French) by the GEBCO Guiding Committee, then by IHO/IOC, and its publication.	Chairman (H.W. SCHENKE) / Secretary (M. HUET)	Completed. B-6 (E/F) officially published in November 2008.
4.1 & 4.2	21/2	Monitor the production of the following language versions of the 4 th edition of B-6: English/Spanish, English/Russian, English/Japanese and English/Korean.	Secretary (M. HUET)	Completed for English/Japanese, English/Korean, and English/Russian. Pending for English/Spanish.

Agenda Item	SCUFN21 Action	Details	Responsible	Status
4.2	21/3	Submit a documented proposal on “Sand Ridge”, as proposed new generic term, to SCUFN22.	Rep of Korea (Dr HAN / Prof. SUNG)	Completed. A definition was proposed, i.e. “ <i>A submerged, permanent, group of shallow, low ridges comprised of sand or sediment, formed in parallel appearance. May constitute a hazard to navigation</i> ”. She further indicated that sand ridges are often lower than 30 m height; however, they can be large in horizontal extent. Due to their rather small size and their transient nature, there was no strong support for showing these features on GEBCO maps. To be re-discussed at SCUFN23.
5.1.1.6	21/4	Include the name Mann-Borghese Seamount in the GEBCO Gazetteer, in replacement of Vaughan Williams Seamount.	Secretary (M. HUET)	Completed.
5.1.1.8	21/5	Include the new East Adare Ridge in the GEBCO Gazetteer and amend the existing Adare Ridge and Adare Trough, as accepted.	Secretary (M. HUET)	Completed.
5.1.1.22	21/6	Provide track control for Gordin Guyot, Skornyakova Guyot, Vulkanolog Guyot, and Zatonsky Guyot.	K. DOBROLYU BOVA	Completed. Track control was provided for the 4 guyots at the meeting. To be considered at SCUFN23.
5.1.2.2	21/7	Define the extent of the Japanese Guyots and provide the coordinates and a shape file.	Y. OHARA	Completed. List of coordinates and a shape file provided. K. Dobrolyubova however suggested that the Japanese Guyots should be grouped differently and offered to prepare a proposal for SCUFN23 accordingly.
5.1.2.2	21/8	Remove the existing comments in the remarks section of the GEBCO Gazetteer for Japanese Guyots.	Secretary (M. HUET)	Completed.
5.1.2.4	21/9	Remove from the GEBCO Gazetteer any information relating to Geisha Guyots, keeping only the name and the comment “See Japanese Guyots” in the Remarks section.	Secretary (M. HUET)	Completed.
5.1.5	21/10	Include Thomas Washington Guyot, Winterer Guyot and Stout Guyot in the Reserve Section of the GEBCO Gazetteer.	Secretary (M. HUET)	Completed.
5.2	21/11	Include Philippine Trench, as accepted, in the GEBCO Gazetteer and to delete Emden Trench.	Secretary (M. HUET)	Completed.

Agenda Item	SCUFN21 Action	Details	Responsible	Status
5.2	21/12	Revise the position of Emden Deep and determine its depth.	Chairman (H.W. SCHENKE)	Pending until a new survey is available.
5.3	21/13	Write to Dr. DAVEY to explain the non acceptance of Hayes Bank and Houtz Bank by the sub-committee.	Chairman (H.W. SCHENKE)	Completed. A response was received by Dr. DAVEY indicating that these features have been accepted by the NZ Geographic Board. SCUFN will not accept these specific terms, as they do not conform to the B-6 naming criteria. However, the features will be kept in the reserve section of the Gazetteer.
6.1.a	21/14	Provide the correct minimum depth for Chichagov Seamount to the Secretary.	K. DOBROLYU BOVA	Completed. The feature that was proposed as Chichagov Seamount had already been named Boytsov Seamount (see SCUFN20 report). As a result, the specific term Chichagov has been proposed for the seamount which was proposed to commemorate Dmitriev at SCUFN21 and rejected. The new proposal for Chichagov Seamount was accepted. Also, a new proposal has been made for Dmitriev Seamount (see section 7.1).
6.1.a	21/15	Clarify the flow of data with the GEBCO guiding committee at its meeting in May 2008.	Chairman (H.W. SCHENKE)	Completed. There was a discussion on how to facilitate the transfer of bathymetric data to the IHO DCDB. Questions / Issues identified are summarized in Annex E . To be re-discussed at SCUFN23.
6.1.c	21/16	Propose another name for the Seamount at <i>Lat. 74°13.81'N, Long. 8°01.78'E</i> and <i>Lat. 74°15.48'N, Long. 7°50.05'E</i> .	K. DOBROLYU BOVA	Completed. The specific term Chichagov was proposed for this feature.
6.2.a	21/17	Provide additional positions for Bando Basin.	Y. OHARA	Completed.
6.2.b	21/18	Provide additional positions for Boso Canyon.	Y. OHARA	Completed.
6.2.c	21/19	Provide additional positions for Katsuura Basin to describe its geometry as a closed polygon.	Y. OHARA	Completed.
6.2.d	21/20	Provide additional positions for Katsuura Canyon.	Y. OHARA	Completed.
6.2.f	21/21	Provide additional positions for Mogi Fan.	Y. OHARA	Completed.

Agenda Item	SCUFN21 Action	Details	Responsible	Status
6.3.e	21/22	Provide additional bathymetric data in support of the proposed Santa Catarina Plateau.	A.A. ALBERONI	Pending. The feature will be kept in the reserve section, pending new multibeam bathymetric data to be collected in 2010.
6.4.a	21/23	Add to the remarks section of the GEBCO Gazetteer for Gageo Reef: "Prior to 2006, this reef was referred to as <i>Ilhyang Reef</i> in nautical charts".	Secretary (M. HUET)	Completed.
6.4.a	21/24	Provide at least one additional position for Gageo Reef.	H-C. HAN	Completed.
6.4.b	21/25	Provide three additional positions for Galmaegi Reef.	H-C. HAN	Completed.
6.4.c	21/26	Provide additional positions for Jeju Valley.	H-C. HAN	Completed.
6.4.g	21/27	Provide additional positions describing the linear extent along the summits of Usan Ridge.	H-C. HAN	Completed.
6.5.a	21/28	Refer the proposal for Grigor'ev Seamount back to Rashidov V.A. with the recommendation to submit the proposal to the Russian committee on undersea feature names. A proposal can then be resubmitted to SCUFN for inclusion in the GEBCO Gazetteer.	K. DOBROLYU BOVA	Completed. When the name has been approved by the Russian Naming Committee, K. DOBROLYUBOVA will formally propose the adoption of this name by the sub-committee for inclusion in the Gazetteer.
6.6.a	21/29	Check whether the feature proposed as Nippon Foundation Seamounts has been named already, e.g. by Dr. Peter LONSDALE. If not, to look for an alternative name, possibly in connection with the nearby State of Mexico.	W. REYNOSO Peralta / J.L. FRIAS	Completed. The specific term Acapulco has been proposed for these seamounts.
7.1	21/30	Review and comment on the list from ACUF, as in Doc. SCUFN21-7.1A, and propose any necessary actions to the sub-committee.	Secretary (M. HUET)	Pending the availability of the new on-line interface to the geospatially enabled Gazetteer database. See also section 8.1.
7.2.d.ii	21/31	Note in the remarks section of the GEBCO Gazetteer for George Walker Seamount: "Accepted by ACUF as Walker Seamount".	Secretary (M. HUET)	Completed.
7.2.d.ii	21/32	Contact the "SBN Seamount Catalog at Earthref.org" SIO project, and check which of the seamounts listed in this catalogue have been named.	W. REYNOSO Peralta	Pending. No report was provided to the sub-committee.
9.1 & 9.2	21/33	Review the BODC and AWI proposals, as in SCUFN21-09.1A, 09.2A and 09.2B, and make proposals to improve definition of feature shapes.	"geometry" sub-group (Leader: L. TAYLOR)	Completed. L. TAYLOR provided a list of recommended geometries for each generic term in the Gazetteer (see Agenda Item 10.2 and Annex F).

Agenda Item	SCUFN21 Action	Details	Responsible	Status
9.1	21/34	Fix the problems identified in Annex I to SCUFN-09.1A.	Secretary (M. HUET)	Pending the availability of the new on-line interface to the geospatially enabled Gazetteer database.
10.1	21/35	Continue and complete his review of the unnamed seamounts in the Pacific Ocean, and make proposals to the sub-committee.	W. REYNOSO Peralta	Pending. No report was provided to the sub-committee.

Outcome:

- The sub-committee noted the list of actions reviewed.
- **Action SCUFN22/5: W. REYNOSO Peralta / J.L. FRIAS Salazar** to complete the English/Spanish version of the 4th edition of B-6 as soon as possible.
- **Action SCUFN22/6: All members and observers** to consider the definition proposed by H.H. SUNG for ‘Sand Ridge’, i.e. “A submerged, permanent, group of shallow, low ridges comprised of sand or sediment, formed in parallel appearance. May constitute a hazard to navigation.”, and provide their comments to H.H. SUNG (hhsung@ewha.ac.kr) in advance of the next meeting. **H.H. SUNG** to report on the results at SCUFN23.
- **Action SCUFN22/7: Y. OHARA** to define the extent of the Joban Seamount Chain and provide the secretary with the coordinates and a shape file.
- **Action SCUFN22/8: K. DOBROLYUBOVA** to prepare a proposal relating to the grouping of seamounts/guyots in the Japanese Guyots area, for discussion at SCUFN23.
- **Action SCUFN22/9: V. STAGPOOLE** to ask the New Zealand Geographical Board if it would be possible to rename Hayes Bank and Houtz Bank, as it is now the international practice not to name features after living persons.
- **Action SCUFN22/10: All members and observers** to review the questions/issues in Annex E to SCUFN22 report, on how to facilitate the transfer of bathymetric data to the IHO DCDB, and provide their comments to L. TAYLOR (Lisa.A.Taylor@noaa.gov) in advance of the next meeting. **L. TAYLOR** to report on the results at SCUFN23.
- **Chichagov Seamount ACCEPTED**, with details as follows:
 - Position: *Lat. 74°13.81’N, Long. 8°01.78’E* (NW summit), N. Atlantic Ocean
Lat. 74°15.48’N, Long. 7°50.05’E (SE summit)
 - Proposer: Dr. Galina V. AGAPOVA and Dr. Ksenia O. DOBROLYUBOVA, Geological Institute, Russian Academy of Sciences (marine@ginras.ru)
 - Date of Proposal: September 2009
 - Discoverer: Russian R.V. Nikolay Strakhov
 - Date of Discovery: 2007
 - Minimum Depth: SE summit: 990 m; NW summit: 1247 m
 - Maximum Depth: SE summit: ~ 2600 m; NW summit: ~ 2450 m
 - Total Relief: SE summit: ~ 1600 m; NW summit: ~ 1200 m

The seamount is located on the west side of the Knipovich Ridge.

Named after Vasily Yakovlevich Chichagov (1726 –1809), an admiral and Russian polar explorer, who in 1765-1766 reached the latitude 80.5 N while searching for the North-West passage. He carried out hydrographical and meteorological observations and confirmed the direction of the ice drift to the west, while studying a region near Spitsbergen Archipelago in the Greenland Sea.

6.2 REVIEW AND APPROVAL OF SCUFN21 REPORT

The secretary referred to the SCUFN21 report and asked the sub-committee if there were any proposed changes. K. DOBROLYUBOVA requested that a statement be added to the report in Section 5.1.2.2 in connection with the discussions regarding the extent of Japanese Seamounts. After consulting with Y. OHARA, the following text was proposed, agreed upon, and included in the SCUFN21 report:

“K. DOBROLYUBOVA, in consultation with G. AGAPOVA (a previous long-standing member of SCUFN), stated that she objected to including three spatially distinct groups of seamounts within the same feature name. Y. OHARA stated that these three groups are not tectonically related, as evidenced by the geomorphological expression of the seamounts.”

Aside from minor editorial issues which were corrected, there were no other proposed changes to the SCUFN21 report. Therefore, the report as amended was approved by the sub-committee.

Outcome:

- The sub-committee agreed the report of SCUFN21, as amended, as a true record.

7 PROPOSALS ON RECORD OR SUBMITTED DURING INTERSESSIONAL PERIOD

The sub-committee revised the classification of the status of an undersea feature name proposal and decided to include the category “ADOPTED”. As a result:

- A. An undersea feature name is composed of a specific term, e.g. Sonne, and a generic term (or a combination thereof), e.g. Seamount or Seamount Province. The status of proposed undersea feature names is classified as follows:
- ACCEPTED (The proposed name, as approved, will be included in the GEBSCO Gazetteer)
 - ADOPTED (The proposed name is mainly located in a territorial sea and has been approved by the relevant national naming authority. It is adopted for inclusion in the GEBSCO Gazetteer due to its significance for GEBSCO).
 - NOT ACCEPTED (Both specific and generic terms are considered unsuitable. The proposed name will not be put in the reserve section of the GEBSCO Gazetteer. The proposer may however be invited to re-formulate his/her proposal.)
 - PENDING (Either the specific term or the generic term is considered unsuitable, or further clarification is needed. The proposed name will be put in the reserve section of the GEBSCO Gazetteer pending the provision of additional information, e.g. supporting bathymetry or biographic information)
- B. The followings are standards routine actions for all proposals:
- All proposers of undersea feature names to arrange for bathymetric data and track control used in support of their proposals, to be provided to the IHO Data Centre for Digital Bathymetry (DCDB).
 - Secretary (M. HUET) to provide the GEBSCO Bathymetric Editor with the meeting reports, drawing attention to all newly accepted names and the associated supporting bathymetric data.
 - Secretary (M. HUET) to provide the chairperson of the UN Group of Experts on Geographical Names (UNGEGN) with the meeting reports.
 - Secretary (M. HUET) to include all ACCEPTED feature names in the GEBSCO Gazetteer; also to include all PENDING features in the reserve section.

7.1 VARIOUS PROPOSALS

Doc: SCUFN22-07.1A Various proposals

7.1.1 Proposal by Geological Institute - Russian Academy of Sciences (GINRAS)

7.1.1.a Dmitriev Seamount

Position:	Lat. 15 °05.7'N, Long. 45°15.9'W, N. Atlantic Ocean
Proposer:	Dr. Natalya N. TURKO and Dr. Ksenia O. DOBROLYUBOVA, Geological Institute, Russian Academy of Sciences (marine@ginras.ru)
Date of Proposal:	September 2009
Discoverer:	Russian R/V Akademik Nikolaj Strakhov
Date of Discovery:	1986
Minimum Depth:	1509 m
Maximum Depth:	~ 2700 m
Total Relief:	~ 1200 m
Dimension/Size:	13 km x 17 km

This cone-shaped seamount is located in the Mid-Atlantic Ridge, at the southern flank of the Fifteen-Twenty Fracture Zone (sometimes referred to as Barracuda FZ or Cabo Verde FZ) and on the summit surface of the southern transverse ridge.

Named after Leonid Vladimirovich Dmitriev (1927 -2005), a professor and Russian marine geologist and petrologist, who worked at the Vernadsky Institute of Geochemistry and Analytical Chemistry of the Russian Academy of Sciences. He participated in 15 expeditions in the Pacific, Atlantic and Indian oceans where he led research projects on the basic rocks of the sea bottom. He took part in the 37th and 46th cruises of DSDP, led several international projects on Mid-oceanic ridges research, and headed the Russian department on the InterRidge Project.

Outcome:

- Dmitriev Seamount **ACCEPTED**, with details as above.

7.1.2 Proposal by Thomas J. OSBORNE, USA

7.1.2.a Lucky Star Ridge

Position:	Lat 21°40.0'N , Long 126°47.8'E, NW. Pacific Ocean Lat 21°43.5'N , Long 126°49.6'E (mid point) Lat 22°46.0'N , Long 126°56.5'E
Proposer:	Mr. Thomas J. OSBORNE, 14 Beavers St., High Bridge, New Jersey 08829 USA (csrcTosborne@tycoelectronics.com)
Date of Proposal:	June 2008
Discoverer:	US S/V Fugro Gauss
Date of Discovery:	October 2007
Minimum Depth:	4460 m
Maximum Depth:	5900 m
Total Relief:	1440 m

The bathymetry provided was insufficient to clearly define the feature as a ridge. Also, the proposed specific term did not follow the guidelines for SCUFN naming criteria, as in B-6.

Y. OHARA mentioned that JHOD has complete multibeam coverage over this feature, which is very close to the Japanese EEZ and part of the Luzon-Okinawa Fracture Zone system. He offered to collaborate with T. OSBORNE in order to submit another proposal for this feature to the next meeting, which was agreed.

Reason for choice of proposed name: The cable ship Tycom Reliance was recovering a cable on the feature. The hard seabed conditions broke the cable several times and it took 3 days to recover the cable. After three days the skies cleared and a bright star appeared above the stern just before the graps were recovered to the surface, which was called the 'Lucky Star'.

Outcome:

- Specific term (Lucky Star) and generic term (Ridge) **NOT ACCEPTED**.
- **Action SCUFN22/11: Secretary** to write to the proposer of Lucky Star Ridge, recommending that he contacts Y. OHARA to collaborate about the feature located from *Lat. 22°46.0'N, Long. 126°56.5'E* to *Lat. 21°40.0'N, Long. 126°47.8'E*, in view of submitting a new proposal to SCUFN23.

7.1.3 Proposal by Walter Reynoso-Peralta, Argentina

7.1.3.a Acapulco Seamounts

Position (summit, smt 1):	<i>Lat. 13°27.1'N, Long. 119°50.5'W, N. Pacific Ocean</i>
Position (summit, smt 2):	<i>Lat. 13°40.3'N, Long. 120°21.8'W</i>
Position (summit, smt 3):	<i>Lat. 13°41.7'N, Long. 120°40.3'W</i>
Proposer:	Walter REYNOSO Peralta, GEBICO/Nippon Foundation Training Program Alumni, SHN, Chacabuco 361 P 10 "D" Buenos Aires 1069, Argentina (wreyper@yahoo.com.ar)
Date of Proposal:	September 2009
Discoverer:	US R/V Thomas Washington (SIO, UCSD)
Date of Discovery:	April 1988
Minimum Depth:	650 m (smt 1); 1150 m (smt 2); 850 m (smt 3).
Maximum Depth:	2350 m (smt 1); 2250 m (smt 2); 2350 m (smt 3).
Total Relief:	1700 m (smt 1); 1100 m (smt 2); 1500 m (smt 3).
Surrounding depths:	Between 3500 and 4000 m.
Dimension/Size:	- Radius of 17 km for the base and 4 km for the flat top, with a conical shape (smt 1); - Radius of 9 km for the base, with a conical shape and two peaks separated by 4 km (smt 2); - Radius of 10 km for the base, with a conical shape (smt 3).
Steepness:	~ 6° (smt 1); ~ 3° (smt 2); ~ 4° (smt 3).

This feature came from a review of the unnamed seamounts in the central Pacific Ocean (see Report of SCUFN20, § 5.1.2). Acapulco is the alternative name for Nippon Foundation which was proposed to SCUFN21 and rejected (see Report of SCUFN21, § 6.6.a).

This feature consists in a group of 3 aligned seamounts located in international waters. It was remarked that one of the features in the seamount group seems to have been named Dowd Guyot in the ACUF Gazetteer, since 1972; also that the GEBICO grid shows three additional seamounts in the group to the west, to be encompassed in a polygon using the new administrative interface (see section 10.1).

Named from the nearby Mexican city of Acapulco.

Outcome:

- **Acapulco Seamounts ACCEPTED**, with details as above.
- **Action SCUFN22/12: T. PALMER** to provide the Secretary with information on Dowd Guyot (*Lat. 13°27'N, 119°39'W*).

- **Action SCUFN22/13: L. TAYLOR** to provide the Secretary with a polygon defining the base of Acapulco Seamounts.

7.2 PROPOSALS BY JAPAN COMMITTEE ON UNDERSEA FEATURE NAMES (JCUFN)

Doc: SCUFN22-07.2A Proposals by JCUFN, July 2009

7.2.a Katori Seamount

Position (summit): *Lat 36°10.0'N, Long 143°00.0'E*, NW Pacific Ocean
 Position (base): *Lat 36°12.3'N, Long 143°03.0'E*
Lat 36°10.8'N, Long 143°08.7'E
Lat 36°05.0'N, Long 143°12.0'E
Lat 35°56.3'N, Long 143°05.3'E
Lat 35°59.0'N, Long 142°54.0'E
Lat 36°02.0'N, Long 142°51.0'E
Lat 36°10.0'N, Long 142°53.5'E
Lat 36°12.5'N, Long 142°56.5'E
 Proposer: Japan Hydrographic and Oceanographic Department, 5-3-1 Tsukiji, Chuo-ku, Tokyo 104-0045, Japan (ohara@jodc.go.jp)
 Date of Proposal: July 2009
 Discoverer: Japanese S/V Komukai and Nakamaya
 Date of Discovery: 1958
 Minimum Depth: 4200 m
 Maximum Depth: 7000 m
 Total Relief: 2800 m
 Dimension/Size: 20 km x 20 km

This feature is a major volcanic edifice within the Joban Seamount Chain. Daiichi-Kashima Seamount and Daini-Kashima Seamount are located nearby.

Named from the nearby town of Katori, located in the Honshu Island, a mainland of Japan.

Outcome:

- **Katori Seamount ACCEPTED**, with details as above.

- **Action SCUFN22/14: Y. OHARA** to identify in the Gazetteer all specific terms which spelling need to be amended to comply with Japanese transliteration rules in force, e.g. from Daiiti to Daiichi, or Kasima to Kashima; list to be provided to the Secretary for updating of the Gazetteer.

7.2.b Takuyo-Daiyon Seamount

Position (summit): *Lat 23°39.0'N, Long 151°51.0'E*, NW Pacific Ocean
 Position (base): *Lat 23°32.0'N, Long 152°23.0'E*
Lat 23°25.0'N, Long 152°02.0'E
Lat 23°25.0'N, Long 151°53.0'E
Lat 23°29.0'N, Long 151°34.0'E
Lat 23°36.3'N, Long 151°30.0'E
Lat 23°51.8'N, Long 151°42.2'E
Lat 23°53.0'N, Long 151°51.0'E
Lat 23°49.0'N, Long 152°05.0'E
 Proposer: Japan Hydrographic and Oceanographic Department, 5-3-1 Tsukiji, Chuo-ku, Tokyo 104-0045, Japan (ohara@jodc.go.jp)
 Date of Proposal: July 2009

Discoverer:	Japanese S/V Takuyo
Date of Discovery:	May 1999 – February 2000
Minimum Depth:	950 m
Maximum Depth:	5800 m
Total Relief:	4650 m
Dimension/Size:	60 km x 100 km

This feature is a large seamount located close to Minami-Tori Shima Island, Japan's easternmost land territory. A small unnamed seamount is located to the south.

Named from the Japanese survey vessel Takuyo that discovered the seamount. This feature is the fourth seamount discovered by S/V Takuyo. "Daiyon" stands for fourth in Japanese.

Outcome:

- **Takuyo-Daiyon Seamount ACCEPTED**, with details as above.

7.2.c Takuyo-Daigo Seamount

Position (NW summit):	Lat 23°24.0'N, Long 153°02.0'E, NW Pacific Ocean
Position (SE summit):	Lat 23°03.6'N, Long 153°26.0'E
Position (base):	Lat 23°35.5'N, Long 153°35.0'E Lat 23°36.5'N, Long 153°49.0'E Lat 23°31.0'N, Long 153°58.5'E Lat 23°12.0'N, Long 153°46.0'E Lat 22°50.0'N, Long 153°47.0'E Lat 22°34.0'N, Long 153°36.0'E Lat 22°27.0'N, Long 153°12.0'E Lat 22°50.0'N, Long 152°35.5'E Lat 23°22.0'N, Long 152°29.5'E Lat 23°45.0'N, Long 153°38.0'E Lat 23°48.0'N, Long 153°08.0'E
Proposer:	Japan Hydrographic and Oceanographic Department, 5-3-1 Tsukiji, Chuo-ku, Tokyo 104-0045, Japan (ohara@jodc.go.jp)
Date of Proposal:	July 2009
Discoverer:	Japanese S/V Takuyo
Date of Discovery:	May 1999 – February 2000
Minimum Depth:	810 m (NW summit) – 910 m (SE summit)
Maximum Depth:	5300 m
Total Relief:	4490 m
Dimension/Size:	150 km x 150 km

This feature is a large seamount, with two flat-topped summits. A spur with 50 km in length extends to the northeast from the southeast summit. Minami-Tori Shima Island, Japan's easternmost land territory is located to the northeast of the seamount.

Named from the Japanese survey vessel Takuyo that discovered the seamount. This feature is the fifth seamount discovered by S/V Takuyo. "Daigo" stands for fifth in Japanese.

Outcome:

- **Takuyo-Daigo Seamount ACCEPTED**, with details as above.

7.2.d Kikai Caldera

Position: *Lat.30°48.5'N, Long 130°20.0'E, NW Pacific Ocean*
Lat.30°48.0'N, Long 130°18.0'E
Lat.30°47.0'N, Long 130°16.5'E
Lat.30°45.0'N, Long 130°16.5'E
Lat.30°42.0'N, Long 130°19.0'E
Lat.30°39.0'N, Long 130°22.0'E
Lat.30°39.0'N, Long 130°24.0'E
Lat.30°41.0'N, Long 130°27.5'E
Lat.30°43.0'N, Long 130°28.5'E
Lat.30°46.0'N, Long 130°29.0'E
Lat.30°48.0'N, Long 130°27.0'E
Lat.30°48.5'N, Long 130°24.0'E

Proposer: Japan Hydrographic and Oceanographic Department, 5-3-1 Tsukiji, Chuo-ku, Tokyo 104-0045, Japan (ohara@jodc.go.jp)

Date of Proposal: July 2009

Discoverer: Dr. Tadaiti MATSUMOTO, Japan

Date of Discovery: 1943

Minimum Depth: 690 m in height

Maximum Depth: 590 m in depth

Total Relief: 1280 m

Dimension/Size: 64 km², with an ellipsoid shape.

About 60-70 % of this feature is located within the territorial sea of Japan. However, since it is well known among the scientific community for its notorious catastrophic volcanic eruptions, the proposed name was accepted by the sub-committee for inclusion in the Gazetteer.

Named from Kikai-ga-Shima Island (old name of Satsuma-lo-Shima Island), which is one of the post caldera volcanoes and a part of the caldera rim.

Outcome:
- Kikai Caldera ADOPTED, with details as above.

7.2.e Fujin Seamount

Position (summit): *Lat 24°00.9'N, Long 142°57.4'E, NW Pacific Ocean*

Position (base): *Lat 24°05.6'N, Long 142°54.3'E*
Lat 24°05.1'N, Long 142°58.6'E
Lat 24°03.8'N, Long 142°59.8'E
Lat 24°03.5'N, Long 143°01.7'E
Lat 24°01.5'N, Long 143°03.6'E
Lat 23°58.8'N, Long 143°03.8'E
Lat 23°56.4'N, Long 142°59.2'E
Lat 23°55.5'N, Long 142°58.9'E
Lat 23°56.0'N, Long 142°56.8'E
Lat 23°58.7'N, Long 142°53.7'E
Lat 24°01.8'N, Long 142°52.0'E

Proposers: - Hisayoshi YOKOSE, Earth & Environment Sci. Graduate

School of Sci. & Technol. Kumamoto Univ., 2-39-1 Kurokami,
Kumamoto, 860-8555, Japan (yokose@sci.kumamoto-u.ac.jp).
- Hirokazu MAEKAWA, Graduate School of Science, Osaka
Pref. Univ., 1-1 Gakuen-cho, Sakai, Naka-ku, Osaka 599-8531,
Japan (maekawa@p.s.osakafu-u.ac.jp).
- Makoto YUASA, Geological Surv. Japan/ AIST, Central 7 1-1-1
Higashi, Tsukuba, Ibaraki, 305-8567, Japan (yuasa-m@aist.go.jp)

Date of Proposal: July 2009
Discoverer: Japanese R/V Yokosuka
Date of Discovery: June 2009
Minimum Depth: 3257 m
Maximum Depth: 4902 m
Total Relief: 1627 m
Dimension/Size: 240 km², with a conical shape.

Named from the Japanese god of wind Fujin, carrying the winds in a circular bag on his shoulders.

Outcome:

- **Fujin Seamount ACCEPTED**, with details as above.

7.2.f Raijin Seamount

Position (summit): *Lat 23°42.3'N, Long 143°18.1'E*, Philippine Sea, NW Pacific Ocean
Position (base): *Lat 23°46.3'N, Long 143°17.7'E*
Lat 23°44.1'N, Long 143°20.8'E
Lat 23°43.5'N, Long 143°25.2'E
Lat 23°41.6'N, Long 143°26.1'E
Lat 23°38.9'N, Long 143°23.6'E
Lat 23°37.0'N, Long 143°18.8'E
Lat 23°39.2'N, Long 143°15.0'E
Lat 23°41.2'N, Long 143°11.4'E
Lat 23°44.1'N, Long 143°11.1'E
Lat 23°47.0'N, Long 143°12.6'E

Proposers:
- Hisayoshi YOKOSE, Earth & Environment Sci. Graduate
School of Sci. & Technol. Kumamoto Univ., 2-39-1 Kurokami,
Kumamoto, 860-8555, Japan (yokose@sci.kumamoto-u.ac.jp).
- Hirokazu MAEKAWA, Graduate School of Science, Osaka
Pref. Univ., 1-1 Gakuen-cho, Sakai, Naka-ku, Osaka 599-8531,
Japan (maekawa@p.s.osakafu-u.ac.jp).
- Makoto YUASA, Geological Surv. Japan/ AIST, Central 7 1-1-1
Higashi, Tsukuba, Ibaraki, 305-8567, Japan (yuasa-m@aist.go.jp)

Date of Proposal: July 2009
Discoverer: Japanese R/V Yokosuka
Date of Discovery: June 2009
Minimum Depth: 3738 m
Maximum Depth: 5649 m
Total Relief: 1911 m
Dimension/Size: 296 km², with a conical shape.

Named from the Japanese god of thunder Raijin, having a circle of drums.

Outcome:

- **Raijin Seamount ACCEPTED**, with details as above.

7.2.g **Futaba Seamount**

Position (summit): *Lat. 37°09.0'N, Long 144°38.0'E, NW Pacific Ocean*
 Position (base): *Lat. 37°12.6'N, Long 144°36.9'E*
Lat. 37°08.3'N, Long 144°35.0'E
Lat. 37°05.3'N, Long 144°40.6'E
Lat. 37°06.4'N, Long 144°44.7'E
Lat. 37°10.9'N, Long 144°45.7'E
Lat. 37°13.4'N, Long 144°41.3'E

Proposer: Japan Hydrographic and Oceanographic Department, 5-3-1 Tsukiji, Chuo-ku, Tokyo 104-0045, Japan (ohara@jodc.go.jp)

Date of Proposal: July 2009
 Discoverer: Japanese S/V Shoyo
 Date of Discovery: May 2005
 Minimum Depth: 3600 m
 Maximum Depth: 5600 m
 Total Relief: 2000 m
 Dipmension/Size: 15 km x 15 km

This name already appears in the Gazetteer as Futuba Seamount (spelling error). It was accepted by SCUFN in 1997. In addition to correcting the specific term, the new proposal aimed at clarifying the position of the feature and providing additional information, e.g. minimum depth and relief. This feature is located on the Joban Seamount Chain.

Named after the nearby town of Futaba in Fukushima Prefecture, Japan, which is known for the dinosaur fossil "Futaba-Suzuki-Ryu".

Outcome:

- **Futaba Seamount ACCEPTED (confirmed)**, with details as above.
- **Action SCUFN22/15: Secretary** to correct spelling of Futuba Seamount to Futaba Seamount in the Gazetteer.

7.2.h **Iwaki Seamount**

Position (summit): *Lat 36°53.0'N, Long 144°52.0'E, NW Pacific Ocean*
 Position (base): *Lat 37°01.1'N, Long 145°04.8'E*
Lat 37°04.1'N, Long 144°55.9'E
Lat 37°05.0'N, Long 144°46.3'E
Lat 36°57.4'N, Long 144°35.6'E
Lat 36°51.9'N, Long 144°32.5'E
Lat 36°43.4'N, Long 144°34.9'E
Lat 36°37.0'N, Long 144°45.0'E
Lat 36°41.5'N, Long 144°57.3'E
Lat 36°47.8'N, Long 145°07.8'E
Lat 36°54.6'N, Long 145°08.3'E

Proposer: Japan Hydrographic and Oceanographic Department, 5-3-1 Tsukiji, Chuo-ku, Tokyo 104-0045, Japan (ohara@jodc.go.jp)

Date of Proposal: July 2009
 Discoverer: Japanese R/V Shoyo
 Date of Discovery: May 2005
 Minimum Depth: 1700 m
 Maximum Depth: 5600 m

Total Relief: 3900 m
Dimension/Size: 60 km x 60 km

This seamount has a gradually sloping top. Iwaki Seamount and Hitachi Seamount are connected by a saddle of 3700 m depth.

This name is already included in the Gazetteer as Iwaki Guyot. It was accepted by SCUFN in 1997. The new proposal aimed at clarifying the position of the feature and providing additional information, e.g. minimum depth and relief. The sub-committee confirmed that this feature, located on the Joban Seamount Chain, is actually a guyot.

Named after the nearby town of Iwaki, in Japan.

Outcome:

- **Iwaki Guyot ACCEPTED (confirmed)**, as in the Gazetteer, with details as above.
- **Action SCUFN22/16: Secretary** to note in the Remarks section of the Gazetteer for Iwaki Guyot "Named Iwaki Seamount by the Japanese Committee on Undersea Feature Names and in the ACUF Gazetteer".

7.3 PROPOSALS BY BRAZILIAN NAVY HYDROGRAPHIC CENTER (BNHC)

Doc: SCUFN220-07.3A Proposals by BNHC, August 2009

7.3.a Besnard Bank

Position (central point): *Lat 19°44.6'S, Long 38°08.1'W*, SW Atlantic Ocean
 Position (base): *Lat 19°43.3'S, Long 38°29.1'W*
Lat 19°39.0'S, Long 38°26.1'W
Lat 19°26.5'S, Long 38°05.1'W
Lat 19°31.6'S, Long 37°56.7'W
Lat 19°41.2'S, Long 37°51.3'W
Lat 19°42.3'S, Long 37°38.5'W
Lat 19°48.4'S, Long 37°36.6'W
Lat 19°53.5'S, Long 37°37.0'W
Lat 19°58.0'S, Long 37°56.9'W
Lat 20°08.5'S, Long 38°04.9'W
Lat 20°11.1'S, Long 38°20.9'W
Lat 19°58.9'S, Long 38°21.6'W
Lat 19°46.8'S, Long 38°27.0'W
Lat 19°42.1'S, Long 38°29.1'W
Lat 19°39.4'S, Long 38°27.4'W
 Proposer: Brazilian Navy Hydrographic Center, Barao de Jaceguay street, Ponta da Armacao, Niteroi, Rio de Janeiro, Brazil, CEP 24.048-900 (ana.angelica@chm.mar.mil.br)
 Date of Proposal: August 2009
 Discoverer: Russian R/V Kurchatov
 Date of Discovery: January 1969
 Minimum Depth: 30 m
 Maximum Depth: 3700 m
 Dimension/Size: ~ 92 km x 81 km (base), with a rectangular shape.

Named from the French researcher Wladimir Besnard (1890–1960). In 1946 he organized the Instituto Paulista de Oceanografia, which was the first Brazilian institution dedicated to living resources, minerals and energy researches in the Brazilian sea area.

Outcome:

- **Besnard Bank ACCEPTED**, with details as above.

7.3.b Rio Grande Fan

Position (central point):	<i>Lat 32°59.0'S, Long 48°45.8'W, SW Atlantic Ocean</i>
Position (areal):	<i>Lat 33°01.1'S, Long 050° 30' 41" W</i>
	<i>Lat 31°45.7'S, Long 049° 51' 30" W</i>
	<i>Lat 31°45.7'S, Long 049°34.9'W</i>
	<i>Lat 31°57.3'S, Long 049°05.5'W</i>
	<i>Lat 32°45.2'S, Long 047°26.9'W</i>
	<i>Lat 32°52.9'S, Long 046°17.6'W</i>
	<i>Lat 33°04.9'S, Long 045°37.6'W</i>
	<i>Lat 33°30.2'S, Long 044°55.4'W</i>
	<i>Lat 33°42.8'S, Long 045°04.5'W</i>
	<i>Lat 33°44.1'S, Long 046°15.3'W</i>
	<i>Lat 33°49.1'S, Long 046°31.9'W</i>
	<i>Lat 33°44.7'S, Long 047°48.0'W</i>
	<i>Lat 33°51.6'S, Long 048°32.4'W</i>
	<i>Lat 34°07.9'S, Long 049°47.0'W</i>
	<i>Lat 34°12.3'S, Long 050°19.4'W</i>
	<i>Lat 34°04.2'S, Long 050°46.5'W</i>
	<i>Lat 33°35.9'S, Long 051°05.3'W</i>
	<i>Lat 33°29.6'S, Long 050°47.2'W</i>
	<i>Lat 32°59.2'S, Long 050°29.2'W</i>
Proposer:	Brazilian Navy Hydrographic Center, Barao de Jaceguay street, Ponta da Armacao, Niteroi, Rio de Janeiro, Brazil, CEP 24.048-900 ana.angelica@chm.mar.mil.br
Date of Proposal:	August 2009
Discoverer:	US R/V Vema
Date of Discovery:	June 1961
Minimum Depth:	87 m
Maximum Depth:	4600 m
Total Relief:	~ 4000 m
Dimension/Size:	100,000 km ² , with an elongated shape.

This may be a very old depositional feature. The north-south current affects the morphology of the fan, which is not typical in shape.

The specific term 'Rio Grande' was accepted. However, the supporting data was considered insufficient to properly define the feature. A.A. Alberoni mentioned that additional multibeam bathymetric data was being collected. Pending provision of more supporting data, this name will be put in the reserve section.

Name proposed from the nearby Brazilian State of Rio Grande do Sul and the city of Rio Grande.

Outcome:

- **Rio Grande Fan PENDING**, with details as above.

- **Action SCUFN22/17: A.A. ALBERONI** to provide additional bathymetric (multibeam) data to SCUFN23 in support of the proposed Rio Grande Fan.

7.3.c **Abrolhos Shelf**

Position (central point):	Lat 18°31.2'S,	Long 38°41.8'W, SW Atlantic Ocean
Position (areal):	Lat 16°44.7'S,	Long 39°07.3'W
	Lat 17°12.0'S,	Long 38°37.8'W
	Lat 17°28.1'S,	Long 38°16.8'W
	Lat 17°54.1'S,	Long 37°19.5'W
	Lat 18°04.5'S,	Long 37°22.6'W
	Lat 18°16.6'S,	Long 37°45.4'W
	Lat 18°32.7'S,	Long 37°53.9'W
	Lat 19°05.4'S,	Long 37°52.1'W
	Lat 19°19.7'S,	Long 38°01.1'W
	Lat 19°31.7'S,	Long 38°50.5'W
	Lat 19°42.5'S,	Long 39°29.0'W
	Lat 18°09.7'S,	Long 39°38.1'W
	Lat 17°53.0'S,	Long 39°26.0'W
	Lat 17°39.7'S,	Long 39°08.6'W
	Lat 17°15.4'S,	Long 39°12.8'W
	Lat 16°47.0'S,	Long 39°09.2'W
Proposer:	Brazilian Navy Hydrographic Center, Barao de Jaceguay street, Ponta da Armacao, Niteroi, Rio de Janeiro, Brazil, CEP 24.048-900 (ana.angelica@chm.mar.mil.br)	
Date of Proposal:	August 2009	
Discoverer:	Portuguese explorers	
Date of Discovery:	16 th century	
Minimum Depth:	18 m	
Maximum Depth:	3835 m	
Total Relief:	~ 3800 m	
Dimension/Size:	~ 220 km x 245 km, with a hexagonal shape.	

Already in the Gazetteer as Abrolhos Bank. The sub-committee accepted the proposal to change the generic term to 'shelf', in accordance with how it has been referred to by the Brazilian scientific community for the last 10 years. It was, however, acknowledged that the sub-committee should be consistent in how to select generic terms and refrain from being influenced by new literature.

Named from the Abrolhos Archipelago which is located inside this shelf. The specific term "abrolhos", which means "open eyes; to stare", was used by the ancient Portuguese navigators when arriving in this shallow area and with many coral reefs.

Outcome:

- **Abrolhos Shelf ACCEPTED**, with details as above, in replacement of the existing Abrolhos Bank.

7.3.d **Besnard Passage**

Position (central point):	Lat 19°29.4'S,	Long 38°16.6'W, SW Atlantic Ocean
Position (areal):	Lat 19°33.7'S,	Long 38°34.4'W
	Lat 19°30.9'S,	Long 38°25.3'W
	Lat 19°25.4'S,	Long 38°15.4'W
	Lat 19°22.9'S,	Long 38°08.5'W
	Lat 19°21.4'S,	Long 38°01.4'W
Proposer:	Brazilian Navy Hydrographic Center, Barao de Jaceguay street, Ponta da Armacao, Niteroi, Rio de Janeiro, Brazil, CEP 24.048-900 (ana.angelica@chm.mar.mil.br)	

Date of Proposal: August 2009
 Discoverer: Brazilian R/V W. Besnard
 Date of Discovery: 1972
 Minimum Depth: 60 m
 Maximum Depth: 1990 m
 Total Relief: 1930 m
 Dimension/Size: ~ 90 km, with an elongated shape.

This passage separates the Brazilian continental shelf and Besnard Bank.

Named from the French researcher Wladimir Besnard (1890–1960). In 1946 he organized the Instituto Paulista de Oceanografia, which was the first Brazilian institution dedicated to living resources, minerals and energy researches in the Brazilian sea area.

Outcome:

- **Besnard Passage ACCEPTED**, with details as above.

7.3.e Rio Grande do Norte Seamount

Position (summit): Lat 06°23.1'S, Long 34°09.7'W, SW. Atlantic Ocean
 Position (base): Lat 6°25.0'S, Long 33°54.0'W
 Lat 6°33.1'S, Long 33°56.9'W
 Lat 6°36.2'S, Long 34°05.4'W
 Lat 6°28.4'S, Long 34°16.9'W
 Lat 6°20.4'S, Long 34°21.2'W
 Lat 6°14.0'S, Long 34°15.5'W
 Lat 6°17.6'S, Long 34°04.5'W
 Lat 6°25.1'S, Long 33°53.7'W
 Proposer: Brazilian Navy Hydrographic Center, Barao de Jaceguay street, Ponta da Armacao, Niteroi, Rio de Janeiro, Brazil, CEP 24.048-900 (ana.angelica@chm.mar.mil.br)
 Date of Proposal: August 2009
 Discoverer: US R/V Vema
 Date of Discovery: December 1961
 Minimum Depth: 1391 m
 Maximum Depth: 4375 m
 Total Relief: 2984 m
 Dimension/Size: ~ 46 km x 23 km (base), with an elongated (NW-SE) and conical shape.

This feature is located in the north-central sector of the Brazilian continental margin, seaward of the Brazilian State of Rio Grande do Norte.

Named from the nearby Brazilian State of Rio Grande do Norte.

Outcome:

- **Rio Grande do Norte Seamount ACCEPTED**, with details as above.

7.3.f São Tomé Seamount

Position (summit): Lat 21°58.7'S Long 36°38.3'W, SW Atlantic Ocean

Position (base): *Lat 21°43.8'S Long 36°46.1'W*
Lat 21°44.0'S Long 36°42.4'W
Lat 21°47.5'S Long 36°39.8'W
Lat 21°47.5'S Long 36°36.0'W
Lat 21°51.2'S Long 36°32.9'W
Lat 21°51.0'S Long 36°28.7'W
Lat 21°54.5'S Long 36°27.5'W
Lat 21°58.5'S Long 36°28.5'W
Lat 22°05.5'S Long 36°39.1'W
Lat 22°05.3'S Long 36°47.5'W
Lat 22°00.5'S Long 36°52.5'W
Lat 21°58.7'S Long 36°53.2'W
Lat 21°51.2'S Long 36°47.1'W
Lat 21°46.9'S Long 36°49.0'W
Lat 21°43.8'S Long 36° 7.1'W

Proposer: Brazilian Navy Hydrographic Center, Barao de Jaceguay street, Ponta da Armacao, Niteroi, Rio de Janeiro, Brazil, CEP 24.048-900 (ana.angelica@chm.mar.mil.br)

Date of Proposal: August 2009
Discoverer: Russian R/V Ivan Kireev
Date of Discovery: February 1973
Minimum Depth: 1350 m
Maximum Depth: 4150 m
Total Relief: 2800 m
Dimension/Size: ~ 37 km x 42 km (base), with a conical shape.

Isolated seamount south of Vitoria-Trinidad Ridge.

Named from the nearby São Tomé Cape, on the coast of the Brazilian State of Rio de Janeiro.

Outcome:

- São Tomé Seamount **ACCEPTED**, with details as above.
- **Action SCUFN22/18: A.A. ALBERONI** to provide the Secretary with track control for São Tomé Seamount.

7.3.g Columbia Bank

Position (central point) *Lat 20°44.2'S Long 35°26.8'W, SW Atlantic Ocean*
Position (base) *Lat 20°36.5'S Long 35°34.3'W*
Lat 20°35.7'S Long 35°29.9'W
Lat 20°39.9'S Long 35°20.1'W
Lat 20°47.1'S Long 35°20.3'W
Lat 20°50.1'S Long 35°23.9'W
Lat 20°49.6'S Long 35°28.8'W
Lat 20°46.5'S Long 35°31.8'W
Lat 20°43.2'S Long 35°32.1'W
Lat 20°40.6'S Long 35°34.3'W
Lat 20°36.5'S Long 35°34.3'W

Proposer: Brazilian Navy Hydrographic Center, Barao de Jaceguay street, Ponta da Armacao, Niteroi, Rio de Janeiro, Brazil, CEP 24.048-900 (ana.angelica@chm.mar.mil.br)

Date of Proposal: August 2009
Discoverer: US R/V Robert D. Conrad

Date of Discovery: 1972
 Minimum Depth: 60 m
 Maximum Depth: 3812 m
 Total Relief: ~ 3750 m
 Dimension/Size: ~ 28 km x 25 km (base), with a conical shape and a flat top.

This feature is located on the Vitoria-Trindade Ridge.

Named from the University of Columbia (USA) that conducted many surveys along the Vitoria-Trindade Ridge.

Outcome:

- **Columbia Bank ACCEPTED**, with details as above.
- **Action SCUFN22/19: A.A. ALBERONI** to provide the Secretary with track control for Columbia Bank.
- **Action SCUFN22/20: T. PALMER** to research the origins of the name Columbia Seamount (*Lat 20°45'S, Long 32°00'W*).

7.3.h Congress Bank

Position (central point):	<i>Lat 20°32.8'S,</i>	<i>Long 37°18.6'W,</i> SW Atlantic Ocean
Position (base):	<i>Lat 20°34.6'S,</i>	<i>Long 37°29.5'W</i>
	<i>Lat 20°30.1'S,</i>	<i>Long 37°20.7'W</i>
	<i>Lat 20°25.8'S,</i>	<i>Long 37°14.9'W</i>
	<i>Lat 20°25.8'S,</i>	<i>Long 37°09.7'W</i>
	<i>Lat 20°31.7'S,</i>	<i>Long 37°08.5'W</i>
	<i>Lat 20°34.4'S,</i>	<i>Long 37°09.2'W</i>
	<i>Lat 20°36.2'S,</i>	<i>Long 37°14.9'W</i>
	<i>Lat 20°38.0'S,</i>	<i>Long 37°19.0'W</i>
	<i>Lat 20°39.1'S,</i>	<i>Long 37°25.4'W</i>
	<i>Lat 20°39.1'S,</i>	<i>Long 37°29.5'W</i>
	<i>Lat 20°36.6'S,</i>	<i>Long 37°31.9'W</i>
	<i>Lat 20°33.9'S,</i>	<i>Long 37°28.5'W</i>

Proposer: Brazilian Navy Hydrographic Center, Barao de Jaceguay street, Ponta da Armacao, Niteroi, Rio de Janeiro, Brazil, CEP 24.048-900 (ana.angelica@chm.mar.mil.br)

Date of Proposal: August 2009
 Discoverer: US R/V Vema
 Date of Discovery: June 1961
 Minimum Depth: 53 m
 Maximum Depth: 3662 m
 Total Relief: ~ 3600 m
 Dimension/Size: ~ 48 km x 17 km (base), with an elliptical shape.

This feature is located on the Vitoria-Trindade Ridge. There is also a Congress Seamount in the Gazetteer in a totally different location, i.e. *Lat 33°07'N, Long 54°49'W*, named after the USS Congress.

This name has been in use since the 1970's by the scientific community.

Outcome:

- **Congress Bank ACCEPTED**, with details as above.
- **Action SCUFN22/21: A.A. ALBERONI** to provide the Secretary with track control for Congress Bank.

7.3.i **Rio Grande Terrace**

Position (central point): *Lat 30°00.5'S, Long 48°05.4'W*, SW Atlantic Ocean
Position (areal): *Lat 30°43.5'S, Long 48°46.1'W*
Lat 30°35.6'S, Long 48°21.4'W
Lat 30°34.5'S, Long 47°52.8'W
Lat 30°19.8'S, Long 47°41.1'W
Lat 29°55.5'S, Long 47°44.3'W
Lat 29°45.3'S, Long 47°49.5'W
Lat 29°23.2'S, Long 47°49.5'W
Lat 30°42.3'S, Long 48°43.5'W

Proposer: Brazilian Navy Hydrographic Center, Barao de Jaceguay street, Ponta da Armacao, Niteroi, Rio de Janeiro, Brazil, CEP 24.048-900 (ana.angelica@chm.mar.mil.br)

Date of Proposal: August 2009
Discoverer: US R/V Robert D. Conrad
Date of Discovery: April 1972
Minimum Depth: 150 m
Maximum Depth: 2600 m
Total Relief: 2450 m
Dimension/Size: ~ 118 km x 65 km, with a triangular shape.

Named from the nearby Brazilian State of Rio Grande do Sul and the city of Rio Grande.

Outcome:

- **Rio Grande Terrace ACCEPTED**, with details as above.
- **Action SCUFN22/22: A.A. ALBERONI** to review the polygon defining Rio Grande Terrace to only include the flat area, and provide the Secretary with the results.

7.3.j **Royal Charlotte Bank**

Position (central point): *Lat 16°03.9'S Long 38°15.3'W*, SW. Atlantic Ocean
Position (base): *Lat 15°32.8'S Long 38°56.3'W*
Lat 15°47.3'S Long 38°35.1'W
Lat 15°48.8'S Long 38°23.6'W
Lat 15°47.9'S Long 38°09.3'W
Lat 15°42.5'S Long 38°01.2'W
Lat 15°50.0'S Long 37°51.2'W
Lat 16°01.7'S Long 37°48.1'W
Lat 16°15.3'S Long 37°48.1'W
Lat 16°25.2'S Long 37°45.9'W
Lat 16°24.3'S Long 37°54.7'W
Lat 16°22.5'S Long 38°07.4'W
Lat 16°24.0'S Long 38°18.0'W
Lat 16°33.0'S Long 38°29.5'W
Lat 16°35.1'S Long 38°38.5'W
Lat 16°45.3'S Long 38°09.3'W
Lat 15°47.3'S Long 38°51.9'W
Lat 15°32.8'S Long 38°56.6'W

Proposer: Brazilian Navy Hydrographic Center, Barao de Jaceguay street, Ponta da Armacao, Niteroi, Rio de Janeiro, Brazil, CEP 24.048-900 (ana.angelica@chm.mar.mil.br)

Date of Proposal: August 2009

Discoverer: US R/V Robert D. Conrad

Date of Discovery: May 1972

Minimum Depth: 15 m

Maximum Depth: 3886 m

Total Relief: ~ 3870 m

Dimension/Size: ~ 109 km x 80 km (base), with a rectangular shape.

This feature is actually a promontory or a shelf but is accepted as bank because of historical use.

This name has been in use since the 1970's by the scientific community.

Outcome:

- **Royal Charlotte Bank ACCEPTED**, with details as above.

7.4 PROPOSALS BY KOREAN COMMITTEE ON MARINE GEOGRAPHICAL NAMES (KCMGN)

Doc: SCUFN22-07.4A Proposals by KCMGN, Korea, August 2009

7.4.a Gaori Tablemount

Position: Lat 12°50'N, Long 156°50'E, W Pacific Ocean

Proposer: Korea Committee on Marine Geographical Names, 195 Seohaero, Jung-gu, Incheon, 400-800, Republic of Korea (info@khoa.go.kr)

Date of Proposal: August 2009

Discoverer: Korean R/V Onnuri

Date of Discovery: June 2000

Minimum Depth: 1400 m

Maximum Depth: 6000 m

Total Relief: 4600 m

Dimension/Size: ~ 100 km x 90 km, with a round shape.

It was remarked that this feature may be the same as the existing Ita Mai Tai Guyot in the ACUF Gazetteer. Pending clarification, this name will be put in the reserve section. The sub-committee expressed preference for the generic term 'Guyot', rather than its synonym 'Tablemount', in accordance with the guidelines in publication B-6.

The feature has a shape similar to that of a ray, which is called "gaori" in Korean language. Ray is popular as a Korean traditional food ingredient with various recipes.

Outcome:

- **Gaori Guyot PENDING**, with details as above.

- **Action SCUFN22/23: T. PALMER** to verify that Ita Mai Tai Guyot in the ACUF Gazetteer (Lat 12°30'N, Long 157°10'E) is not the same feature as the proposed Gaori Guyot (Lat 12°50'N, Long 156°50'E).

7.4.b Geobukseon Tablemount

Position: Lat 13°55'N, Long 157°35'E, W Pacific Ocean

Proposer: Korea Committee on Marine Geographical Names, 195 Seohaero,

Jung-gu, Incheon, 400-800, Republic of Korea (info@khoa.go.kr)
 Date of Proposal: August 2009
 Discoverer: Korean R/V Onnuri
 Date of Discovery: June 2000
 Minimum Depth: 1200 m
 Maximum Depth: 5800 m
 Total Relief: 3600 m
 Dimension/Size: ~ 75 km x 65 km, with a round shape.

Outcome:

-Proposal **WITHDRAWN**; feature already named **Gramberg Guyot**.

7.4.c Arirang Tablemount

Position: *Lat. 11°50'N, Long. 157°40'E, W Pacific Ocean*
 Proposer: Korea Committee on Marine Geographical Names, 195 Seohaero, Jung-gu, Incheon, 400-800, Republic of Korea (info@khoa.go.kr)
 Date of Proposal: August 2009
 Discoverer: Korean R/V Onnuri
 Date of Discovery: June 2001
 Minimum Depth: 1300 m
 Maximum Depth: 5500 m
 Total Relief: 4200 m
 Dimension/Size: ~ 40 km x 35 km, with a round shape.

The preferred generic term is 'Guyot', rather than 'Tablemount' (see 7.4.a).

Named from the first Korean Multipurpose Satellite (KOMSAT), "Arirang", launched in 1999. Thanks to its Ocean Scanning Multispectral Imaging system, this satellite has made significant contributions to the ocean observation technology field.

Outcome:

- **Arirang Guyot ACCEPTED**, with details as above.

7.4.d Changpogo Seamount

Position: *Lat 15°20'N, Long 158°45'E, W Pacific Ocean*
 Proposer: Korea Committee on Marine Geographical Names, 195 Seohaero, Jung-gu, Incheon, 400-800, Republic of Korea (info@khoa.go.kr)
 Date of Proposal: August 2009
 Discoverer: Korean R/V Onnuri
 Date of Discovery: June 2001
 Minimum Depth: 1205 m
 Maximum Depth: 5500 m
 Total Relief: 4295 m
 Dimension/Size: ~ 40 km x 40 km, with a round shape.

Named from the Korean maritime trader Changpogo, known in Korea as the "King of the Sea" and who established the first maritime trading enterprise in Northeast Asia, an area encompassing Korea, China and Japan, during the Shilla dynasty (8th and 9th centuries). He established an East-West maritime trade route, connecting East Asia with India, along a route through Southeast Asia where Persian Arabian traders sailed, greatly expanding the international market for East Asian products. He also significantly contributed to marine

science technology in enterprises such as shipbuilding and navigation techniques etc. through his prolific maritime activities.

Outcome:

- **Changpogo Seamount ACCEPTED**, with details as above.
- **Action SCUFN22/24: H.H. SUNG** to provide the Secretary with a polygon defining the base of Changpogo Seamount.

7.4.e Onnuri Tablemount

Position:	Lat. 15°05'N, Long. 159°15'E, W Pacific Ocean
Proposer:	Korea Committee on Marine Geographical Names, 195 Seohaero, Jung-gu, Incheon, 400-800, Republic of Korea (info@khoa.go.kr)
Date of Proposal:	August 2009
Discoverer:	Korean R/V Onnuri
Date of Discovery:	June 2001
Minimum Depth:	1100 m
Maximum Depth:	5500 m
Total Relief:	4400 m
Dimension/Size:	~ 55 km X 45 km, with a round shape.

The preferred generic term is 'Guyot', rather than 'Tablemount' (see 7.4.a).

Named from the Korean R/V "Onnuri" of the Korea Ocean Research & Development Institute (KORDI) that conducted surveys and oceanographic research in the central Pacific Ocean since 1992 and discovered this feature in 2001.

Outcome:

- **Onnuri Guyot ACCEPTED**, with details as above.

7.4.f Baekdu Tablemount

Position:	Lat 15°40'N, Long 160°05'E, W Pacific Ocean
Proposer:	Korea Committee on Marine Geographical Names, 195 Seohaero, Jung-gu, Incheon, 400-800, Republic of Korea (info@khoa.go.kr)
Date of Proposal:	August 2009
Discoverer:	Korean R/V Onnuri
Date of Discovery:	June 2001
Minimum Depth:	1100 m
Maximum Depth:	4750 m
Total Relief:	3650 m
Dimension/Size:	55 km x 40 km, with a round shape.

This feature is linked to Zubov Seamount through a common base at a depth of 5500 meters. The preferred generic term is 'Guyot', rather than 'Tablemount' (see 7.4.a).

Named from the volcanic Mountain "Baekdu", in North Korea, which is the highest mountain of the Korean peninsula. Baekdu Mt. has been worshiped by the neighbouring people throughout history and is considered by the Korean people as the place of their ancestral origin.

Outcome:

- **Baekdu Guyot ACCEPTED**, with details as above.

7.5 PROPOSALS BY INTERNATIONAL BATHYMETRIC CHART OF THE SOUTH-EAST PACIFIC (IBCSEP)

Doc: SCUFN22-07.5A Proposals by IBCSEP, April 2008

7.5.1 Proposals by Ecuador

7.5.1.a Ecuador Trench

Position:	Lat 1°30'N, Long 80°10'W, South Eastern Pacific Ocean
Extension:	From Lat 1°24'N to Lat 3°23'S
Proposer:	Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
Date of Proposal:	April 2008
Discoverer:	Dr. Peter LONSDALE (SIO, UCSD, USA)
Date of Discovery:	1978
Maximum Depth:	~ 3000 m

The proposed trench coincides with the collision area of the Carnegie Ridge with the continental slope. The maximum depths along this feature are approximately 3000 m, which is significantly lower than the Colombian Trench to the north and the Peru Trench to the south. This is due to the different tectonic processes which have created the trenches along this system. The northern extent of the Peru-Chili Trench and the southern extent of the Peru Trench are also separated by a tectonic collision zone, i.e. that of the Nazca Ridge and the continental slope, expressed as a relatively shallow trench. During the detailed examination of the geomorphology of the area, the sub-committee decided that the existing Peru Trench should be extended further north to Lat. 3°10'S, Long 81°38.0'W with an additional intermediate coordinate of Lat 5°21'S, Long 82°00'W. In addition, the existing Colombian Trench should be extended further south, with its coordinates redefined as Lat 6°57'N, Long 78°57'W to Lat 5°16'N, Long 78°12'W to Lat 2°36'N, Long 79°44'W.

Named from the nearby State of Ecuador.

Outcome:

- **Ecuador Trench ACCEPTED**, with details as above and the amended coordinates of:

Lat. 0°28'N, Long 80°48.0'W
Lat. 3°10'S, Long 81°38.0'W

- **Action SCUFN22/25: Secretary** to add the following two positions to Peru Trench in the Gazetteer, extending this feature further north: Lat 5°21'S, Long 82°00'W and Lat. 3°10'S, Long 81°38.0'W.

- **Action SCUFN22/26: Secretary** to replace the existing position in the Gazetteer for Colombian Trench with the following three positions: Lat 6°57'N, Long 78°57'W; Lat 5°16'N, Long 78°12'W; and Lat 2°36'N, Long 79°44'W.

Note: None of the 12 proposals below, i.e. Megaprint Seamount, Paganini 1, 2 & 3 Seamounts, Sonne Seamount, Werner Seamount, Orion Seamount, Pillow Seamount, Galera 1, 2 & 3 Seamounts and Amadeus Seamount, had any documentation other than a basic proposal form. There was no supporting bathymetry – only a small-scale index map - and no track line documents, no printed depths, no maximum or minimum depths, or any other anecdotal information. In some cases, no information was provided regarding the reason for giving the feature a specific term. As a result, the sub-committee was not in a position to properly consider these proposals which therefore were not accepted, or were deferred.

7.5.1.b Megaprint Seamount

Position: *Lat. 2°01.2'S, Long 85°56.8'W, South Eastern Pacific Ocean*
 Proposer: Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
 Date of Proposal: April 2008
 Discoverer: German R/V Meteor (Dr. R. WERNER, GEOMAR)
 Date of Discovery: July/August 2001
 Minimum Depth: *Not provided*
 Maximum Depth: *Not provided*
 Total Relief: *Not provided*

The proposed specific name 'Megaprint' was accepted, but the feature was rejected due to lack of bathymetric evidence.

Name proposed from the Megaprint oceanographic campaign in July-August 2001.

Outcome:

- **Megaprint Seamount PENDING**, with details as above.

- **Action SCUFN22/27: Secretary** to ask the proposer to provide bathymetric data in support of the proposed Megaprint Seamount.

7.5.1.c Paganini 1 Seamount

Position: *Lat 2°12.9'S, Long 82°37.4'W, Eastern Pacific Ocean*
 Proposer: Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
 Date of Proposal: April 2008
 Discoverer: German German R/V Sonne (Dr. D. ACKERMAN, GEOMAR)
 Date of Discovery: November/December 1999
 Minimum Depth: *Not provided*
 Maximum Depth: *Not provided*
 Total Relief: *Not provided*

The proposed specific term 'Paganini 1' was not accepted, as there is already a Paganini Seamount in the Gazetteer and that numbered names like Paganini 1 do not conform to SCUFN naming criteria. Further, the feature was not accepted due to lack of bathymetric evidence.

Name proposed from the Paganini oceanographic campaign in November-December 1999.

7.5.1.d Paganini 2 Seamount

Position: *Lat 2°11.3'S, Long 83°44.5'W, Eastern Pacific Ocean*
 Proposer: Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
 Date of Proposal: April 2008
 Discoverer: German R/V Sonne (Dr. D. ACKERMAN, GEOMAR)
 Date of Discovery: November/December 1999
 Minimum Depth: *Not provided*
 Maximum Depth: *Not provided*
 Total Relief: *Not provided*

The proposed specific term 'Paganini 2' was not accepted, as there is already a Paganini Seamount in the Gazetteer and that numbered names like Paganini 2 do not conform to SCUFN naming criteria. Further, the feature was not accepted due to lack of bathymetric evidence. From the index map provided, it seems that this feature is actually a guyot.

Name proposed from the Paganini oceanographic campaign in November-December 1999.

7.5.1.e Paganini 3 Seamount

Position:	<i>Lat 2°13.6'S, Long 84°28.5'W, Eastern Pacific Ocean</i>
Proposer:	Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
Date of Proposal:	April 2008
Discoverer:	German R/V Sonne (Dr. D. ACKERMAN, GEOMAR)
Date of Discovery:	November/December 1999
Minimum Depth:	<i>Not provided</i>
Maximum Depth:	<i>Not provided</i>
Total Relief:	<i>Not provided</i>

The proposed specific term 'Paganini 3' was not accepted, as there is already a Paganini Seamount in the Gazetteer and that numbered names like Paganini 3 do not conform to SCUFN naming criteria. Further, the feature was not accepted due to lack of bathymetric evidence.

Name proposed from the Paganini oceanographic campaign in November-December 1999.

Outcome:

- Paganini 1, 2, 3 Seamounts NOT ACCEPTED.

- Action SCUFN22/28: Secretary to ask the proposer to provide bathymetric data in support of the proposed Paganini 1, 2, 3 seamounts; to also ask the proposer to submit alternative names for these three features, as there is already a Paganini Seamount as part of the Musicians Seamounts in North Central Pacific and that numbered specific terms, e.g. Paganini 1, are not accepted.

7.5.1.f Sonne Seamount

Position:	<i>Lat 1°06.5'S, Long 82°13.9'W, Eastern Pacific Ocean</i>
Proposer:	Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
Date of Proposal:	April 2008
Discoverer:	German R/V Sonne (Dr. D. ACKERMAN, GEOMAR)
Date of Discovery:	<i>Not provided</i>
Minimum Depth:	<i>Not provided</i>
Maximum Depth:	<i>Not provided</i>
Total Relief:	<i>Not provided</i>

The proposed specific term 'Sonne' was not accepted, as there is already a Sonne Seamount in the Gazetteer. Further, the feature was not accepted due to lack of bathymetric evidence. From the index map provided, it seems that this feature is actually a knoll.

Name proposed from the R/V Sonne, the discoverer of this feature.

Outcome:

- Sonne Seamount NOT ACCEPTED.

- **Action SCUFN22/29: Secretary** to ask the proposer to provide bathymetric data in support of the proposed Sonne Seamount; to also ask the proposer to submit an alternative name for this feature, as there is already a Sonne Seamount in North Central Pacific, south of Hawaii.

7.5.1.g Werner Seamount

Position:	Lat 0°00.9'N, Long 83°43.1'W, Eastern Pacific Ocean
Proposer:	Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
Date of Proposal:	April 2008
Discoverer:	German R/V Sonne (Dr. D. ACKERMAN, GEOMAR)
Date of Discovery:	<i>Not provided</i>
Minimum Depth:	<i>Not provided</i>
Maximum Depth:	<i>Not provided</i>
Total Relief:	<i>Not provided</i>

The proposed specific term 'Werner' was not accepted, as naming features after living persons, like Dr. Reinhardt WERNER (GEOMAR, Germany), does not conform to SCUFN naming criteria. Further, the feature was not accepted due to lack of bathymetric evidence.

Name proposed after Dr. Reinhardt Werner (GEOMAR, Germany).

Outcome:

- Werner Seamount NOT ACCEPTED.

- **Action SCUFN22/30: Secretary** to ask the proposer to provide bathymetric data in support of the proposed Werner Seamount; to also ask the proposer to submit an alternative name for this feature, as names of living persons, like Dr. R. WERNER, are not accepted.

7.5.1.h Orion Seamount

Position:	Lat 0°08.6'N, Long 82°51.9'W, Eastern Pacific Ocean
Proposer:	Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
Date of Proposal:	April 2008
Discoverer:	German R/V Sonne (Dr. D. Ackerman, GEOMAR)
Date of Discovery:	<i>Not provided</i>
Minimum Depth:	<i>Not provided</i>
Maximum Depth:	<i>Not provided</i>
Total Relief:	<i>Not provided</i>

The specific term 'Orion' was not accepted, as the reason for proposing this name was not provided. Further, the feature was not accepted due to lack of bathymetric evidence.

Outcome:

- Orion Seamount NOT ACCEPTED.

- **Action SCUFN22/31: Secretary** to ask the proposer to provide bathymetric data in support of the proposed Orion Seamount; to also ask the proposer to provide the reason for naming this feature after 'Orion'.

7.5.1.i Pillow Seamount

Position: *Lat 1°38.2'N, Long 90°48.2'W, Eastern Pacific Ocean*
 Proposer: Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
 Date of Proposal: April 2008
 Discoverer: German R/V Sonne (Dr. D. Ackerman, GEOMAR)
 Date of Discovery: *Not provided*
 Minimum Depth: *Not provided*
 Maximum Depth: *Not provided*
 Total Relief: *Not provided*

The specific term 'Pillow' was not accepted, as the reason for proposing this name was not provided. Further, the feature was not accepted due to lack of bathymetric evidence.

Outcome:

- **Pillow Seamount NOT ACCEPTED.**

- **Action SCUFN22/32: Secretary** to ask the proposer to provide bathymetric data in support of the proposed Pillow Seamount; to also ask the proposer to provide the reason for naming this feature after 'Pillow'.

7.5.1.j Galera 1 Seamount

Position: *Lat. 0°50.2'N, Long. 80°45.7'W, South Eastern Pacific Ocean*
 Proposer: Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
 Date of Proposal: April 2008
 Discoverer: French R/V L'Atalante (Dr. J.Y. COLLOT, IRD, in cooperation with INOCAR)
 Date of Discovery: February/March 2005
 Minimum Depth: *Not provided*
 Maximum Depth: *Not provided*
 Total Relief: *Not provided*

The specific term 'Galera' was accepted for this feature, which is close to Punta Galera. However, the feature was not accepted due to lack of bathymetric evidence.

Name proposed from the nearby Punta Galera, in Ecuador.

Outcome:

- **Galera Seamount PENDING**, with details as above.

7.5.1.k Galera 2 Seamount

Position: *Lat 0°42.9'N, Long 80°46.7'W, Eastern Pacific Ocean*
 Proposer: Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)

Date of Proposal: April 2008
Discoverer: French R/V L'Atalante (Dr. J.Y. COLLOT, IRD, in cooperation with INOCAR)
Date of Discovery: February/March 2005
Minimum Depth: *Not provided*
Maximum Depth: *Not provided*
Total Relief: *Not provided*

The proposed specific term 'Galera 2' was not accepted, as numbered names like Galera 2 do not conform to SCUFN naming criteria. Further, the feature was not accepted due to lack of bathymetric evidence.

Name proposed from the nearby Punta Galera, in Ecuador.

Outcome:

- Galera 2 Seamount NOT ACCEPTED.

7.5.1.l Galera 3 Seamount

Position: *Lat 0°36.7'N, Long 80°49.5'W, Eastern Pacific Ocean*
Proposer: Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
Date of Proposal: April 2008
Discoverer: French R/V L'Atalante (Dr. J.Y. COLLOT, IRD, in cooperation with INOCAR)
Date of Discovery: February/March 2005
Minimum Depth: *Not provided*
Maximum Depth: *Not provided*
Total Relief: *Not provided*

The proposed specific term 'Galera 3' was not accepted, as numbered names like Galera 3 do not conform to SCUFN naming criteria. Further, the feature was not accepted due to lack of bathymetric evidence.

Name proposed from the nearby Punta Galera, in Ecuador.

Outcome:

- Galera 3 Seamount NOT ACCEPTED.

- Action SCUFN22/33: Secretary to ask the proposer to provide bathymetric data in support of the proposed Galera 1, 2, 3 seamounts; to also ask the proposer to submit alternative names for Galera 2 and Galera 3, as numbered specific terms, e.g. Galera 2, are not accepted.

7.5.1.m Amadeus Seamount

Position: *Lat 0°25.7'N, Long 80°48.0'W, Eastern Pacific Ocean*
Proposer: Instituto Oceanografico de la Armada (INOCAR), Avenida 25 de Julio, Via a Pto. Maritimo (Base Naval Sur) Casilla de Correos 5940 Guayaquil, Ecuador (inocar@inocar.mil.ec)
Date of Proposal: April 2008
Discoverer: *Not provided*
Date of Discovery: *Not provided*
Minimum Depth: *Not provided*
Maximum Depth: *Not provided*
Total Relief: *Not provided*

The proposed specific name 'Amadeus' was accepted, but the feature was not accepted due to lack of bathymetric evidence.

Name proposed from the Amadeus oceanographic campaign in March 2005.

Outcome:

- **Amadeus Seamount PENDING**, with details as above.
- **Action SCUFN22/34: Secretary** to ask the proposer to provide bathymetric data in support of the proposed Amadeus seamount.

7.5.2 Proposals by Peru

Note: Due to lack of time, the two proposals below could not be considered by the sub-committee during the meeting. In any case, the lack of supporting bathymetric data and track line documents would have prevented the sub-committee to properly consider these proposals. They will be addressed at SCUFN23.

7.5.2.a Chimbote Bank

Position:	<i>Lat 9°04.8'S, Long 79°55.5'W, Eastern Pacific Ocean Lat 9°05.0'S, Long 79°55.5'W (mid point) Lat 9°05.5'S, Long 79°55.5'W</i>
Proposer:	Direccion de Hidrografia y Navegacion, Directorate of Hydrography and Navigation Avda. Gamarra No. 500 Chucuito Callao 1, Peru (dihidronav@dhn.mil.pe)
Date of Proposal:	April 2008
Discoverer:	<i>Not provided</i>
Date of Discovery:	<i>Not provided</i>
Minimum Depth:	66 m
Maximum Depth:	<i>Not provided</i>
Total Relief:	<i>Not provided</i>

This feature has an oval irregular form.

Name proposed from the nearby port of Chimbote, in Peru.

Outcome:

- **Chimbote Bank DEFFERED.**

7.5.2.b Perú-Máncora Bank

Position:	<i>Lat 3°26.7'S, Long 81°11.3'W, Eastern Pacific Ocean Lat 3°32.5'S, Long 81°11.8'W (mid point) Lat 3°38.9'S, Long 81°14.7'W</i>
Proposer:	Direccion de Hidrografia y Navegacion, Directorate of Hydrography and Navigation Avda. Gamarra No. 500 Chucuito Callao 1, Peru (dihidronav@dhn.mil.pe)
Date of Proposal:	April 2008
Discoverer:	<i>Not provided</i>

Date of Discovery: *Not provided*
Minimum Depth: 111 m
Maximum Depth: ~ 300 m
Total Relief: ~ 200 m

This feature has an oval irregular form and is constituted with basalt rocks.

Named proposed from the nearby State of Peru and Máncora Cove, in Peru.

Outcome:

- **Perú-Máncora Bank DEFERRED.**

- **Action SCUFN22/35: Secretary** to ask the proposer to provide bathymetric data in support of the proposed Chimbote Bank and Perú-Máncora Bank.

7.6 PROPOSAL BY YUZGMORGEO, RUSSIA

Docs: SCUFN22-07.7A *Proposals by Yuzhmergeo, Russia, September 2009*

7.6.a Marova Guyot

Position: *Lat 14°51.2'N, Long 160°30.1'W, N. Pacific Ocean*
Proposer: State Scientific Centre "Yuzhmergeologiya" 20, Krymskaya St., Gelendzhik 353461, Russia (melnikov@ymg.ru)
Date of Proposal: September 2009
Discoverer: Russian R/V Gelendzhik
Date of Discovery: 2008
Minimum Depth: 1091 m
Maximum Depth: 5300 m
Total Relief: 4209 m
Dimension/Size: 82 km x 60 km, with an isometric shape.

This feature is located in the Magellan Seamounts.

Named after Dr. M.A. Marova (1933–2001) who worked for the Institute of Oceanology of the Russian Academy of Sciences. She specialized in geomorphology and marine cartography, and studied ocean bottom topography and cartographic interpretation. She took part in the preparation of bathymetric maps in the Atlantic, Pacific and Indian oceans. She developed compilation methods of physiographic maps, including for seamounts.

Outcome:

- **Marova Guyot ACCEPTED**, with details as above.

7.6.b Rykachev Guyot

Position: *Lat. 17°10.2'N, Long. 162°40.1'W, N. Pacific Ocean*
Proposer: State Scientific Centre "Yuzhmergeologiya" 20, Krymskaya St., Gelendzhik 353461, Russia (melnikov@ymg.ru)
Date of Proposal: September 2009
Discoverer: Russian R/V Gelendzhik
Date of Discovery: 2008
Minimum Depth: 1233 m
Maximum Depth: 5600 m

Total Relief: 4367 m
 Dimension/Size: 133 km x 85 km, with an oval shape.

This feature is located in the Magellan Seamounts.

Named after M.A. Rykachev (1840–1919), a Russian meteorologist who became director of the Main Physical Observatory and a member of the Emperor Academy of Scientists. He did meteorological and magnetic observations and took part in meteorological flights. He established a Department of Marine Meteorology, Storms Warnings and Weather Forecast. He developed a magnetic map of the Caspian Basin. In 1881, he compiled and published the first map of the World Ocean, based on data from the “Challenger” expedition (1872-1876)..

Outcome:

- **Rykachev Guyot ACCEPTED**, with details as above.
- **Action SCUFN22/36: K. DOBROLYUBOVA** to provide the Secretary with a polygon defining the base of Rykachev Guyot.

7.7 PROPOSALS BY AWI, GERMANY

Doc: SCUFN22-07.7A Proposals by AWI, Germany

Note: The six proposals below were submitted beyond the agreed SCUFN deadline which is one month in advance of meetings. In addition, there was insufficient bathymetric data provided in support of these proposals. It was agreed to re-consider the six proposals at SCUFN23.

7.7.a Beiersdorf Peak

Position: Lat 52°09.0'N, Long 148°44.4'W, N Atlantic
 Proposer: Dr. Rainer GERSONDE, Alfred-Wegener-Institute for Polar and Marine Research, Postfach 12 01 61, 27515 Bremerhaven, Germany (Rainer.Gersonde@awi.de)
 Date of Proposal: September 2009
 Discoverer: German RV Sonne (T. DUFEK, A.-K. ROHARDT and C. HEINZL)
 Date of Discovery: August 2009
 Minimum Depth: 1766 m
 Maximum Depth: 4531 m
 Total Relief: 2765 m
 Dimension/Size: 13 km x 8 km, isolated peak.

Name proposed after Prof. Dr. Helmut Beiersdorf (1938-2004). After his geology studies in Göttingen he joined the Bundesanstalt für Geowissenschaften und Rohstoffe (Federal Institute for Geosciences and Resources, BGR) in Hannover, where he later became head of geological research. He represented the German ODP community on the JOIDES executive committee and coordinated the priority programme “ODP/DSDP” of the Deutsche Forschungsgemeinschaft (German Research Community, DFG) from 1976 to 2000. He was a member of the International Seabed Authority and honorary professor at the University of Hannover where he lectured Marine Geology.

7.7.b Billings Seamount

Position: Lat 47°36.7'N, Long 157°50.5'E, NE Pacific Ocean

Proposer: Dr. Rainer GERSONDE, Alfred-Wegener-Institute for Polar and Marine Research, Postfach 12 01 61, 27515 Bremerhaven, Germany (Rainer.Gersonde@awi.de)

Date of Proposal: September 2009

Discoverer: German RV Sonne (T. DUFEK, A.-K. ROHARDT and C. HEINZL)

Date of Discovery: July 2009

Minimum Depth: 3862 m

Maximum Depth: 5201 m

Total Relief: 1339 m

Dimension/Size: 13 km x 9 km, with a steep circular shape.

Name proposed after Joseph Billings (1758–1806), a British navigator and explorer who led an expedition in search of the Northeast Passage from 1785 to 1794. He then stayed with the Imperial Russian Navy and was transferred to the Black Sea fleet in 1796, where he conducted coastal surveys. He retired in 1779. In 1799, he published his surveys in an atlas with an accuracy and a completeness that did not exist before. Cape Billings in the Chukotka Autonomous Okrug was named after him.

7.7.c Krauss Seamount

Position: Lat 49°01.8'N, Long 153°24.5'W, N Pacific Ocean

Proposer: Dr. Rainer GERSONDE, Alfred-Wegener-Institute for Polar and Marine Research, Postfach 12 01 61, 27515 Bremerhaven, Germany (Rainer.Gersonde@awi.de)

Date of Proposal: September 2009

Discoverer: German RV Sonne (T. DUFEK, A.-K. ROHARDT and C. HEINZL)

Date of Discovery: August 2009

Minimum Depth: 3513 m

Maximum Depth: 4900 m

Total Relief: 1387 m

Dimension/Size: 24 km x 18 km, with a steep elongated shape.

Name proposed after Prof. Dr. Wolfgang Krauss (1931-2009), one of the leading scientists in theoretical oceanography. He worked as a professor at the Christian-Albrecht-University (CAU) in Kiel, where he became Dean of the School of Mathematics and Science at CAU in 1970/71 and Director of the Institute for Marine Research (IfM) from 1982 to 1988. Until his retirement he had a great influence on the development of the theoretical oceanography and the establishment of the CAU as an internationally recognized academic institution in marine research.

7.7.d Krümmel Seamount

Position: Lat 49°41.2'N, Long 152°34.7'W, N Pacific Ocean

Proposer: Dr. Rainer GERSONDE, Alfred-Wegener-Institute for Polar and Marine Research, Postfach 12 01 61, 27515 Bremerhaven, Germany (Rainer.Gersonde@awi.de)

Date of Proposal: September 2009

Discoverer: German RV Sonne (T. DUFEK, A.-K. ROHARDT and C. HEINZL)

Date of Discovery: August 2009

Minimum Depth: 3655 m

Maximum Depth: 5000 m

Total Relief: 1345 m

Dimension/Size: 19 km x 14 km, with a steep oval shape.

Name proposed after Prof. Otto Krümmel (1854-1912), a German geographer and oceanographer who worked as a professor in Kiel and Marburg. He was involved in the foundation of GEBCO, as member of the international

commission on nomenclature and submarine topography which met from 14 to 15 April 1903 in Wiesbaden. He is known as a pioneer of modern oceanography.

7.7.e Svarichevskiy Seamount

Position: Lat 46°47.6'N, Long 156°44.8'E, NE Pacific Ocean
 Proposer: Dr. Rainer GERSONDE, Alfred-Wegener-Institute for Polar and Marine Research, Postfach 12 01 61, 27515 Bremerhaven, Germany (Rainer.Gersonde@awi.de)
 Date of Proposal: September 2009
 Discoverer: German RV Sonne (V. KARNAUKH)
 Date of Discovery: July 2009
 Minimum Depth: 3361 m
 Maximum Depth: 5060 m
 Total Relief: 1699 m
 Dimension/Size: 16 km x 10 km, with a steep circular shape.

Name proposed after Dr. Alexander Svarichevskiy (1943–2006) who worked for the Far Eastern Institutes of the Russian Academy of Sciences and participated in numerous marine cruises on Russian and international projects. He studied the structure origin and evolution of the bottom relief of the Pacific Ocean and its marginal seas, the analysis of present day exogenic relief-forming processes. He was co-head of works on the "Geological and geomorphological mapping of the bottom of the Pacific Ocean and its marginal seas" programme from 1992 to 2003.

7.7.f Vancouver Knolls

Position (eastern hill summit): Lat 49°22.2'N, Long 152°44.3'W, N Pacific Ocean
 Position (central hill summit): Lat 49°20.5'N, Long 152°48.9'W
 Position (western hill summit): Lat 49°22.5'N, Long 152°54.6'W
 Proposer: Dr. Rainer GERSONDE, Alfred-Wegener-Institute for Polar and Marine Research, Postfach 12 01 61, 27515 Bremerhaven, Germany (Rainer.Gersonde@awi.de)
 Date of Proposal: September 2009
 Discoverer: German RV Sonne (T. DUFEK, A.-K. ROHARDT and C. HEINZL)
 Date of Discovery: August 2009
 Minimum Depth: 4087 m (eastern); 4106 m (central); 4450 m (western)
 Maximum Depth: 5000 m
 Total Relief: 913 m (eastern); 894 m (central); 550 m (western)
 Dimension/Size: 20 km x 11 km, with a rounded profile.

Name proposed after George Vancouver (1757-1798), an officer in the British Royal Navy and explorer who became famous when he explored the Pacific coast of North America from California up to Alaska. He also explored the west coast of Australia.

The cities of Vancouver (B.C., Canada and WA, USA) as well as Vancouver Island (B.C., Canada) where named after him.

Outcome:

-Consideration of all six proposals above **DEFERRED** to SCUFN23.

- **Action SCUFN22/37: Secretary** to ask the proposer for Beiersdorf Peak, Billings Seamount, Krauss Seamount, Krümmel Seamount, Svarichevskiy Seamount and Vancouver Knolls, to provide additional bathymetric data in support of these proposals.

8 LIAISON WITH THE ADVISORY COMMITTEE ON UNDERSEA FEATURES (ACUF) [of the US Board on Geographic Names]

8.1 HARMONIZATION OF GEBCO AND ACUF GAZETTEERS

Doc: SCUFN22-08.1A *Comparative Review of GEBCO and ACUF Gazetteers – Proposals for changes (T. Palmer)*

T. PALMER carried out a detailed review of the current GEBCO Gazetteer, comparing with the ACUF Gazetteer, and he provided numerous comments / suggestions for changes to the GEBCO Gazetteer, mainly of editorial nature, as reflected in SCUFN22-08.1A. It was considered that reviewing this document should be a housekeeping task for the secretary.

Outcome:

- **Action SCUFN22/38: Secretary** to review and comment on the comparative review of GEBCO and ACUF gazetteers, as in Doc. SCUFN22-08.1A, and propose any necessary actions to the sub-committee.

8.2 REVIEW OF REPORTS OF ACUF MEETINGS SINCE MAY 2008

Doc: SCUFN22-08.2A *Reports of ACUF Meetings (T. Palmer)*

T. PALMER, as ACUF secretary, reviewed how ACUF has traditionally cooperated with SCUFN, emphasizing the differences between the two groups. ACUF is part of the US Board on Geographic Names and they only make recommendations to the BGN; they do not have approval authority. ACUF met four times over the past year. There were two new proposals that were relevant to SCUFN.

T. PALMER mentioned, as part of the current ACUF activities, a review of undersea feature names in the Arctic Ocean and a revision of ACUF policy (equivalent to B-6). The BGN foreign names programme, including undersea feature names, is reflected on the following website: <http://earth-info.nga.mil/gns/html/index.html>. T. PALMER invited SCUFN members / observers to consult this site and provide comments.

8.2.a ACUF Meeting 328, 30 September 2008

No new names were considered for inclusion in the GEBCO Gazetteer.

8.2.b ACUF Meeting 329, 6 November 2008

No new names were considered for inclusion in the GEBCO Gazetteer.

8.2.c ACUF Meeting 330, 24 February 2009

8.2.c.i Spiess Seamount Chain

Position:	<i>Lat. 32°26'N, Long 128°00'W, NE Pacific Ocean Lat. 30°28'N, Long 122°44'W Lat. 29°22'N, Long 118°30'W</i>
Proposer:	Dr. Peter LONSDALE, Scripps Institution of Oceanography, 0205, UCSD, San Diego, CA 92093, USA (plonsdale@ucsd.edu)
Date of Proposal:	February 2009
Discoverer:	US R/V Pioneer
Date of Discovery:	1955-56
Minimum Depth:	<i>Not provided</i>
Maximum Depth:	<i>Not provided</i>
Total Relief:	<i>Not provided</i>

The length of the chain is approximately 900 km.

Named from Dr. Fred N. Spiess, whose first geophysical research took place in this area.

Outcome:

- **Spiess Seamount Chain ACCEPTED**, with details as above and the amended coordinates of:

Lat 32°52'N, Long 132°32'W
Lat 31°00'N, Long 124°36'W (mid point)
Lat 29°05'N, Long 117°40'W

8.2.c.ii **Spiess Seamount**

Position (summit):	<i>Lat. 32°16'N, Long 127°15'W, NE Pacific Ocean</i>
Position (areal):	<i>Lat. 32°23'N, Long 127°09'W</i> <i>Lat. 32°12'N, Long 127°08'W</i> <i>Lat. 32°11'N, Long 127°24'W</i> <i>Lat. 32°21'N, Long 127°22'W</i>
Proposer:	Dr. Peter LONSDALE, Scripps Institution of Oceanography, 0205, UCSD, San Diego, CA 92093, USA (plonsdale@ucsd.edu)
Date of Proposal:	February 2009
Discoverer:	US R/V Pioneer
Date of Discovery:	1955
Minimum Depth:	1045 m
Maximum Depth:	4300 m
Total Relief:	~ 3250 m

Named from Dr. Fred N. Spiess, whose first geophysical research took place in this area.

Outcome:

- **Spiess Seamount ACCEPTED**, with details as above.

8.2.d **ACUF Meeting 331, 16 April 2009**

No new names were considered for inclusion in the GEBSCO Gazetteer.

9 LIAISON WITH THE UN GROUP OF EXPERTS ON GEOGRAPHICAL NAMES (UNGEGN)

Doc: SCUFN22-09A Report on UNGEGN-25 (T. Palmer)

T. PALMER reported briefly on the 25th UNGEGN meeting, where he presented the IHO report on geographical naming matters, prepared by the IHB and *inter alia* reporting on SCUFN activities. There were no comments

Outcome:

-The sub-committee noted the report.

10. GAZETTEER OF UNDERSEA FEATURE NAMES

10.1 WEB-BASED MAP INTERFACE AND ON-LINE DATABASE FOR THE GEBCO GAZETTEER

L. TAYLOR reported that the web-based map interface and on-line database for the GEBCO Gazetteer was developed at the US NGDC (also IHO Data Centre for Digital Bathymetry – DCDB), in collaboration with the GEBCO Digital Atlas Manager at BODC, UK (P. WEATHERALL). In May 2009, a NGDC GIS expert (J. CARTWRIGHT) who developed the database and interface, travelled to the IHB in Monaco to demonstrate a prototype of the management interface and to discuss changes and further enhancements to the web-based gazetteer. This face-to-face meeting between J. CARTWRIGHT, M. HUET as SCUFN Secretary, and others at the IHB proved very useful and has resulted in an improved version of the web-based gazetteer.

L. TAYLOR gave a demo of the latest version to the meeting. As an example, she entered the newly accepted Acapulco Seamounts into the gazetteer and drew a polygon defining the geometry of the feature, from the bathymetry available, i.e. ETOPO1 (normally the polygon will be drawn from the supporting bathymetric data, to be provided by the proposer).

Outcome:

-The sub-committee noted the progress made in the development of the web-based map interface and on-line database for the GEBCO Gazetteer, which will eventually replace the custom software which was used at the IHB to maintain the GEBCO Gazetteer.

- **Action SCUFN22/39: Secretary** to coordinate the transition to the web-based GEBCO Gazetteer, in liaison with NGDC (L. TAYLOR and J. CARTWRIGHT).

10.2 UNDERSEA FEATURE TOPOLOGY

L. TAYLOR reported on the work carried out by the Geometry sub-group which was established at SCUFN21 in 2008. The sub-group produced a list assigning the allowed geometry(ies) to each generic term, e.g. 'point' and 'polygon' for the generic term 'Bank'. A primary geometry was assigned to a given generic term and, when appropriate, a secondary geometry and a tertiary geometry.

The meeting reviewed the generic terms geometry list. The resulting list (see **Annex F**) was agreed by the sub-committee, as well as that it be posted on the SCUFN page of the IHO website.

Outcome:

-The sub-committee endorsed the generic terms geometry list, as in **Annex F**.

- **Action SCUFN22/40: Secretary** to post the generic terms geometry list (Annex F of SCUFN22 report) on the SCUFN page of the IHO website.

11. ANY OTHER BUSINESS

11.1 UNNAMED SEAMOUNTS IN THE CENTRAL PACIFIC OCEAN

In the absence of W. REYNOSO Peralta who was tasked to “continue and complete his review of the unnamed seamounts in the Pacific Ocean, and make proposals to the sub-committee”, and as no report on this matter was provided, consideration of those ‘unnamed seamounts’ was deferred to SCUFN23.

Outcome:

- **Action SCUFN22/41: W. REYNOSO Peralta** to continue and complete his review of the unnamed seamounts in the Pacific Ocean, and make proposals to SCUFN23.

11.2 REQUEST FROM COLOMBIA FOR CHANGES TO THE GAZETTEER

Docs: SCUFN21-11.2A Letter from CIOH, Colombia, dated 12 May 2009

11.2.a Alice / Alicia Shoal – Alice / Alicia Gap

The hydrographic Office of Colombia (Centro de Investigaciones Oceanográficas e Hidrográficas) had requested that the specific term 'Alice', as in Alice Shoal (*Lat 16°05'N, Long 79°22'W*) and Alice Gap (*Lat 16°04'N, Long 79°35'W*), be changed to 'Alicia', in order to conform to Colombian national regulations to use Spanish names.

There is no indication in the Gazetteer on the origin of 'Alice', e.g. whether this was the name of a person or of a ship. Without this information, the sub-committee was not in a position to consider the Colombian request. T. PALMER offered to investigate whether ACUF has such information.

Outcome:

-The sub-committee acknowledged CIOH's request, but was unable to decide in the absence of information on the origin of the specific term 'Alice'. Meanwhile, the names Alice Shoal and Alice Gap will be kept in the Gazetteer.

- **Action SCUFN22/42: T. PALMER** to check in ACUF if there is origin information for the specific term 'Alice', as in Alice Shoal and Alice Gap.

11.2.b Calarca Reef

CIOH reported that they have conducted a recent multibeam bathymetric survey in the area of the so-called Calarca Reef (*Lat 13°08.5'N, Long 81°17.5'W*). This survey has revealed that there is no such reef in that area. The minimum depth measured was about 1000 metres. They asked that Calarca Reef be removed from the Gazetteer.

From the 3D bathymetric view provided by CIOH, the sub-committee agreed that there was no reef in the relevant area and that Calarca Reef should therefore be deleted from the Gazetteer.

Outcome:

-The sub-committee agreed CIOH's request to delete Calarca Reef from the Gazetteer.

- **Action SCUFN22/43: Secretary** to delete Calarca Reef from the Gazetteer.

11.3 REVIEW OF RESERVE SECTION

Docs: Reserve section of GEBCO Gazetteer, Sept. 2009

The Secretary referred to the "Reserve Section of the GEBCO Gazetteer" containing 74 'pending' names. This included 13 unnamed features in the North West Pacific Ocean, off Japan. He mentioned that some explanation and/or suggested action were provided in the right hand column of the spreadsheet.

It was agreed that the reserve section would be posted on the IHO website and that each SCUFN member / observer would look at the list and provide comments on how to improve the situation. In particular, JCUFN was invited to consider proposing suitable specific terms for the unnamed features close to Japan.

Outcome:

- The sub-committee acknowledged the reserve section.
- **Action SCUFN22/44: Secretary** to post the reserve section on the SCUFN page of the IHO website.
- **Action SCUFN22/45: All members and observers** to review the reserve section and provide comments to the Secretary by end February 2010 in view of resolving the pending issues.
- **Action SCUFN22/46: Y. OHARA**, in liaison with JCUFN, to consider proposing suitable specific terms to all unnamed features close to Japan.

12. SITE AND DATES FOR THE NEXT MEETING

The sub-committee agreed that any future SCUFN meetings should take place, as far as possible, in conjunction with the other GEBSCO meetings, i.e. GGC and TSCOM, in order to minimize travel costs for those SCUFN members also involved in GGC and/or TSCOM.

The Chair reported that the time and venue for the 2010 GEBSCO meetings, including SCUFN23, would be decided at the Guiding Committee meeting to take place, also in Brest, on the following week (1-2 October). He mentioned a possible offer by the Peruvian Hydrographic Office to host the next GEBSCO meetings.

12. CONCLUSION

In his concluding remarks, the chairman (H.W. SCHENKE) expressed his warm thanks to SHOM of support for such a great job of organizing the meeting. He thanked the sub-committee members and observers for the productive discussions and their willingness to consider all points of view. He stressed the importance of continuing to work hard both during the meetings and intersessionally. He also thanked the SCUFN secretary, M. HUET, for his continued commitment to the work of the sub-committee and L. TAYLOR and N. CHERKIS for their efforts as rapporteurs. He acknowledged SHOM for their hospitality and for hosting the meeting. On behalf of all meeting participants, M. HUET congratulated and thanked the chairman for conducting a successful meeting (*Applause*).

The Korean participants announced that a symposium would take place at the end of October 2009 in Seoul, on the occasion of the Korean Hydrographic Office 60th anniversary (KHOA, formerly NORI).

The chairman closed the meeting at 6:30 pm on 25 September 2009.

LIST OF DOCUMENTS

	Report of SCUFN21
	GEBCO Gazetteer Sept. 09 Reserve Section Sept. 09
SCUFN22-01A rev.1	List of Meeting Documents
SCUFN22-01B rev.1	List of Participants
SCUFN22-01C	Members and Observers of SCUFN
SCUFN22-02A rev.4	Agenda
SCUFN22-03A	Terms of Reference and Rules of Procedures for SCUFN
SCUFN22-05.1A	B-6, 4th Edition, English/French Version
SCUFN22-05.1B	B-6, 4th Edition, English/Korean Version
SCUFN22-05.1C	B-6, 4th Edition, English/Japanese Version
SCUFN22-05.1D	B-6, 4th Edition, English/Russian Version
SCUFN22-05.2A	Flaws in the English Version of B-6, 4 th Edition
SCUFN22-06.1A	List of Actions from SCUFN-21 and Status
SCUFN22-07.1A	Various Proposals
SCUFN22-07.2A	Proposals by Japan Committee on Undersea Feature Names (JCUFN), July 2009
SCUFN22-07.3A	Proposals by Brazilian Navy Hydrographic Center (BNHC), August 2009
SCUFN22-07.4A	Proposals by Korean Committee on Marine Geographical Names (KCMGN), August 2009
SCUFN22-07.5A	Proposals by International Bathymetric Chart of the South East Pacific (IBCSEP), April 2008
SCUFN22-07.6A	Proposals by Yuzhmorgeo, Russia, September 2009
SCUFN22-07.7A	Proposals by AWI, Germany, September 2009
SCUFN22-08.1A	ACUF Comments on January 2009 GEBCO Gazetteer
SCUFN22-08.2A	Report of ACUF Activities since SCUFN 21

SCUFN22-09A	Report on UNGEGN-25
SCUFN22-11.2A rev.1	Letter from CIOH, Colombia, May 2009

LIST OF PARTICIPANTS

Members	Country	IHO/ IOC	E-mail
Dr Yasuhiko OHARA	Japan (JHOD)	IHO	ohara@jodc.go.jp
Ms Lisa A. TAYLOR	USA (NGDC)	IHO	Lisa.A.Taylor@noaa.gov
Dr Hans Werner SCHENKE (Chairman)	Germany (AWI)	IOC	hans-werner.schenke@awi.de
Dr Hyun-Chul HAN	Rep. of Korea (KIGAM)	IOC	han@kigam.re.kr
Dr Ksenia DOBROLYUBOVA	Russia (GINRAS)	IOC	marine@ginras.ru
Mr Norman CHERKIS	USA	IOC	fiveoceanscon@yahoo.com
Cdr Harvinder AVTAR	India (NHO)	IHO	inho@dataone.in Avtar_hydro7076@rediffmail.com
Cdr Ana Angelica ALBERONI	Brazil (DHN)	IHO	ana.angelica@chm.mar.mil.br anaangelica@urbi.com.br
Dr Vaughan STAGPOOLE	New Zealand (IGNS)	IOC	V.Stagpoole@gns.cri.nz
Secretary	Organization		Email
Ing en Chef Michel HUET (Secretary)	IHB		mhuet@ihb.mc
Observers	Country/Organization		E-mail
Mr Trent PALMER	USA (NGA & BGN/ACUF)		Trent.C.Palmer@nga.mil
Ms Darma BENNETT	USA(NGA)		Darma.L.Bennett@nga.mil
Dr Christopher FOX	USA (NGDC)		Christopher.G.Fox@noaa.gov
Dr Kunio YASHIMA	Japan (JHA)		yashima@jha.jp
Mr Shigeru KASUGA	Japan (JHOD)		kasuga-k9nk@kaiho.mlit.go.jp
Prof Hyo Hyun SUNG	Rep of Korea (EWU)		hhsung@ewha.ac.kr
Mr. Young Tae LIM	Rep of Korea (KHOA)		lyt0221@korea.kr
Ms. In Young PARK	Rep of Korea (KHOA)		piocean@mltm.go.kr
Ing Général Etienne CAILLIAU	France (SHOM)		etienne.cailliau@wanadoo.fr
Ing en Chef Henri DOLOU	France (SHOM)		henri.dolou@shom.fr
Mr. Brede GUNDERSEN	Norway (NHS)		Brede.Gundersen@statkart.no
Prof. Shaohua LIN	China (NMDIS)		shlin@mail.nmdis.gov.cn

Acronyms:

- ACUF: Advisory Committee on Undersea Features (of BGN, USA)
- AWI: Alfred Wegener Institute für Polar und Meeresforschung (Germany)
- BGN: Board on Geographic Names (USA)
- DHN: Directorate of Hydrography and Navigation (Brazil)
- EWU: EWHA Womans University (Rep. of Korea)
- GINRAS: Geological Institute of the Russian Academy of Sciences
- IGNS: Institute of Geological & Nuclear Sciences (New Zealand)
- IHB: International Hydrographic Bureau
- JHA: Japan Hydrographic Association
- JHOD: Japan Hydrographic and Oceanographic Department
- KHOA: Korean Hydrographic and Oceanographic Administration
- KIGAM: Korea Institute of Geoscience & Mineral Resources
- NGA: National Geospatial-intelligence Agency (USA)
- NGDC: National Geophysical Data Center (USA)
- NHO: National Hydrographic Office (India)
- NHS: Norwegian Hydrographic Service
- NMDIS: National Marine Data & Information Service (China)
- SHOM: Service Hydrographique et Océanographique de la Marine (France)

AGENDA

1. **Opening and Administrative Arrangements**
Docs: SCUFN22-01A *List of Documents (Secretary)*
SCUFN22-01B *List of Participants (Secretary)*
SCUFN22-01C *SCUFN Membership and Observers List (Secretary)*
2. **Approval of Agenda**
Docs: SCUFN22-02A *Agenda (Secretary)*
3. **SCUFN Terms of Reference and Rules of Procedures**
Docs: SCUFN22-03A *Terms of Reference and Rules of Procedures for SCUFN (Secretary)*
4. **Election of Vice-Chairperson**
5. **Standardization of Undersea Feature Names: IHO-IOC Publication B-6**
 - 5.1 Current Language Versions of B-6, 4th Edition
Docs: SCUFN22-05.1A *B-6, 4th Edition, E-French Version, November 2008 (Secretary)*
SCUFN22-05.1B *B-6, 4th Edition, E-Korean Version, November 2008 (H-C. Han)*
SCUFN22-05.1C *B-6, 4th Edition, E-Japanese Version, November 2008 (Y. Ohara)*
SCUFN22-05.1D *B-6, 4th Edition, E-Russian Version, November 2008 (K. Dobrolyubova)*
 - 5.2 Future Improvements of B-6
Docs: SCUFN22-05.2A *Flaws in the English Version of B-6, 4th Edition (Y. Ohara)*
6. **Matters remaining from Previous Meetings**
 - 6.1 Review of Actions from SCUFN21
Docs: SCUFN22-06.1A *List of Actions from SCUFN-21 and Status (Secretary)*
 - 6.2 Review and Approval of SCUFN21 Report
Docs: *Report of SCUFN21*
7. **Proposals Submitted during Intersessional Period**
 - 7.1 Various Proposals
Docs: SCUFN22-07.1A *Various proposals*
 - 7.2 Japan Committee on Undersea Feature Names (JCUFN)
Docs: SCUFN22-07.2A *Proposals by JCUFN, Japan, July 2009*
 - 7.3 Brazilian Navy Hydrographic Center (BNHC)
Docs: SCUFN22-07.3A *Proposals by BNHC, August 2009*
 - 7.4 Korean Committee on Marine Geographical Names (KCMGN)
Docs: SCUFN22-07.4A *Proposals by KCMGN, Rep of Korea, August 2009*
 - 7.5 International Bathymetric Chart of the South-East Pacific (IBCSEP)
Docs: SCUFN22-07.5A *Proposals by IBCSEP, April 2008*
 - 7.6 Yuzgmorego, Russia
Docs: SCUFN22-07.6A *Proposals by Yuzhmorego, Russia, September 2009*
 - 7.7 AWI, Germany
Docs: SCUFN22-07.7A *Proposals by AWI, Germany, September 2009*
8. **Liaison with the Advisory Committee on Undersea Features (ACUF) [of the US Board on Geographical Names]**
 - 8.1 Harmonization of GEBCO and ACUF Gazetteers
Doc: SCUFN22-08.1A *ACUF Comments on January 2009 GEBCO Gazetteer (T. Palmer)*
 - 8.2 Review of Reports of ACUF Meetings since May 2008

Doc: SCUFN22-08.2A Reports of ACUF Meetings since SCUFN 21 (T. Palmer)

9. Liaison with the UN Group of Experts on Geographical Names (UNGEGN)

Doc: SCUFN22-09A Report on UNGEGN-25 (T. Palmer)

10. Gazetteer of Undersea Feature Names

10.1 Web-based Map Interface and On-line Database for the GEBCO Gazetteer

10.2 Undersea Feature Topology

11. Any Other Business

11.1 Unnamed seamounts in the Central Pacific Ocean

11.2 Request from Colombia for changes to the Gazetteer

Docs: SCUFN22-11.2A rev.1 Letter from CIOH, Colombia, dated 12 May 2009

11.3 Review of Reserve Section

Docs: Reserve section of GEBCO Gazetteer, Sept. 2009

12. Site and Dates for the Next Meeting

13. Conclusion

ACTION ITEMS ARISING FROM SCUFN22

Agenda Item	Action	Details
5.1	SCUFN22/1	All members to submit appropriate graphics depicting clear examples of generic feature types (e.g., color shaded relief images and feature profiles) to the secretary for inclusion via links in B-6.
5.1	SCUFN22/2	Secretary to establish links to approved graphics in B-6.
5.2	SCUFN22/3	Y. OHARA and V. STAGPOOLE to review B-6 in detail to check for consistency in reference to 'Naming Authorities' and make recommendations to the next meeting.
5.2	SCUFN22/4	Y. OHARA and H-C. HAN to compose an improved definition for caldera for submission to the next SCUFN meeting.
6.1	SCUFN22/5	W. REYNOSO Peralta / J.L. FRIAS Salazar to complete the English/Spanish version of the 4 th edition of B-6 as soon as possible.
6.1	SCUFN22/6	All members and observers to consider the definition proposed by H.H. SUNG for 'Sand Ridge', i.e. "A submerged, permanent, group of shallow, low ridges comprised of sand or sediment, formed in parallel appearance. May constitute a hazard to navigation.", and provide their comments to H.H. SUNG (hhsung@ewha.ac.kr) in advance of the next meeting. H.H. SUNG to report on the results at SCUFN23.
6.1	SCUFN22/7	Y. OHARA to define the extent of the Joban Seamount Chain and provide the secretary with the coordinates and a shape file.
6.1	SCUFN22/8	K. DOBROLYUBOVA to prepare a proposal relating to the grouping of seamounts / guyots in the Japanese Guyots area, for discussion at SCUFN23.
6.1	SCUFN22/9	V. STAGPOOLE to ask the New Zealand Geographical Board if it would be possible to rename Hayes Bank and Houtz Bank, as it is now the international practice not to name features after living persons.
6.1	SCUFN22/10	All members and observers to review the questions/issues in Annex E to SCUFN22 report, on how to facilitate the transfer of bathymetric data to the IHO DCDB, and provide their comments to L. TAYLOR (Lisa.A.Taylor@noaa.gov) in advance of the next meeting. L. TAYLOR to report on the results at SCUFN23.
7.1.2.a	SCUFN22/11	Secretary to write to the proposer of Lucky Star Ridge, recommending that he contact Y. OHARA to collaborate about the feature located from <i>Lat.</i> 22°46.0'N, <i>Long.</i> 126°56.5'E to <i>Lat.</i> 21°40.0'N, <i>Long.</i> 126°47.8'E, in view of submitting a new proposal to SCUFN23.
7.1.3.a	SCUFN22/12	T. PALMER to provide the Secretary with information on Dowd Guyot (<i>Lat.</i> 13°27'N, 119°39'W).
7.1.3.a	SCUFN22/13	L. TAYLOR to provide the Secretary with a polygon defining the base of Acapulco Seamounts.
7.2.a	SCUFN22/14	Y. OHARA to identify in the Gazetteer all specific terms for which spelling needs to be amended to comply with Japanese transliteration rules in force, e.g. from Daiiti to Daiichi, or Kasima to Kashima; list to be provided to the Secretary for updating of the Gazetteer.
7.2.g	SCUFN22/15	Secretary to correct spelling of Futaba Seamount to Futaba Seamount in the Gazetteer.

Agenda Item	Action	Details
7.2.h	SCUFN22/16	Secretary to note in the Remarks section of the Gazetteer for Iwaki Guyot "Named Iwaki Seamount by the Japanese Committee on Undersea Feature Names and in the ACUF Gazetteer".
7.3.b	SCUFN22/17	A.A. ALBERONI to provide additional bathymetric (multibeam) data to SCUFN23 in support of the proposed Rio Grande Fan.
7.3.f	SCUFN22/18	A.A. ALBERONI to provide the Secretary with track control for Sao Tomé Seamount.
7.3.g	SCUFN22/19	A.A. ALBERONI to provide the Secretary with track control for Columbia Bank.
7.3.g	SCUFN22/20	T. PALMER to research the origins of the name Columbia Seamount (<i>Lat 20°45'S, Long 32°00'W</i>).
7.3.h	SCUFN22/21	A.A. ALBERONI to provide the Secretary with track control for Congress Bank.
7.3.i	SCUFN22/22	A.A. ALBERONI to review the polygon defining Rio Grande Terrace to only include the flat area, and provide the Secretary with the results.
7.4.a	SCUFN22/23	T. PALMER to verify that Ita Mai Tai Guyot in the ACUF Gazetteer (<i>Lat 12°30'N, Long 157°10'E</i>) is not the same feature as the proposed Gaori Guyot (<i>Lat 12°50'N, Long 156°50'E</i>).
7.4.d	SCUFN22/24	H.H. SUNG to provide the Secretary with a polygon defining the base of Changpogo Seamount.
7.5.1.a	SCUFN22/25	Secretary to add the following two positions to Peru Trench in the Gazetteer, extending this feature further north: <i>Lat 5°21'S, Long 82°00'W</i> and <i>Lat. 3°10'S, Long 81°38.0'W</i> .
7.5.1.a	SCUFN22/26	Secretary to replace the existing position in the Gazetteer for Colombian Trench with the following three positions: <i>Lat 6°57'N, Long 78°57'W</i> ; <i>Lat 5°16'N, Long 78°12'W</i> ; and <i>Lat 2°36'N, Long 79°44'W</i> .
7.5.1.b	SCUFN22/27	Secretary to ask the proposer to provide bathymetric data in support of the proposed Megaprint Seamount.
7.5.1.c, d, e	SCUFN22/28	Secretary to ask the proposer to provide bathymetric data in support of the proposed Paganini 1, 2, 3 seamounts; to also ask the proposer to submit alternative names for these three features, as there is already a Paganini Seamount as part of the Musicians Seamounts in North Central Pacific and that numbered specific terms, e.g. Paganini 1, are not accepted.
7.5.1.f	SCUFN22/29	Secretary to ask the proposer to provide bathymetric data in support of the proposed Sonne Seamount; to also ask the proposer to submit an alternative name for this feature, as there is already a Sonne Seamount in North Central Pacific, south of Hawaii.
7.5.1.g	SCUFN22/30	Secretary to ask the proposer to provide bathymetric data in support of the proposed Werner Seamount; to also ask the proposer to submit an alternative name for this feature, as names of living persons, like Dr. Werner, are not accepted.
7.5.1.h	SCUFN22/31	Secretary to ask the proposer to provide bathymetric data in support of the proposed Orion Seamount; to also ask the proposer to provide the reason for naming this feature after 'Orion'.
7.5.1.i	SCUFN22/32	Secretary to ask the proposer to provide bathymetric data in support of the proposed Pillow Seamount; to also ask the proposer to provide the reason for naming this feature after 'Pillow'.

Agenda Item	Action	Details
7.5.1.j, k, l	SCUFN22/33	Secretary to ask the proposer to provide bathymetric data in support of the proposed Galera 1, 2, 3 seamounts; to also ask the proposer to submit alternative names for Galera 2 and Galera 3, as numbered specific terms, e.g. Galera 2, are not accepted.
7.5.1.m	SCUFN22/34	Secretary to ask the proposer to provide bathymetric data in support of the proposed Amadeus seamount.
7.5.2.a, b	SCUFN22/35	Secretary to ask the proposer to provide bathymetric data in support of the proposed Chimbote Bank and Peru Bank.
7.6.b	SCUFN22/36	K. DOBROLYUBOVA to provide the Secretary with a polygon defining the base of Rykachev Guyot.
7.7	SCUFN22/37	Secretary to ask the proposer for Beiersdorf Peak, Billings Seamount, Krauss Seamount, Krümmel Seamount, Svarichevskiy Seamount and Vancouver Knolls, to provide additional bathymetric data in support of these proposals.
8.1	SCUFN22/38	Secretary to review and comment on the comparative review of GEBSCO and ACUF gazetteers, as in Doc. SCUFN22-08.1A, and propose any necessary actions to the sub-committee.
10.1	SCUFN22/39	Secretary to coordinate the transition to the web-based GEBSCO Gazetteer, in liaison with NGDC (L. Taylor and J. Cartwright).
10.2	SCUFN22/40	Secretary to post the generic terms geometry list (Annex F of SCUFN22 report) on the SCUFN page of the IHO website.
11.1	SCUFN22/41	W. REYNOSO Peralta to continue and complete his review of the unnamed seamounts in the Pacific Ocean, and make proposals to SCUFN23.
11.2.a	SCUFN22/42	T. PALMER to check in ACUF if there is origin information for the specific term 'Alice', as in Alice Shoal and Alice Gap.
11.2.b	SCUFN22/43	Secretary to delete Calarca Reef from the Gazetteer.
11.3	SCUFN22/44	Secretary to post the reserve section on the SCUFN page of the IHO website.
11.3	SCUFN22/45	All members and observers to review the reserve section and provide comments to the Secretary <u>by end February 2010</u> in view of resolving the pending issues.
11.3	SCUFN22/46	Y. OHARA , in liaison with JCUFN, to consider proposing suitable specific terms to all unnamed features close to Japan.

TRANSFER OF BATHYMETRIC DATA TO THE IHO DCDB

Summary of Discussions

The following questions/issues were identified:

- Should the data be limited to those supporting the proposals or be extended to cover the complete survey data collected?
- What kind of data can be transferred (e.g., raw data, processed data, gridded data (aggregated vs. interpolated), lower resolution data)?
- Should the distribution of the submitted data be restricted in certain cases to specific uses and recipients such as GEBCO and IBC projects, tsunami related applications, and/or IHO Member States?
- How can the IHO DCDB make it easier to submit data?

SCUFN GENERIC TERMS: LIST OF ALLOWED GEOMETRIES

Generic Feature Type	Geometry (primary)	Geometry (secondary)	Geometry (tertiary)
ABYSSAL HILL	POINT	POLYGON	
ABYSSAL HILLS	POLYGON	MULTIPOINT	MULTIPOLYGON
ABYSSAL PLAIN	POLYGON		
APRON	POLYGON		
ARCHIPELAGIC APRON	POLYGON		
BANK	POINT	POLYGON	
BANKS	POLYGON	MULTIPOINT	MULTIPOLYGON
BASIN	POLYGON		
BORDERLAND	POLYGON		
CALDERA	POINT	POLYGON	
CANYON	LINestring	POLYGON	
CANYONS	POLYGON	MULTILINestring	MULTIPOLYGON
CAP	POINT		
CHANNEL	LINestring	POLYGON	
CONE	POLYGON		
CONTINENTAL MARGIN	POLYGON		
CONTINENTAL RISE	POLYGON		
CONTINENTAL SHELF	POLYGON		
CONTINENTAL SLOPE	POLYGON		
DEEP	POINT	POLYGON	
DEEPS	POLYGON	MULTIPOINT	MULTIPOLYGON
DISCORDANCE	MULTIPOINT	POLYGON	
ESCARPMENT	LINestring	POLYGON	
FAN	POLYGON		
FRACTURE ZONE	LINestring	MULTILINestring	POLYGON
FRACTURE ZONE SYSTEM	POLYGON		
GAP	LINestring	POLYGON	
GROUND	POINT		
GUYOT	POINT	POLYGON	
GUYOTS	POLYGON	MULTIPOINT	MULTIPOLYGON
HILL	POINT	POLYGON	
HILLS	POLYGON	MULTIPOINT	MULTIPOLYGON
HOLE	POINT	POLYGON	
KNOLL	POINT	POLYGON	
KNOLLS	POLYGON	MULTIPOINT	MULTIPOLYGON
LEVEE	LINestring	POLYGON	
MEDIAN VALLEY	LINestring	MULTILINestring	POLYGON
MID-OCEANIC RIDGE	LINestring	MULTILINestring	
MOAT	LINestring	POLYGON	
PASS	POINT		
PASSAGE	LINestring	POLYGON	
PEAK	POINT	POLYGON	
PEAKS	POLYGON	MULTIPOINT	MULTIPOLYGON
PINNACLE	POINT	POLYGON	
PINNACLES	POLYGON	MULTIPOINT	MULTIPOLYGON
PLAIN	POLYGON		
PLATEAU	POLYGON		
PROMONTORY	LINestring	POLYGON	

PROVINCE	POLYGON		
REEF	POINT	POLYGON	
REEFS	POLYGON	MULTIPOINT	MULTIPOLYGON
RIDGE	LINestring	POLYGON	
RIDGES	POLYGON	MULTILINestring	MULTIPOLYGON
RISE	POLYGON		
SADDLE	POINT	POLYGON	
SCARP	LINestring	POLYGON	
SEABIGHT	POINT	POLYGON	
SEACHANNEL	LINestring	POLYGON	
SEACHANNELS	POLYGON	MULTILINestring	MULTIPOLYGON
SEAMOUNT	POINT	POLYGON	
SEAMOUNT CHAIN	LINestring	MULTIPOINT	MULTIPOLYGON
SEAMOUNT GROUP	POLYGON	MULTIPOINT	MULTIPOLYGON
SEAMOUNTS	POLYGON	MULTIPOINT	MULTIPOLYGON
SEAMOUNT PROVINCE	POLYGON	MULTIPOINT	MULTIPOLYGON
SEAVALLEY	LINestring	POLYGON	
SEAVALLEYS	POLYGON	MULTILINestring	MULTIPOLYGON
SHELF	POINT	POLYGON	
SHELF BREAK	LINestring		
SHELF-EDGE	LINestring		
SHOAL	POINT	POLYGON	
SHOALS	POLYGON	MULTIPOINT	MULTIPOLYGON
SILL	POINT	LINE	POLYGON
SLOPE	POLYGON		
SPUR	POINT	LINE	POLYGON
SUBMARINE VALLEY	LINestring	POLYGON	
SUBMARINE VALLEYS	POLYGON	MULTILINestring	MULTIPOLYGON
TABLEMOUNT	POINT	POLYGON	
TABLEMOUNTS	POLYGON	MULTIPOINT	MULTIPOLYGON
TERRACE	POINT	POLYGON	
TERRACES	POLYGON	MULTIPOINT	MULTIPOLYGON
TRENCH	LINestring	POLYGON	
TROUGH	LINestring	POLYGON	
VALLEY	LINestring	POLYGON	
VALLEYS	POLYGON	MULTILINestring	MULTIPOLYGON
ZONE	POLYGON		

LIST OF ACRONYMS USED IN THIS REPORT

ACUF	Advisory Committee on Undersea Features (to the US BGN)
AWI	Alfred-Wegener-Institut für Polar und Meeresforschung (Germany)
B-6	IHO-IOC Publication “Standardization of Undersea Feature Names”
BGN	Board on Geographic Names (USA)
BODC	British Oceanographic Data Centre
BNHC	Brazilian Navy Hydrographic Center (of DHN)
CIOH	Centro de Investigaciones Oceanográficas e Hidrográficas (Colombia)
DCDB	Data Centre for Digital Bathymetry (IHO)
DHN	Diretoria de Hidrografia e Navegação (Brazil)
EEZ	Exclusive Economic Zone
ETOPO1	Earth Topography on a 1-minute grid (NGDC)
EWU	EWHA Womans University (Rep. of Korea)
GEBCO	General Bathymetric Chart of the Oceans (IOC/IHO)
GEOMAR	Leibniz Institute of Marine Sciences at the Christian-Albrechts Universität zu Kiel (Germany)
GGC	GEBCO Guiding Committee
GINRAS	Geological Institute of the Russian Academy of Sciences
GIS	Geographic Information System
HO	Hydrographic Office
IGNS	Institute of Geological & Nuclear Sciences (New Zealand)
IHB	International Hydrographic Bureau (IHO)
IHO	International Hydrographic Organization
INOCAR	Instituto Oceanografico de la Armada (Ecuador)
IOC	Intergovernmental Oceanographic Commission (of UNESCO)
IRD	Institut de Recherche pour le Développement (France)
JCUFN	Japanese Committee on Undersea Feature Names
JHOD	Japan Hydrographic and Oceanographic Department
KCMGN	Korean Committee on Marine Geographical Names
KHOA	Korean Hydrographic and Oceanographic Administration (Rep. of Korea, formerly NORI)
KIGAM	Korea Institute of Geoscience & Mineral Resources
KOMSAT	Korean Multipurpose Satellite (Rep. of Korea)
KORDI	Korea Ocean Research & Development Institute (Rep. of Korea)
NHS	Norwegian Hydrographic Service
NGA	National Geospatial-intelligence Agency (USA)
NGDC	National Geophysical Data Center (USA)
NHO	National Hydrographic Office (India)
NOAA	National Oceanic and Atmospheric Administration (USA)
NORI	National Oceanographic Research Institute (Rep. of Korea, now KHOA)
R/V	Research Vessel
SBN	Seamount Biogeosciences Network
SCUFN	Sub-Committee on Undersea Feature Names (of GEBCO)
SHN	Servicio de Hidrografia Naval (Argentina)

SHOM	Service Hydrographique et Océanographique de la Marine (France)
SIO	Scripps Institution of Oceanography (of UCSD, USA)
S/V	Survey Vessel
TSCOM	Technical Sub-Committee on Ocean Mapping (of GEBCO)
UCSD	University of California, San Diego (USA)
UNGEGN	United Nations Group of Experts on Geographical Names
UNCSGN	United Nations Conference on the Standardization of Geographical Names