23rd SCUFN MEETING Lima, Peru, 11-14 September 2010

RUSSIAN COMMENTS ON THE RESERVE SECTION March 2010

1. Afanasenkov Seamount, Karusev Seamount and Kovrigin Seamount

These 3 seamounts were put in the Reserve Section with the following comment "DNO to submit additional track control". Ksenia D. provided revised proposals for <u>Afanasenkov Seamount</u>, <u>Karusev</u> <u>Seamount</u> and <u>Kovrigin Seamount</u>, containing additional bathymetry. Ksenia D. further made the following comment:

"I think, that recommendation of SCUFN "to provide additional track control" more generally means "to provide additional data (or soundings)" - this was done in new version, where are more depths. Tracks as track lines could not be provided, because, as you see in Proposal Form, these are soundings from ice, which were usually carried out by means of airborne landing, not from the vessel."

After reviewing the information provided by Ksenia D., both SCUFN Chair and Vice-Chair have agreed that the above 3 names <u>be moved from the Reserve Section to the GEBCO Gazetteer</u>. SCUFN Chair further commented: "*It is shown on the latest version of IBCAO that the minimum depth of Karusev Smt is about 2,000 m. New data in this region were collected by <u>US ships (Healy)</u> and included into IBCAO Vers 2.12."*

2. Kiselyov / Kiselev Seamount

This seamount located at 82°57' N - 125°19' W was proposed as Kiselyov Seamount in 2001 by "The All-Russian Research Institute of the World Ocean Geology and Mineral Resources of the Russian Academy of Sciences" and 'accepted provisionally' as Kiselev Seamount by SCUFN16 (2003) and put in the Reserve Section with an action for John Hall "to provide additional data to determine whether this feature is part of the Lamont Ridge (not in the GEBCO Gazetteer) encountered in 1960s-1970s." No such additional data was received from John Hall. Further in the SCUFN16 report, there was a 2nd position (76°52' N - 162°46' W) which clearly was wrong. Ksenia D. has made the following comments:

"Such coordinates, i.e. the 2nd position, for the seamount are impossible. This can't have any relation to Lamont Ridge, because the seamount is in the Canadian basin. So, no additional data is needed to approve this UFN. Also, 'Kiselyov' is right. In the proposal form it is pointed out that this seamount is located between Canada Basin and Stefansson Basin."

After considering the information provided by Ksenia D., both SCUFN Chair and Vice-Chair have agreed that this name <u>be moved from the Reserve Section to the GEBCO Gazetteer</u>. SCUFN Chair further commented: "The name as proposed by Garrik Grikurov, i.e. 'Kiselev' is spelled correctly. I have double checked this, for example in some Literature citations I found: **Yu. G. Kiselev**, 'Certain Features of the Recent Morphotectonic Structure of the Lomonosov Rise Based on Data of Seismic Studies' Morsk. Geol. Geofiz., No. 1, 123–128 (1970). Also, Demenitskaya et al., 1964R. M. Demenitskaya, A.M. Karasik and **Yu.G. Kiselev**, 'Structure of the earth's crust in the Arctic, Geology of the Sea and Ocean Floor', Nauka, Moscow (1964), pp. 114–121.

3. Agafonov Seamount, Aref'yev Seamount and Bukhmeyer Seamount

These 3 seamounts were put in the Reserve Section with the following comment "DNO to submit additional track control". Ksenia D. provided revised proposals for <u>Agafonov Seamount</u>, <u>Arefyev Seamount</u>, and <u>Bukhmeyer Seamount</u>, containing additional track control. Ksenia D. further made the following comment:

"I have attached the JPG files with MB charts of Gakkel Ridge (see <u>map1</u>, <u>map2</u> and <u>map3</u>), showing that these smts are outside the coverage. This means that there are no available (at least for me) multibeam data for this area to be compared."

After reviewing the information provided by Ksenia D., SCUFN Vice-Chair commented: "The additional track control for Agafonov, Aref'yev and Bukhmeyer Smts is sufficient to confirm that these features are seamounts. The SCUFN20 report recommends that the provided data be compared to available multibeam data from IBCAO for Afanasenkov and Agafonov seamounts. I think this is a good idea."

SCUFN Chair subsequently commented: "As pointed out earlier, all features are outside of the AMORE and SCICEX maps. I have tried to find more information in Gravity field and magnetics, but I was unsuccessful. So finally I accept the additional bathymetric evidence, extracted from submarine missions submitted in 2010 by Russia."

As a result, the above 3 names have been moved from the Reserve Section to the GEBCO Gazetteer.

4. Bellingshausen Basin

This name was put in the Reserve Section with the following comment "There is insufficient evidence to show that this feature can actually be identified by the generic name given." SCUFN Vice-Chair initially commented: "*Unclear statement: ... Does this mean that the issue is the name, Bellingshausen?*". SCUFN Secretary's recollection of the discussions at SCUFN15 (2002) is that the issues were a) whether this feature is distinctive enough to deserves a name; and b) if yes, whether the name 'Bellingshausen' is appropriate. Kesia D. provided the following comments:

"I think I can give the explanation of the situation. Primary discussion was connected with the point that on the GEBCO map were shown three abyssal plains – Bellingshausen, Amundsen and Murchison and that an additional name of basin is excessive. Galina Agapova has explained that basins are another level of hierarchy and the bottom of the basin could be hilly or smooth and include abyssal plains. Then, can the basin be well identified? The answer is YES because the basin is situated between the slopes of South America and Antarctica and EPR (see picture). It was recognized, that this basin is included in the ACUF Gazetteer (2001) in two variants: 'Bellingshausen basin' with remark 'see Southeast Pacific basin'. In the latest ACUF Gazetteer there is only 'Southeast Pacific Basin'. We think that UFN 'Bellingshausen Basin' is preferable. It was given by P.G.Schott in 1935 in memory of the outstanding researcher of Antarctic and it conforms to B-6 terminology and criteria, used in many publications and allow to avoid such names, as "central', 'northwest', 'southeast' etc. in every ocean. Limits could be contoured as followed: 45°S - 95°W; 59°S - 70°W; 72°S - 100°W; 72°S - 130°W; 73°S - 150°W; 70°S - 170°W."

For convenience, I (Secretary) have prepared a <u>map of the area</u> showing in red the limits suggested by Ksenia D., in white the limits in the Reserve Section taken from the SCUFN15 report (2002) and in green the single position in the ACUF Gazetteer.

SCUFN Vice-Chair suggested that "we should wait for the new data before deciding on Bellinghausen Basin". SCUFN Chair subsequently provided the following comments: "The geographic limits given in the attached map are to my opinion not meaningful. A 'Basin' should only cover a region of plan extent. The geographic limits defined in the plot cover the Mary Byrd Seamounts, and large parts of the West Antarctic Continental shelf. We (AWI) are preparing a new bathymetric map in this region, which will be based on a large amount of new data. However this takes time and we should therefore wait until the new product is available."

5. Skif Seamount, Unnamed1 Seamount / Stout Guyot, Thomas Washington Guyot, Winterer Guyot and Danil'chuk Seamount

5.1 Skiff Seamount

Originally proposed as Shaposhnikov Seamount by DNO in 2003. Not accepted by SCUFN18 (2005) as "the sub-committee considered that Aleksey Ivanovich Shaposhnikov (1928 – 1995) did not make an outstanding contribution to ocean science, so the name was rejected. The sub-committee suggested that this feature be named Skif Seamount, after the vessel which discovered this feature, upon acceptance by HDNO.

Ksenia D. reported that DNO has now agreed that the name 'Skif' be given to this seamount.

SCUFN Chair and Vice-Chair have agreed that Skif Seamount be <u>moved from the Reserve Section</u> to the GEBCO Gazetteer.

5.2 Unnamed1 Seamount / Stout Guyot, Thomas Washington Guyot and Winterer Guyot

SCUFN21 (2008) decided to put Stout Guyot into the reserve section of the Gazetteer until new data and track control can be obtained. It has been accepted by ACUF as Stout Seamount.

Ksenia D. commented that "Unnamed1 seamount with coordinates 31°39.5' N 149°00.0' E, proposed as Knizhnik Seamounts, overlays with Stout Guyot. The priority of discovery is unknown, but the data were published by Vogt and Smoot in 1984. So we (DNO) agree with the name 'Stout' for this feature."

SCUFN Secretary can confirm that Unnamed1 Seamount and Stout Guyot relate to the same feature. See attached proposal by DNO for <u>Knizhnik Seamounts</u>. The name 'Knizhnik' was not accepted by SCUFN20 (2007). Stout Guyot at 31°39.5'N - 149°00.0'E (accepted by ACUF as seamount in 1984-85) is clearly depicted on the associated graphics, as well as Thomas Washington Guyot at 32°00'N - 149°15'E and Winterer Guyot at 32°45'N - 148°20'E (both accepted by ACUF in 1985 and included in the Reserve Section). As DNO has agreed with the name Stout Guyot and assuming that the bathymetry provided by DNO is sufficient (to be confirmed), SCUFN Secretary has suggested that:

- Stout Guyot, Thomas Washington Guyot and Winterer Guyot be <u>moved from the Reserve</u> <u>Section to the GEBCO azetteer</u>.
- Unnamed1 Seamount be <u>removed from the Reserve Section</u>.

This has been done following agreement by the SCUFN Chair and Vice-Chair.

5.3 Danil'chuk Seamount

SCUFN20 (2007) decided to put this name in the Reserve Section, further asking "DNO to provide a more detailed contour map including a scale to support Danil'chuk Seamount in order to determine if the feature is a seamount or a ridge".

Ksenia D. commented that "Danil'chuk Seamount in the Reserve Section and Dibner Seamount in the GEBCO Gazetteer relate to the same feature at 74°15.5'N - 7°20.2'E." As Dibner Seamount was accepted by SCUFN21 (2008) and that DNO has agreed with this name (Danil'chuk to be used in a future proposal), Ksenia D. and Secretary have suggested <u>removing Danil'chuk Seamount from the Reserve Section</u>.

This has been done following agreement by the SCUFN Chair and Vice-Chair.