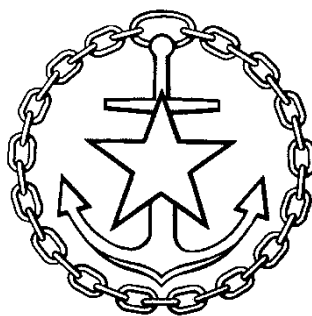


**DEPARTMENT OF NAVIGATION AND OCEANOGRAPHY
OF THE MINISTRY OF DEFENSE OF THE RUSSIAN FEDERATION**

**NATIONAL REPORT
OF THE RUSSIAN FEDERATION**



**The 14th CONFERENCE of HYDROGRAPHIC COMMISSION
on ANTARCTICA of INTERNATIONAL HYDROGRAPHIC
ORGANIZATION**

Tromsø, Norway, 28-30 June 2016

1. Hydrographic Office

In accordance with the legislation of the Russian Federation matters of nautical and hydrographic services for the purpose of aiding navigation in the water areas of the national jurisdiction except the water area of the Northern Sea Route and in the high sea are carried to competence of the Ministry of Defense of the Russian Federation.

Planning, management and administration in nautical and hydrographic services for the purpose of aiding navigation in the water areas of the national jurisdiction except the water area of the Northern Sea Route and in the high sea are carried to competence of the Department of Navigation and Oceanography of the Ministry of Defense of the Russian Federation (further in the text - DNO).

The DNO is authorized by the Ministry of Defense of the Russian Federation to represent the State in civil law relations arising in the field of nautical and hydrographic services for the purpose of aiding navigation. It is in charge of the Hydrographic Service of the Navy – the National Hydrographic Service of the Russian Federation.

The main activities of the Hydrographic Service of the Navy are the following:

- to carry out the hydrographic surveys adequate to the requirements of safe navigation in the water areas of the national jurisdiction and in the high sea;

- to prepare and issue nautical charts, sailing directions, lists of lights, tide tables and other nautical publications, satisfying the needs of safe navigation in the water areas of the national jurisdiction and in the high sea;

- to promulgate notices to mariners in order that nautical charts and publications are kept up to date;

- to provide such aids to navigation as the volume of traffic justifies and the degree of risk requires in the water areas of the national jurisdiction and in the high sea and to arrange for information relating to aids to navigation to be made available to all concerned;

- to provide the nautical charts, sailing directions and other nautical publications to Russian and foreign mariners.

The Hydrographic Service of the Navy includes the Department of Navigation and Oceanography of the Ministry of Defense of the Russian Federation and the Naval Chart Division situated in Saint Petersburg and the regional hydrographic divisions for the Arctic, Pacific, Baltic Sea, Black Sea and Caspian Sea regions.

The regional hydrographic divisions include oceanographic and hydrographic survey vessels and hydrographic survey divisions carrying out hydrographic surveys and collecting and hydrographic data processing.

2. Surveys

2.1. Areas covered by new surveys.



Fig. 1. Oceanographic survey vessel “Admiral Vladimirskiy”

In the early 2016 the oceanographic survey vessel “Admiral Vladimirskiy” carried out hydrographic surveys along the coast and in the water areas of the Antarctic seas covered with the INT Charts of the Russian Federation responsibility – Cooperation Sea, Davis Sea, Kosmonavtov Sea, Lazarev Sea and Riiser-Larsen Sea.

Table 1

Root (water area)	Sailed miles	Root sounding (sounding), km
Cape Town – Antarctic – Cape Town	14000	25928
60° S – Cooperation Sea – Davis Sea – Kosmonavtov Sea – Lazarev Sea – Riiser-Larsen Sea – 60° S	10800	20002

**Fig. 2. A helicopter landing on board****Fig. 3. Icebergs**

A modified single-beam echo-sounder was used for sounding. Nowadays the hydrographic data processing is in progress.

As a result the corresponding INT Charts will be updated.

2.2. New technologies and/or equipment.

In 2014 – 2015 the modern mobile single- and multi-beam echo-sounders, side-scanning sonars, sub-bottom profilers and hydrographic data processing products were provided to the regional hydrographic divisions.

2.3. New survey vessels.

In 2014 – 2015 the regional hydrographic divisions received 4 modern hydrographic survey echo-sounding launches equipped with the multi-beam echo-sounders and side-scanning sonars.

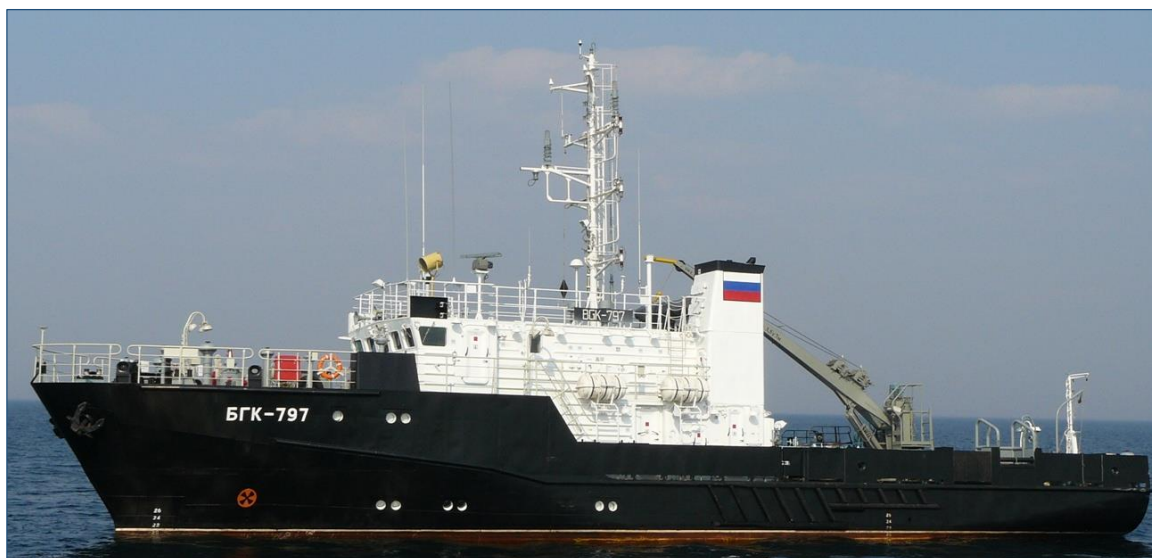


Fig. 4. Hydrographic survey echo-sounding launch

The Hydrographic survey echo-sounding launch is designed and constructed to provide bathymetric surveying and gathering underwater data in coastal waters at 400 meters depths and at 100 miles from the shore.

The main launch characteristics:

overall length –	36,4 meters
beam –	7,8 meters
draft –	2,0 meters
speed –	8 knots
crew –	11

3. New Charts and updates

3.1. Electronic Navigational Charts.

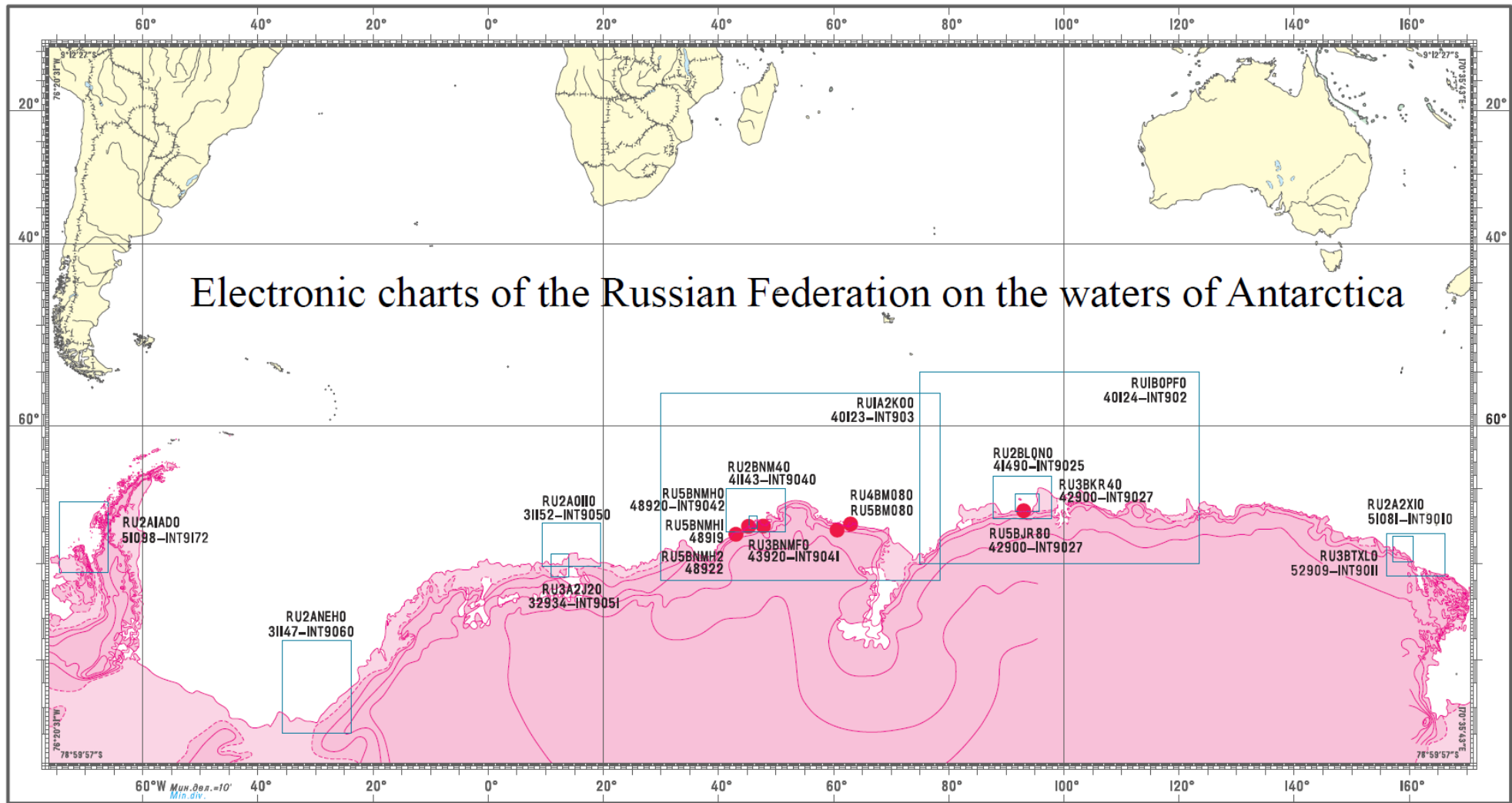


Fig. 5

Electronic charts of the Russian Federation on the waters of Antarctica

Table 2

No.	Cell No.	Name (Area)	Scale 1:	Year of the edition
The Antarctic Coast				
1	RU1A2K00	Indian Ocean. Sodruzhestva and Kosmonavtov Seas	3 000 000	2011
2	RU1B0PF0	Indian Ocean. Mawson and Davis Seas	3 000 000	2011
3	RU2ANEH0	Atlantic Ocean. Weddell Sea. Cape Rol to Vahsel Bay	700 000	2011
4	RU2A0I10	Atlantic Ocean and Indian Ocean. Leningradskiy Gulf to Erskine Iceport	700 000	2011
5	RU2BNM40	Kosmonavtov Sea. Cape Ann to Alasheyev Gulf	700 000	2011
6	RU2BLQN0	Indian Ocean. Davis Sea	700 000	2011
7	RU2A2XI0	Pacific Ocean. Cape North to Matusевич Glacier	700 000	2011
8	RU2A1AD0	Pacific Ocean. Lavoisier (Nansen) Island to Alecsandr I Land	700 000	2011
9	RU3A2J20	Atlantic Ocean. Lazarev Sea. Leningradskiy Gulf and approaches	180 000	2011
10	RU3BKR40	Indian Ocean. Davis Sea. Approaches to scientific station Mirnyy	180 000	2011
11	RU3BNMF0	Indian Ocean. Kosmonavtov Sea. Alasheyev Gulf	90 000	2011
12	RU3BTXL0	Pacific Ocean. Belousov Point to Terra Nova Islands	180 000	2011
13	RU4BMO80	Holmevika Bay. Scientific Station Mawson and Approaches	22 000	2012
14	RU5BNMH0	Indian Ocean. Kosmonavtov Sea. Alasheyev Gulf. Molodyozhnaya Scientific Station and Approaches	12 000	2011
15	RU5BMO80	Scientific Station Mawson and Approaches. Horseshoe Bay	8 000	2012

16	RU5BJR80	Indian Ocean. Davis Sea. Mirnyy Roads	12 000	2011
17	RU5BNMH1	Kosmonavtov Sea. Alasheyev Gulf. Freeth Bay E part	8 000	2012
18	RU5BNMH2	Kosmonavtov Sea. Alasheyev Gulf. From 46°01' E to Vyvodnoy Point	8 000	2012

3.2. ENC's distribution method.

The ENC's are distributed through the official distributor of cartographic products of the National Hydrographic Service of the Russian Federation.

3.3. Raster Navigational Charts (RNC's).

The DNO does not distribute RNC's.

3.4. The INT Charts.

The list of the International Charts issued in the framework of the Hydrographic Commission on Antarctica

Table 3

No.	Cell No.	Russian No.	Chart Title	Scale 1:	Year of Edition
1	INT902	40124	Indian Ocean. Coast of Antarctica. Mawson and Davis Seas	2 000 000	2000
2	INT903	40123	Indian Ocean. Coast of Antarctica. Cooperation Sea and Kosmonavtov Sea	2 000 000	2001
3	INT9010	51081	Pacific Ocean. Coast of Antarctica. Cape North to Lednic Matushevicha	500 000	2000

4	INT9011	52909	Cape Belousova to Terra Nova Island Plan A. Leningradskaya station	200 000 1 000	2000
5	INT9025	41149	Coast of Antarctica. Davis Sea	500 000	1999
6	INT9026	42900	Coast of Antarctica. Davis Sea. Approaches to Scientific Station Mirnyy	200 000	1999
7	INT9027	49900	Indian Ocean. Coast of Antarctica. Davis Sea. Roads Mirnyy	10 000	1999
8	INT9040	41143	Indian Ocean. Coast of Antarctica. Cape Ann to Zaliv Alasheyeva	500 000	2000
9	INT9041	43920	Indian Ocean. Coast of Antarctica. Kosmonavtov Sea. Zaliv Alasheyeva	100 000	1999
10	INT9042	48920	Indian Ocean. Coast of Antarctica. Kosmonavtov Sea. Zaliv Alasheyeva. Scientific Station Molodyozhnaya and Approaches	12 500	1999
11	INT9050	31152	Atlantic and Indian Ocean. Coast of Antarctica. Zaliv Leningradskiy to Erskine Iceport	500 000	1999
12	INT9051	32934	Atlantic Ocean. Antarctic Coast. More Lazareva. Zaliv Leningradskiy and Approaches	200 000	1998
13	INT9060	31147	Atlantic Ocean. Coast of Antarctica. Weddell Sea. Cabo Rol to Vahsel Bay	500 000	2000
14	INT9172	51098	Coast of Antarctica. Lavoisier (Nansen) Island to Zemlya Aleksandra I	500 000	1999

3.5. National Paper Charts.

There are 90 nautical charts issued by the DNO on the Antarctic water areas. Scale row is shown in the Table 3. The collection is updated using corrections and re-issues of the charts as new hydrographic data become available.

Table 4

No.	Scale 1:	Number
1	1: 5 000 000	9
2	1: 2 000 000	12
3	1: 500 000	43
4	1: 250 000	2
5	1: 200 000	3
6	1: 100 000	2
7	1: 75 000	1
8	1: 50 000	5
9	1: 30 000	2
10	1: 25 000	1
11	1: 15 000	2
12	1: 12 500	1
13	1: 10 000	5
14	1: 7 500	1
15	1: 5 000	1

3.6. Print-On-Demand Charts System.

Beginning from 2011 the paper nautical charts are being published with the Print-on-Demand Charts System.

The present day database of Print-on-Demand nautical charts contains more than 3385 charts.

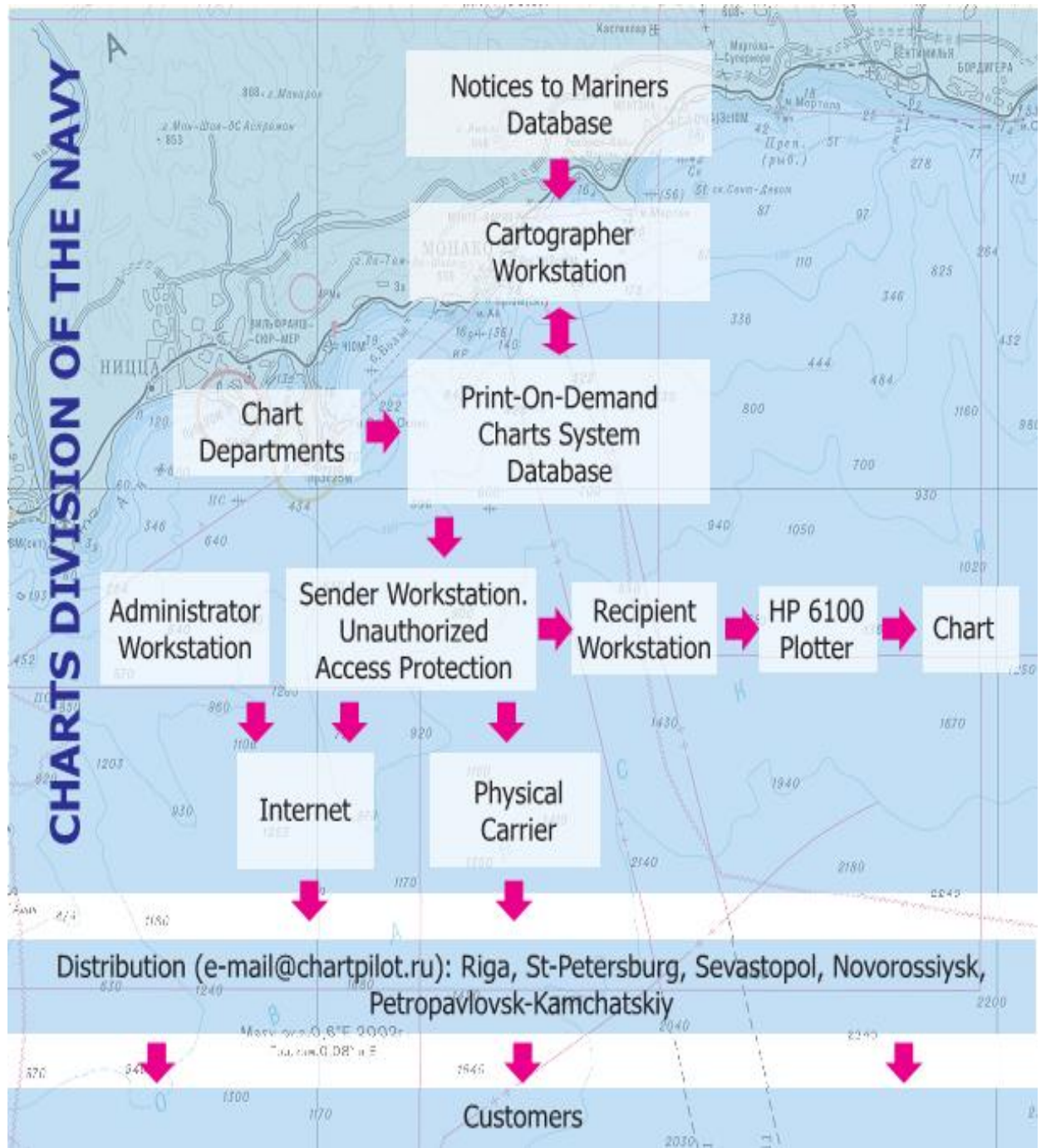


Fig. 6

4. New Publications and updates

4.1. New Publications.

Table 4

No.	Admiralty No.	Publication Title
1	3013	Broadcast Schedule of Navigational Warnings and Hydrometeorological Messages to Radio Stations of the Pacific and Indian Oceans

4.2 Updated Publications.

Issued publications are updated through the DNO Notices to Mariners.

4.3 Means of Supply (e.g. paper, digital).

All publications are supplied on a paper basis.

5. Maritime Safety Information (MSI)

Electronic versions of Notices to Mariners Editions and Navigational Warnings Bulletins in pdf. are available on official website of Ministry of Defense of the Russian Federation:

<http://structure.mil.ru/structure/forces/hydrographic/info/notices.htm>

6. S-55

No information to include in the report.

7. Capacity Building

No information to include in the report.

8. Oceanographic Activities

No information to include in the report.

9. Other Activities

No information to include in the report.

10. Conclusion

The report reflects the activities of the National Hydrographic Service of the Russian Federation during the period since the last meeting of the Commission.

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(Notices to Mariners are available in English)

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