

Hydrographic Society Russia

News

The Sixty Second session of the Hydrographic Society of Russia (HSR) Council took place on 15 November 2004. As usual, the President and the Secretary reported on the work executed. Members of Council approved work of the Secretary in the preparation and sending in of Hydro international materials on activities of the HSR. Applications of six persons to become members of the Society were considered. All were accepted. A proposal submitted by Rear Admiral A.I. Sorokin to hold a meeting on the development of international models for standard and reference oceanspheres was considered. It was decided to hold such a meeting in the near future in the form of a round table™.

A brief report of HSR member Captain 1st rank Oleg Churkin was heard. He reported that on 27 September 2004 icebreaker Capitan Dranitsyn returned to the port of Murmansk with participants of the third expedition which had been carried out by the Arctic and Antarctic Research Institute (AARI) from Russia and the International Arctic Research Center (IARC) of the University of Alaska from the USA. The head of the expedition from Russia was Dr L. Timokhov and from America – Dr I. Dmitrenko. Among the participants of this expedition were officers from the State Research Navigational and Hydrographic Institute, Ministry of Defence of the Russian Federation (GNIINGI): a hydrographer Dr Captain 1st rank O. Churkin and oceanographer Dr. Colonel S. Mastrojukov. Both were participants of the two preceding expeditions in 2002 and 2003.

As it was noted earlier, the purpose of the expedition was to assess the influence of the transformation of the Atlantic waters occurring on the continental slope in the Laptev Sea upon climate change in the Arctic Region. During twenty two days the Russian, American and Canadian scientists carried out ice, meteorological, oceanographic and biological observations in the northern part of the Laptev Sea. On two occasions groups of scientists alighted from the ice breaker on drifting ice fields. They determined characteristics of ice and the intensity of heat exchange between the ocean and the atmosphere.

Ice field automatic stations were established. During long drifts over the Arctic Ocean they will measure weather conditions and transfer data to meteorological centres. Owing to the use of the ice breaker important and interesting data on the natural environment in this poorly investigated and accessibly difficult area of the Arctic Ocean were gathered.

During the expedition a number of discoveries were made. They allow in a new way the estimation of the former data in this Arctic region and its influence on the climate of our planet.

It was, for example, found out that in a deep part of the Laptev Sea there are powerful currents with speeds up to 10cm/sec. They can move huge masses of cold water, greatly influencing the ice formation process. Until now no data had been available to scientists on this natural phenomenon.

As well as in the previous years one of the greatest difficulties encountered by the expedition was the installation of Semi-submersible Buoy Stations (SBS) in areas with depths greater than 2,000m. The matter is that the charts of areas of installation are made using data of hydrographic surveys executed with a spacing of 15km and more. As the area in between could have very rugged relief, each SBS installation was preceded by sounding using EchoTrack Mark II. Measurements in areas of ice-free open water.

Complex ice conditions in which to use the technical equipment did not prevent the hydrographers from carrying out the task of determining sea bottom relief in places of the SBS installations. The co-operative investigations in the Laptev Sea by American and Russian scientists will be continued in 2005.

Members of Council thanked the lecturer and wished success in carrying out future expeditions.

Contact

Hydrographic Society Russia (HSR)

Att. Viktor Rybine

Kozhevennaja linija 41

Saint-Petersburg 199106

Russia

T/F: +7 812 350 5026