

Article



Lieutenant F. F. Vrangal' and corvette 'Challenger'

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In the second half of the XIXth century the United States of America and the countries of Western Europe started a systematic survey of the Atlantic Ocean. It was initiated by Lieutenant M. F. Maury, an officer of the American Navy and hydrographer (1806 – 1873). On the 1st of July, 1850, the Secretary of the United States Fleet signed a circular letter requiring all commanders of naval vessels to assist Lieutenant Maury in his research, and give due attention to deep-water sounding.

Lieutenant S. F. Lee, commander of the brig *'Dolphin'*, was the first to succeed. In 1851 he managed to take a sounding of 1700 fathoms without breaking the line. In the following year the new commander of the brig Lieutenant O. G. Berriman took more than 100 successful soundings in the course of an eight-month voyage.

These works not only made the brig *'Dolphin'* famous, but caused a review of the established opinion on the Atlantic Ocean bottom relief, as some mariners stated that the depths of the ocean were 30 to 50 thousand feet (9,000 – 15,000 m).

The new information of the ocean bottom relief allowed a fresh consideration of the previous idea of transatlantic telegraph cable laying, which had seemed impracticable previously, due to the great depths. In 1858 the Eng-

lish vessel *'Agamemnon'* and the American screw frigate *'Niagara'* carried out the cable laying. It should be noted that three officers of the Russian Navy participated in the work carried out aboard the American ship: Lieutenant-Commander S. P. Shvarts, Warrant Officer Kolobnin, marine engineer (1857) and Lieutenant A. I. Boyye (1858).

Only eight years later, when the Civil War came to an end in the United States of America (1861 – 1865), regular telegraph communication was established between the New and Old World.

Meanwhile, the Atlantic Ocean survey continued in the 1860s. While the Americans studied the Gulf Stream and took soundings in the Gulf of Mexico, the English, Swedes and Germans carried out a number of successful expeditions to the North Atlantic. In the course of these expeditions one more reason for deep-water survey was revealed, as in 1890 during the voyage of the English steamer *'Bulldog'* the first direct evidence of the habitability of the ocean bottom was obtained: the participants of the expedition caught some live starfish at a depth of 1680 fathoms (3,924 m).

In 1868 the English scientists Professor Ch. W. Thomson and Doctor W. B. Carpenter drew the attention of the Royal Society to the necessity of the

systematic study of the ocean underwater fauna. In the same year they participated in the expedition aboard the steamer '*Lightning*' in the Atlantic Ocean, in areas to the west and north of Scotland.

In 1869 – 1870 the English continued work aboard the vessel '*Porcupine*' and in the following year – aboard the vessel '*Shirewater*'. A survey in the Mediterranean Sea was also started.

The conduct of these annual expeditions vividly demonstrated the extent that a survey might be successful when properly equipped with "appropriate outfit and skilful operation" of a specially designated vessel. Besides, the English scientists and mariners became aware that "the ocean presents an extremely spacious field for various research". This made them convinced of the necessity of organizing an expedition around the world.

The three-masted wooden corvette '*Challenger*' with displacement of 2,306 tons and an engine of 400 'nominal forces' horsepower and equipped with 18 guns was chosen as the expedition vessel. It could carry a supply of coal for one month. The corvette, which was built in 1851, was re-equipped especially for expeditionary works and fitted with modern devices. The crew consisted of 250 volunteers, Captain G. Nares was appointed the commander of the corvette. He was an experienced sailor, who had participated in Arctic voyages and the expedition in the course of which the survey of the Red Sea was carried out; in 1871 he was the captain of '*Shirewater*'. Ch. W. Thomson became the head of the round the world expedition. Besides him the scientific staff included five more scientists.

Admiral D. G. Richards, the Hydrographer of the Admiralty, was charged with the recruitment of the officers – "without any outside interference". Persons of high rank managed to have Lord Campbell appointed a member of the '*Challenger*' crew. His brother was married to the daughter of Queen Victoria. About 120 persons who wished to participate in the unique voyage were refused.

Lieutenant F. F. Vranghel' (1844 – 1919), an officer of the Russian Navy, was among those who wished to join '*Challenger*'. He was the son of Admiral F. P. Vranghel' (1796 – 1870), polar explorer, participant of voyages round the world and an Honorary Mem-

ber of the St. Petersburg Academy of Sciences.

F. F. Vranghel', typical of the sons of many mariners, followed his father's footsteps. In 1860 he graduated from the Naval College and for two years served abroad and in the Baltic Sea. From April 1862 to August 1864 he attended lectures at Derpt University. In April 1865 he was promoted to the rank of lieutenant and one month later he went abroad aboard the frigate '*Peresvet*' under the command of the experienced sailor, Captain 2nd rank N. V. Kopytov. The voyage lasted for about half a year. It should be noted that during this voyage Vranghel' had to test the Schneider "electric sounder" himself in the Mediterranean Sea.

In November 1870 the 26 years old officer graduated from the Academic Courses in Marine Sciences (as top student) with the "right to compete for official journey abroad", but he was appointed to the Black Sea Fleet Unit. From April 1871 to February 1872 Vranghel' was in command of the screw boat '*Priboy*', and then was finally "sent on an official journey abroad with scientific purpose".

When in mid-June, 1872, Lieutenant Vranghel' arrived in London, he learnt that the corvette '*Challenger*' was under preparation for a voyage around the world. The commander of the corvette told the Russian officer that the initial part of the vessel's voyage would pass from Lisbon across the Atlantic Ocean to St. Thomas Island. The Scientist J. Glaisher advised him to join the expedition "for a while". G. Nares and the officers from the corvette were prepared to have Vranghel' aboard the vessel for 1-2 months, provided the Russian Navy Department approved and the British Admiralty gave its permission.

As Lieutenant P. S. Mukhanov, the Navy Department Agent (Naval Attaché – V. S.), was away from London, Vranghel' had no idea how to get the permission from the High Maritime Authorities for his voyage aboard the '*Challenger*'. Finally, he decided to address the person who knew him well and could render him practical assistance. On the 6th of July, 1872, Vranghel' wrote a letter to Captain 1st rank A. P. Yepanchin, Head of the Naval College (in 1867-1891 the name of the Naval Corps in St. Petersburg – V. S.) and the Academic Courses on Marine Sciences, asking him to "petition" in getting permission from the Navy Department Manag-

er to make a voyage aboard the English vessel. In particular, Vrangél' wrote: "I am profoundly convinced that a month aboard the frigate '*Challenger*' (Vrangél' calls the vessel frigate – V. S.) will be more useful than a year ashore, and after my participation in so well and thoroughly organised expedition I will acquire knowledge which I will be able to use later... If my wish could come true, I would accompany the expedition in its most interesting part: across the Atlantic Ocean to West India, where currents, depths and temperature distribution are of the most interest."

Before the expedition Vrangél' wished to visit Holland, Denmark and Sweden. After the voyage aboard the '*Challenger*' he planned to leave St. Thomas Island aboard the mail-boat for the United States "to collect the necessary information", and then return to Europe.

A. P. Yepanchin fulfilled the request of F. F. Vrangél'. Following his report Vice Admiral S. S. Lesovskiy, Deputy Manager of the Navy Department, considered it "most useful" to give the opportunity to an able officer to take part in the English expedition. On the 30th of July, 1872, S. S. Lesovskiy appealed to V. I. Vestman, Deputy Minister of Foreign Affairs of Russia, with the request for "petition in getting permission for Lieutenant Vrangél' from the English Government via our Ambassador in London to make a transit to the coasts of America aboard the frigate '*Challenger*'...".

Almost at the same time Admiral N. K. Krabbe, Manager of the Navy Department, forwarded a humble report on the plans of Vrangél's voyage aboard the '*Challenger*' to the Emperor Alexander II to Livadiya (The Crimea). On the 12th of August, 1872, the report returned to St. Petersburg with the Emperor's resolution "Agreed".

It seemed that Vrangél's dream could come true. But that was not the case. One month later V. I. Vestman informed the Navy Ministry of the opinion of the Count F. I. Brunnov, the Russian Ambassador in London. Being a highly experienced diplomat (Brunnov was in service in England from 1840 to 1854 and from 1858 to 1874 – V. S.), he believed that it "would be somewhat embarrassing" to appeal to the British Admiralty with a request to send Vrangél' to the '*Challenger*', as later the Lords of the Admiralty would have a chance to ask the Russian Govern-

ment of the same favour, and "in such places and under such circumstances, where the presence of an English naval officer would be extremely undesirable". Besides, F. I. Brunnov pointed out that Vrangél' made his request "in a not quite appropriate way – without the knowledge of our Navy Department Agent in England". On the 19th of September, 1872, the reply of V. I. Vestman was reported to the Navy Department Manager, and Admiral N. K. Krabbe ordered that further correspondence on Vrangél's participation in the English expedition be terminated "due to the recall of the Count Brunnov" and the Head of the Naval College to be informed on this.

Thus, due to the overly cautious position of Count F. I. Brunnov, the Russian Ambassador in England, Lieutenant F. F. Vrangél' did not manage to take part in the voyage of the English corvette '*Challenger*' (1872 – 1876), which went down in history as the first complex oceanographic expedition round the world.

On the 21st of December, 1872, the '*Challenger*' left England. A large article '*Corvette Challenger Expedition*' on the preparation for the voyage and the objectives of the expedition was published in "*Morskoy Sbornik*". The author of the article was Lieutenant F. F. Vrangél'.

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Biography

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