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Exploration of Franz Josef Land

Franz Josef Land is the most polar territory of Eurasia situated just 900 km from the North Pole. Though at present time interest to such remote places can sometimes be surprising, not too long ago finding of a passage from Europe to Asia and to the north coast of North America, especially in case of presence of a solid ground and fresh water on such passage, was considered as an important step in development of commerce and protecting of national interests in the Arctic region. The latter issue once again became hot topic in recent years, with consideration of the Polar Ocean floor as a rich source of minerals.

What was the national identity of first people to see the Franz Josef Land is unclear. It is possible that coast-dwellers from the presently Russian territories did use the Franz Josef Land waters and beaches. Same can be true for the Vikings. That time lands and routes were kept in secret—not to attract others to newly found resources. It can be most likely true that the “North-East Spitsbergen” found by N.F. Rønnebeck and J.P. Aidijärvi in 1865 was part of the Franz Josef Land (Barr, 1995). However, unquestionably the first introduction of the archipelago to public was made by the Austro-Hungarian Tegetthoff expedition 1872–1874.

The expedition funded in large part by Count Hans Wilczek and officially supported by the Russian Tsar Alexander II consisted from two part: First was the reconnaissance sail on yacht Jsbyörn (Isbjörn) from Tromsø in summer 1872. The map presented in the resulting publication has no Franz Josef Land on it (Daublebsky, 1874). The second expedition on schooner Tegetthoff brought first map of the Franz Josef Land (Payer, 1876), which was considerably edited in future, but, more importantly, it brought world-wide interest to the heroic adventures of the Polar explorers and exploration of the Arctic region in general. It is believed that soon expressed idea of C. Weyprecht on the necessity of the international cooperation in the Polar research and on the organization of the International Polar Year was the result of suffering, which accompanied the discoveries of this expedition (Schröder & Wiederkehr, 2001).

The discovery of new lands stimulated various kinds of activities in the regions. More than 100 hunting expeditions visited the Franz Josef Land before the Soviet Union closed access of foreigners to this area (Barr, 1995). Considerable number of scientific expeditions also took place, not always able to reach the land, but related to such famous names as Willem Barents, Leigh Smith, Fridtjof Nansen, Frederick George Jackson, Georgiy Sedov, Umberto Nobile, etc.

Annexing of the Franz Josef Land by Soviet Union in 1926 practically closed access of foreigners to the regions. On the other hand, it resulted in very high activity of Soviet Union in there. In 1929 a permanent station was settled under the leadership of O.Yu. Shmidt. Even the German expedition of the Graf Zeppelin airship was with participation of Russian

researchers, together with scientists from other countries including Lincoln Ellsworth. The Graf Zeppelin exchanged mail with Soviet icebreaker Malygin in Tikhaya Buchta, and among the passengers of Malygin was Umberto Nobile.

Soviet expeditions repeated year by year, up to 300 people were wintering on the Franz Josef Land and the weather stations in there were securing Arctic exploration by planes and the intercontinental flights of V.Chkalov, widely advertized around the World. The activity was highly reduced during WWII, when there were only two weather stations in there-Soviet and German ones, but came back after the war, when the Franz Josef Land started to be considered in USSR as the unsinkable aerocarrier. Scientific expeditions had in the list of duties the study of the possibility of construction and use of airfields. This changed after appearance of intercontinental missiles, to 1956, but the participation of the Soviet Union in the International Geophysical Year (IGY) allowed once again truly detailed and large scale study of the Franz Josef Land in 1957–1959 (Grosswald et al., 1973; Markin, 1963). The Soviet exploration of the Franz Josef Land after the IGY up to the period of “Glasnost” was mainly related to the military presence in the regions. Several scientific expeditions also took place, but the scale on not-secret investigations was well below the previous activity.

The next period of exploration was marked by decline in financing of scientific research in Russia with easier organization of the participation of Western institution. Soviet–Norwegian expedition with participation of Poland took place at the archipelago in 1990, when several historic cites of the Franz Josef Land exploration were rediscovered. As a participant of the second such expedition Karl Habsburg–Lothringen could visit the land named in honor of his forefather. 4 expeditions of Austrian Broadcasting System (ORF) in 1992–1994, resulting in documentaries to become part of “1000 years Austria” celebration, took place. Institute of Geography of the Russian Academy of Sciences together with Scott Polar Research Institute and Ohio State University succeed in airborne radio-echo sounding of the Franz Josef Land glaciers and in drilling of several icecaps in 1994. The latter collaboration is still continuing, in large part shifted to study of icebergs formation and distribution in Arctic Seas, for which the Franz Josef Land plays important role. More recently, the archipelago is included into at least two of the International Polar Year 2007–2008 programs: investigation of the radiation-climatic factors of meteorological conditions in the Arctic region and rehabilitation of the polluted territories of the Franz Josef Land.

Since 1994 the Franz Josef Land and surrounding waters became a nature reserve. At the same time large interest in developing of tourism to the area was expressed by various authorities not only as the intermediate stop on the tourists passage to the North Pole but also as the sites of historic interests as itself. For example, the full-size model of the Tegetthoff ship was installed at the Ziegler Island by ORF.

There seems to be one more change in the relation to the archipelago by Russian authorities more recently. President Medvedev visited the archipelago in 2008 and once again expressed the Russian predominance in the region. Not long before that an Austrian expedition to the Franz Josef Land related to the IPY activities was not permitted by the Russian government. Evidently, the political developments around the Arctic region are the outcome of the unresolved territorial claims accumulated over the previous century. No other ocean and very few seas have such small ratio of total area to be unclaimed by anyone (IBRU, 2008). Making difficult direct international scientific collaboration, such situation is unavoidably increasing the touristic interest. An interplay between the financial dividends from the Polar tourism and managing the scientific research as a part of such

touristic activity can soon become the leading way to carry out scientific research in such politically tense area as the Arctic region in general and the Franz Josef Land in particular.

References

- Barr S. (ed.) 1995. *Franz Josef Land (Polarhåndbok No. 8)*. Oslo: Norsk Polarinstitut, 175 pp.
- Daublebsky von Sterneck M. 1874. *Reise von Tromsø nach Spitsbergen, Nowaja Zemlja und Russland an Bord der Yacht Isbjörn : arktische Expedition des Grafen Hans Wilczek im Sommer 1872 (Beilage zum den "Mittheilungen aus dem Gebiete des Seewesens")*. Pola: Das Hydrographische Amtes. S. M. Kriegsmarine, 63 S.
- Grosswald M.G., Krenke A.N., Vinogradov O.N., Markin V.A., Psariova T.V., Razumeiko N.G., Sukhodrovsky V.L., 1973, *Olednenie Zemli Frantsa-Iosifa [Glaciers of Franz Josef Land]*. Moscow: Nauka, 352 pp.
- IBRU (International Boundary Research Unit). 2008. *Maritime jurisdiction and boundaries in the Arctic region*. Durham University, 3 pp. (<http://www.durham.ac.uk/ibru>)
- Markin V.A. 1963. *V strane ledyanykh kupolov (Nauchno polulyarnaya seriya Akademii Nauk SSSR) [In the land of icecaps (Popular science seria of the USSR Academy of Sciences)]*. Moscow: Academy of Sciences, 184 pp.
- von Payer J. 1876. *Die österreichisch-ungarische Nordpol-expedition in den Jahren 1872–1874, nebst einer skizze der zweite deutschen Nordpol-expedition 1869–1870 und der Polarexpedition von 1871*. Wien: Alfred Hölder, cvi+696 S.
- Schröder W., Wiederkehr K.-H. 2001. *Geomagnetic research in the 19th century: a case study of the German contribution*. *Journal of Atmospheric and Solar-Terrestrial Physics* 63(15): 1649–1660.