

The Arctic Detachments of the Russian Great Northern Expedition (1733–43) and their largely Forgotten and even Clandestine Predecessors

by William Barr

Abstract

Following the inconclusive outcome of Vitus Bering's First Kamchatka Expedition (1725–30), whereby he pushed north through the strait later named after him but, since he did not sight the Alaskan coast, could not be sure that the two continents were not joined, he proposed a follow-up expedition to be known as the Second Kamchatka Expedition or Great Northern Expedition, which lasted from 1733 until 1743. Ultimately it involved seven detachments, one of which, Bering's own voyage from Kamchatka to Alaska, has been extensively studied and analysed. Five of the detachments, however, focused on different sections of the arctic coast of Russia. This article portrays the complicated progress of these detachments which ultimately resulted in a remarkably detailed map of that coast. Also examined is the fact that Russians had been sailing along almost every part of that coast in the previous century; a fact about which the officers of the Great Northern Expedition appear to have been largely unaware, and appear to have derived little benefit.

Introduction

In the closing months of his life, on 23 December 1724, Tsar Petr I, interested in the possibility of a sea route from European Russia to China via the Arctic Ocean (i.e. through a Northeast Passage), wrote brief instructions for an expedition (which would be known as the First Kamchatka Expedition) to determine the critical point of whether Asia was joined to America. In brief, boats built in Kamchatka should sail north 'to determine where it [the Asian shore], as is expected, joins America'.¹ Vitus Bering, a Danish officer in the Russian Navy was selected to execute the Tsar's instructions. On 6 February 1725, nine days after the Tsar's death, Bering left St Petersburg, heading east. On 14 July 1728 his ship, *Sv. Gavriil* put out to sea from the mouth of the Kamchatka River on the east coast of Poluostrov Kamchatka, and headed north, parallel to the coast.² By 8 August the vessel was rounding Mys Chukotskiy and next day an island was spotted to the southeast and was named Ostrov Sv. Lavrentiya (St Lawrence Island). By 13 August when *Sv. Gavriil* had reached 65°30'N, almost in the narrowest part of the strait later named after him, Bering called a meeting of his officers to discuss their further progress.³ Some, including Bering, opted for turning back. Bering's second-in-command, Aleksei Il'ich Chirikov recommended continuing to follow the Asiatic coast until they reached the mouth of the Kolyma River – a known point – to make sure that the two continents were not joined.⁴ Ultimately the consensus was to continue north until 16 August, or to 67°N, and then to turn back. Following this plan *Sv. Gavriil* continued north through the strait but the Alaskan coast was not sighted, although the strait is only 82 km wide at its narrowest point, between Mys Dezhnev and Cape Prince of Wales. Following the

¹ Ostrovskii, *Velikaya severnaya ekspeditsiya*, p. 8; Vize, *Morya Sovetskoy Arktiki*, p. 61.

² Ostrovskii, *Velikaya severnaya ekspeditsiya*, p. 14.

³ Belov, *Arkticheskoye moreplavaniye*, p. 255.

⁴ Vize, *Morya Sovetskoy Arktiki*, p. 62.

consensus which had been reached, at 67°18'N / 167°W on 16 August, *Sv. Gavriil* started back south.⁵ On the return voyage the Alaskan coast was still not spotted, although Ostrov Ratmanova (Big Diomedes Island) in the middle of the strait, was seen. By 2 September the expedition vessel was back at its starting point at the Kamchatka River, and on 1 March 1730 Bering returned to St Petersburg. He submitted his report on the expedition, which became generally known as the First Kamchatka Expedition, to the Admiralty College on 30 April 1730.

The Admiralty College and the Senate were far from satisfied at the frustratingly inconclusive outcome of the expedition. Bering then submitted his proposal for a follow-up expedition, which came to be known as the Second Kamchatka Expedition, or Great Northern Expedition. The main points were that a ship built in Kamchatka should head east to locate America, which Bering felt lay only 180 to 320 km to the east. Secondly a ship should head south from Kamchatka or Okhotsk to the Amur River or Japan, and finally, the north coast of Siberia, from the Ob' to the Lena should be surveyed and mapped, either by sea or overland.⁶ Bering's proposal was accepted and greatly expanded. The plan, ultimately was for seven detachments involving a total of 977 men (not counting a largely independent academic group). One detachment would sail from Arkhangel'sk at the mouth of the Severnaya Dvina to the mouth of the Ob'; a second from the mouth of the Ob' to the mouth of the Yenisey; a third would head eastward from the Yenisey along the coast of Poluostrov Taymyr; a fourth from the mouth of the Lena west to the Khatanga and around Poluostrov Taymyr, until it met the third group; a fifth from the Lena eastward to Chukotka and Kamchatka; a sixth detachment eastward from Kamchatka to America; and a seventh south from Okhotsk to Japan.⁷ Overall responsibility for the first two detachments would lie with the Admiralty College, while Vitus Bering would be ultimately responsible for all the others, as well as commanding the detachment bound for America.

By this point the existence of Bering Strait had been conclusively established. In 1732 Ivan Fedorov and geodesist Mikhail Gvozdev, in Bering's old vessel *Sv. Gavriil*, had headed east from Mys Dezhnev to investigate Chukchi stories about the 'Bol'shaya Zemlya' ('Great Land') lying to the east. Passing Ostrov Ratmanova, they spotted Little Diomedes Island beyond, and shortly afterwards the cape later named Cape Prince of Wales by James Cook in 1778. They coasted along the shores of Alaska to the location of the present city of Nome before turning back.⁸

In addition to the seven exploring detachments the Senate approved the appointment of an academic detachment, associated with, but not part of the Great Northern Expedition. Those involved were Johann Georg Gmelin, who would focus on natural history but who also made the first observations on the presence of permafrost throughout much of Siberia;⁹ Louis Delisle de la Croyère, whose initial objective was to observe the transit of Mercury in 1840 but whose focus thereafter was on astronomical observations;¹⁰ Gerhard Friedrich Müller who studied the history of Russian colonization of Siberia and its indigenous population;¹¹ and Johann Eberhard Fischer who, like Müller, made the history of Siberia his focus.¹² They travelled extensively around Siberia, although Delisle de la Croyère was the only one to spend

⁵ Ostrovskii, *Velikaya severnaya ekspeditsiya*, p. 17.

⁶ Bown, *Island of the blue foxes*, p. 57.

⁷ Belov, *Arkticheskoye moreplavaniye*, p. 268.

⁸ *Ibid.*, pp. 260-61; Ostrovskii, *Velikaya severnaya ekspeditsiya*, p. 2; Vize, *Morya Sovetskoy Arktiki*, p. 63.

⁹ Ostrovskii, *Velikaya Severnaya Ekspeditsiya*, p. 40

¹⁰ *Ibid.*, pp. 41-2.

¹¹ Orcott, *Bering*, p. 68; Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, pp. 39-40.

¹² Ostrovskii, *Velikaya Severnaya Ekspeditsiya*, pp. 40-41.

any time in the north, namely at Berezovo on the lower Ob', to observe the transit of Mercury (an objective foiled by persistent overcast), early in 1740.¹³

While the voyage of Bering and Chirikov to Alaska and back have been repeatedly researched, described and analysed in detail in the English language,¹⁴ by contrast the five arctic detachments have been largely ignored by English-language writers. This article represents a modest attempt at rectifying this situation

The Dvina-Ob' detachment

The officers appointed to lead the Dvina-Ob' detachment were Leytenant Stepan Voinovich Murav'yev and Leytenant Mikhail Pavlov. The latter left St Petersburg first, reaching Arkhangel'sk on 28 May 1733, followed shortly afterwards by Murav'yev. They were to command two near-identical vessels, *kochi*, named *Ekspeditsion* and *Ob'*; these were two-masted vessels with a length of 16.55 m; a beam of 6.4 m and a depth of 1.88 m.¹⁵ Like all *kochi* their planking was sewn with withies or tree roots, their hulls were heavily coated with pitch and they were very strong built with frames only about 50 cm apart.¹⁶ Being almost flat-bottomed, i.e. with very little in the way of a keel, it was practically impossible for them to tack, and thus they were unable to make progress into a headwind.

Murav'yev commanded *Ekspeditsion*, with Gabrilo Rudnev as his second-in-command, and was assisted by two pilots from Mezen', Andrei Shnyarov and David Rogachev; the vessel's total complement was 26. On board *Ob'* Pavlov was assisted by shturman Vasiliy Andreyev and also by two Mezen' pilots: Mikhail Yuzhin and Ivan Nagiin; his crew totaled 25 men. There was a medical orderly and a priest on each of the vessels.¹⁷

The two vessels put to sea from Arkhangel'sk in fair weather on 10 July 1734 and passed northwards through the *gorlo* [throat, or narrows] of the White Sea on the 21st. Reaching Yugorskiy Shar, the strait between the mainland and Ostrov Vaygach, on the 25th they found no ice in the strait although the local Nentsi reported that it and the Kara Sea beyond had been still choked with ice only two weeks earlier.¹⁸ Four days were spent in surveying and mapping the straits. By prearrangement the ships here made rendezvous with a herd of 60 reindeer, driven by men from Mezen' or by Nentsi. It was planned that the reindeer would keep pace with the vessels along the coast, in part as a safety measure in the event of serious ice problems, and in part as a source of fresh meat. The Admiralty College had also sent orders to the *voyevoda* [governor] at Tobol'sk to send men to the Kara coast to build beacons as a guide for the ships.

Putting out into the Kara Sea on 29 July the expedition forged eastward past the mouth of the Kara River and across Baydaratskaya Guba to reach Mutnyy Zaliv on the west coast of Poluostrov Yamal. By 3 August the two vessels were starting to coast northwards past the Sharapoviye Koshki, a series of low offshore islands. But then the weather, and the expedition's prospects, changed drastically. Headwinds delayed the *kochi* off the Sharapoviye Koshki until 15 August when they reached gale-force. Even at Yugorskiy Shar it had been discovered that the vessels were leaking and now – even more alarmingly – scurvy broke out; even by early August 10 men were sick, after only about three weeks at sea. Progress against

¹³ Ibid, p. 104.

¹⁴ For example, by Fisher, *Bering's voyages*; by Frost, *Bering and Chirikov*; Bering; and by Bown, *Island of the blue foxes*.

¹⁵ Belov, *Arkticheskoye moreplavaniye*, p. 273, n. 2.

¹⁶ Ibid, p. 273.

¹⁷ Ostrovskii, *Velikaya Severnaya Ekspeditsiya*, p. 50.

¹⁸ This date, and all others in this article, is according to the Julian calendar. Particularly for purposes of comparison with the present-day situation as regards ice conditions (presented according to the Gregorian calendar), a factor of 11 days should be added to the dates quoted here throughout.

the strong winds was negligible and to make matters worse the pilots now admitted that they did not know the route beyond this point. Later Nentsi on Poluostrov Yamal reported that the two *kochi* had been spotted almost at Ostrov Belyy.¹⁹ At 72°35'N there was still no sign of ice, but nonetheless Murav'yev decided to turn back.²⁰ By 26 August the expedition was back at Yugorskiy Shar, and lay there until 6 September. Then with a fair wind the vessels ran across to the mouth of the Pechora, which they reached on the following day.



Fig 1. Western Russian Arctic

Murav'yev intended initially to winter right at the mouth of the Pechora but his pilots dissuaded him since there was no firewood there and only a couple of very small huts. Instead the *kochi* ran up the river to the village of Keltitskaya, 15 km from the town of Pustozersk, which they reached on 16 September. The ships were unloaded and unrigged and their crews moved to the *ostrog* [fortress] at Pustozersk for the winter.

In his report to the authorities at Arkhangel'sk Murav'yev requested for the following season flour, groats, salt and medicines, and a replacement for one man who had died. He reported that (not surprisingly) the reindeer herd had been unable to keep pace with the ships, and thus they had not benefitted from them as a source of fresh meat. Moreover he had not seen any beacons at any point on the coast. For the upcoming season (1735) two geodesists were sent from Arkhangel'sk to join the expedition: Ensign Vasilii Somov and student Vasilii Selifontov. They left Arkhangel'sk on 6 February and reached Pustozersk on 11 March 1735.

¹⁹ Belov, *Arkticheskoye moreplavaniye*, p. 276, n. 2.

²⁰ Vize, *Morya Sovetskoy Arktiki*, p. 6.

In the spring the crews moved back to their ships, lying at Keltitskaya and got them ready for sea once more. The two vessels started down the river on 1 June but, probably due to headwinds made only slow progress, reaching the river mouth only on the 15th. They reached Yugorskiy Shar a month later, on 15 July, and emerged into the Kara Sea on the 21st. Finding the Kara Sea still ice-bound Murav'yev was forced to turn back into the strait. On his second attempt, on 6 August, he was more successful; the ice had moved out and he made good progress across to the coast of Yamal, which he reached on 11 August. This was despite the fact that one of the *kochi* had run aground and had been warped off only with difficulty. Despite thick fog the two vessels headed north independently and by 13 August *Ekspeditsion* had reached 73°14'N and *Ob'* 73°21'N, off the northern tip of Ostrov Belyy. Thus both vessels had missed the entrance to Proliv Malygina, between Ostrov Belyy and the mainland. At this point, on the basis of the unconvincing argument that it was late in the season, Murav'yev and Pavlov decided to turn back although, clearly, they might just as easily have headed south into Obskaya Guba. Pavlov reached Yugorskiy Shar on 25 August and Murav'yev on 6 September. By 9 September both vessels were back at their previous wintering site at Keltitskaya on the Pechora River.

Vasilii Selifontov worked up his observations to produce the first reasonably accurate map of the expedition's course from Arkhangel'sk to its farthest north off the west coast of Poluostrov Yamal (with a detailed inset map of Yugorskiy Shar).²¹ Selifontov's original map reached Arkhangel'sk on 3 February 1736.

Thus the 1735 season had been barely more successful than the previous one, apart from the production of Selifontov's map. The two commanders had quarreled quite frequently and, not surprisingly, since they had not been paid for two years, both crews were less than enthusiastic. Thus Murav'yev reported that he had had to deal with a mutiny of both crews at the mouth of the Pechora on 24 June 1735, i.e. at the start of the voyage.²² The party which was supposed to have erected beacons along the coast of Yamal appeared to have failed in its task – Murav'yev spotted only one -- but this was a feeble excuse for his own lack of drive. In his final report to the Admiralty College he wrote that it was impossible to reach the mouth of the *Ob'* in one season, even if no ice was encountered.

Not surprisingly the Admiralty College was not impressed by the less-than-inspiring performance of Murav'yev and Pavlov. In addition complaints about the behavior of both captains had been lodged both by members of their crews and by the residents of Pustozersk.²³ As a result they were relieved of duty and placed on trial. An enquiry was initiated in the hands of Kapitan A. Cherevin and Leytenant Stepan Malygin. While Cherevin remained in Arkhangel'sk, Malygin (who was to head the 1736 attempt at reaching the *Ob'*) was dispatched to Pustozersk to gather evidence on the spot. The outcome of the enquiry was that Murav'yev and Pavlov were demoted to the rank of seaman.²⁴

For the 1736 attempt two new vessels had been built at Solombala (now a suburb of Arkhangel'sk), and rather unimaginatively were named *Pervyy* [First] and *Vtoroy* [Second].²⁵ Appointed to command them were Leytenant Aleksei Skuratov and Leytenant A. Sukhotin respectively. Their combined crews totaled 64 men, including four pilots from Mezen' with experience of ice navigation. The two new vessels were to make rendezvous with *Ekspeditsion* and *Ob'* at Yugorskiy Shar; thus it was planned that a total of four vessels was to make the new attempt at reaching the *Ob'*.

²¹ Reproduced in Belov, *Arkticheskoye moreplavaniye*, p. 279.

²² *Ibid.*, p. 280.

²³ Vize, *Morya Sovetskoy Arktiki*, p. 67.

²⁴ Ostrovskii, *Velikaya severnaya ekspeditsiya*, p. 52.

²⁵ Romanov, *Kolumby*, p. 45.

Pervyy and *Vtoroy* headed down the Severnaya Dvina from Solombala on 22 June 1736 and crossed the bar at the river mouth on the 25th. Surveying and sounding en route, on 8 July they reached Ostrov Kolguyev, but there they became weather-bound due to persistent easterly winds. Forced to return to the island after several attempts, with a change of wind they finally got well clear of the island on 6 August.²⁶ On 8 August, off Ostrov Matveyev on the approach to Yugorskiy Shar, they encountered the *koch Ob'* with Malygin in command. It emerged that he had left Keltitskaya on board *Ekspeditsion* on 25 May but that at the mouth of the Pechora the *koch* had been driven ashore and crushed by ice driving in from the sea on the 29th. Evidently Malygin was partly responsible, having ignored the advice of his officers as to this possible danger. Malygin had then transferred to the *koch Ob'*; it, too was damaged in heavy ice in Pechorskaya Guba, and was leaking badly.²⁷

Late on 8 August all three vessels reached the western entrance of Yugorskiy Shar. Malygin sent a boat through the strait on reconnaissance. It returned to report close ice on the Kara Sea as far as the eye could see. On 11 August Malygin transferred to *Pervyy* and Skuratov to *Vtoroy*, while Sukhotin was sent back to Arkhangel'sk in command of *Ob'*, in view of that vessel's damaged condition.

Despite ice drifting down the strait, *Pervyy* and *Vtoroy* managed to reach the Kara Sea on 25 August, to find it partly clear of ice. On the 26th they dropped anchor in a bay on Ostrov Mestnyy. Wind-bound, despite driving ice which had to be fended off the hulls with poles, they lay there until 3 September, when an offshore wind drove the ice out to sea. On 4 September they got under way again and by the 6th had reached the west coast of Yamal at 70°07'N. Having stocked up with fresh water and firewood from driftwood, they headed north, being forced to row due to calm conditions, and hampered by fog and a south-flowing current. But on 9 September, at 70°10'N, well south of where Murav'yev and Pavlov had turned back, they encountered pack ice and Malygin, too, decided to turn back.²⁸ He was planning to winter at the mouth of the Kara River. Both vessels reached that river but on seeing a change in the ice conditions for the better, Malygin made one more attempt to reach the *Ob'*, putting to sea again on 3 September. Next day, however, further progress was blocked by ice at only 70°08'N and Malygin was forced to return south. On 18 September both vessels reached the mouth of the Kara again and headed upriver to its confluence with the Trekhozernaya, where they settled down for the winter. Winter quarters were built on shore and then, on 1 December, leaving the ships in the care of podshurman Velikopol'skiy and a handful of men, Malygin and Skuratov with the rest of the crews set off overland to Obdorsk (now Salekhard) on the lower *Ob'*.

Before they left the Trekhozernaya, on 7 November geodesist Vasilii Mikhaylov Selifontov arrived there, having spent the summer and fall surveying more of the west coast of Yamal and in building a total of 18 beacons and cairns at conspicuous points.²⁹ In the spring and summer of 1737 he headed north again twice, once travelling by reindeer and once by boat and reindeer, and completed a survey of Ostrov Belyy.

A reconnaissance party sent from the wintering ships on the Trekhozernaya down to the mouth of the Kara revealed that the sea ice had cleared out by mid-June 1737. On 31 June the ships started downriver, embarked on a fourth attempt at reaching the *Ob'*. In the interim, however, the sea ice had moved in again and they had to wait at the river mouth until 6 July before they could put out to sea. By early on 23 July they had reached the Sharapoviye Koshki, where they spotted the first of Selifontov's beacons; thereafter they spotted more of his beacons quite frequently. The two vessels were making excellent time and by midnight on

²⁶ Ibid, p. 48.

²⁷ Ibid, p. 49.

²⁸ Ibid, p. 50.

²⁹ Ibid.

the 23rd, at 73°30'N, Ostrov Belyy was in sight, and Selifontov and his Nenets interpreter came aboard.³⁰

Attempting the passage of what has since been named Proliv Malygina, Malygin and Skuratov found its waters extremely shallow. Although the strait is only 50 km long and they had the results of Selifontov's surveys on hand, a combination of easterly and northeasterly winds and baffling shoals made for extremely slow progress and it was not until 12 August that they emerged from the east end of the strait into Obskaya Guba. Heading south the two vessels reached Obdorsk on 23 September and Berezovo on 5 October. Leaving Skuratov and podshturman Golovin and some of the crews to settle the ships into winter quarters in the mouth of the Sos'va River near Berezovo, Malygin set off for St Petersburg with the rest of the crews. He reached the capital in late February and on 9 March he reported to the Admiralty College and presented the map resulting from his and Selifontov's years of effort, depicting the entire coastal route from the Pechora to Berezovo and showing the whole of Poluostrov Yamal and Obskaya Guba for the first time.³¹ Despite this, however, the conclusion of the Admiralty College was that it was not realistic to anticipate that this voyage could be completed in one season.³²

That this conclusion would appear to be justified was soon confirmed by the return voyage of *Pervyy* and *Vtoroy* from Berezovo to Arkhangel'sk, under the command of Skuratov and Golovin. They left Berezovo on 14 June 1738 and on 4 July called at Obdorsk where they topped off their provisions. Sailing north, the two vessels negotiated Proliv Malygina successfully then headed south along the west coast of Yamal. On 6 August, off the mouth of the Morzhovka a wide expanse of water deluded Skuratov and Golovin into thinking that this southern part of the Kara Sea was totally ice-free and they set a course straight across to Yugorskiy Shar. They soon encountered ice, however and were forced to continue further south before heading across Baydaratskaya Guba. Soon, however, they were among ice again, working along leads and in places fending floes off with poles or chopping their way through ice barriers.

By sustained effort by 4 September they had advanced to within 1½ km of the mouth of the Kara. Next day, however, both vessels were driven ashore by the ice but managed to get afloat again once an offshore wind had driven the ice seaward again. Soon the ice was back again and when both vessels dropped anchor *Pervyy*'s anchor cable was severed by the ice and the vessel started to pound against the ice. The vessel's hull was severely damaged and a second anchor lost a fluke. *Vtoroy* meanwhile had managed to take shelter behind a spit and was undamaged.

With great difficulty both vessels were maneuvered to relatively sheltered winter quarters about 6 km east of the mouth of the Kara.³³ With the help of local Nentsi some of Malygin's huts at the Trekhozernaya River were dismantled and moved to close to the wintering vessels; there was only time to assemble one of them before winter set in, however.³⁴ On 11 November, leaving podshturman Velikopol'skiy and four pilots in charge of the vessels, Skuratov and Golovin with the rest of the crew set off by reindeer sledges across country to Obdorsk, some 400 km away.

Skuratov maintained fairly regular contact with the ships throughout the winter and on 7 May 1739 he and both crews returned to the wintering site. By 4 July the ships were ready for sea but it was not until the 13th that the ice cleared out allowing them to set off, bound west to Yugorskiy Shar. They passed Ostrov Mestniy with a fair wind but, having negotiated

³⁰ Ibid, p. 52.

³¹ Reproduced in Belov, *Arkticheskoye moreplavaniye*, p. 287.

³² Ibid, p. 286.

³³ Ibid, p. 288, n. 2.

³⁴ Romanov, *Kolumby*, p. 54.

the strait they became separated in fog, but were passing Ostrov Kolguyev by 7 August. Skuratov in *Pervyy* reached Solombala on 15 August and Golovin in *Vtoroy* ten days later.³⁵

By 17 September 1740 Skuratov was reporting on his voyage to the Admiralty College in St Petersburg and then too, he presented his final map. Despite the Admiralty College's somewhat negative assessment of the potential of the route to the mouth of the Ob', the five years of effort by the Dvina-Ob' detachment had resulted in the first detailed chart, including numerous soundings in critical areas, from Arkhangel'sk to Berezovo. Thus the Kara Sea, which had been sailed by *pomor'y*³⁶ for centuries, now appeared on the world's maps for the first time.

The Ob'-Yenisey detachment

The Ob'-Yenisey detachment, under the command of Leytenant Dmitriy Leont'yevich Ovtsyn, was charged with mapping the route from the Ob' to the Yenisey. For this purpose, under the supervision of Ivan Nikitich Koshelev, a two-masted vessel, named *Tobol*, was built in the city of Tobol'sk, far inland at the confluence of the Irtysh and the Tobol, and was completed by January 1734. With a length of 21 m, and a beam of 4.5 m it had a draft of 2.1 m. Ovtsyn was accompanied by podsturman Sterlegov, apprentice shturman Kanishchev, geodesist Ushakov, his student Vykhodtsev and miner Medvedev.³⁷ With a total complement of 56 and accompanied by river craft laden with provisions *Tobol* set off down the Irtysh to the Ob' on 13 May 1734. The little flotilla reached Berezovo on 1 June and Obdorsk on 11 June. From Berezovo it was escorted along shore by a detachment of 74 Cossacks as protection against possible attacks.³⁸

Ovtsyn was counting on hiring local residents with a knowledge of Obskaya Guba as pilots, but in this he was disappointed; he could find nobody familiar with the navigation in the gulf beyond Nadym, about 300 km below Obdorsk. Getting under way again on 18 June, about 100 km north of Nadym the river craft were sent back once their loads had been transhipped to *Tobol*. By 5 August *Tobol* had reached 70°N, about 110 km north of where Tazovskaya Guba branches off to the east. But then Ovtsyn ran into serious difficulties. In a severe storm his vessel lost its rudder and when it tried to anchor it lost the flukes of two anchors and, out of control it was driven into the ice. Somehow, by pushing floes apart with poles and by warping the crew managed to reach the shelter of a bay. Having convened a council of his officers Ovtsyn decided to turn back once a replacement rudder had been jury-rigged. *Tobol* was back at Obdorsk by 3 September, and when the river froze on 21 September Ovtsyn and his men settled down for the winter there. During the winter there was an outbreak of scurvy among the men. Some of the sick men were sent up river to Berezovo where the air was considered to be healthier.³⁹

In anticipation of trying again in the summer of 1735 Ovtsyn made extensive preparations over the winter. He located Nentsy who regularly migrated north along the west shore of Obskaya Guba as far as Ostrov Belyy. In the spring some of these Nentsy, accompanied by Cossacks, were dispatched north with orders to build beacons and to maintain fires on them. Ovtsyn also gathered information about the old Mangazeya route from Tobol'sk to Turukhansk on the Yenisey and in the summer of 1735 sent geodesist Fedor Pryanishnikov with thirteen Cossacks to question the Nentsy and to locate the overland route from the head of Tazovskaya Guba past the old site of Mangazeya to Turukhansk.

³⁵ Ibid, p. 54.

³⁶ Residents of Pomor'ye: the White Sea area.

³⁷ Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 56.

³⁸ Belov, *Arkticheskoye moreplavaniye*, p. 290.

³⁹ Vize, *Morya Sovetskoy Arktiki*, p. 63.

Tobol set off downriver again on 29 May 1735 but Ovtysn soon realized that he was faced with a late breakup of the ice in Obskaya Guba. Indeed it would not become totally free of ice that summer. From 18 June onwards *Tobol* was working through ice and was finally brought to a halt at only 68°40'N, i.e. not even as far north as Tazovskaya Guba.⁴⁰ At a council meeting it was wisely decided to turn back. Undoubtedly affecting this decision was a serious outbreak of scurvy among the crew. By the end of July, 38 officers and men were sick and only 21 men were still healthy enough to steer and handle the sails. Four men died, including the mining expert, Zakhar Medvedev. Even Ovtysn himself had fallen ill early in the voyage. From 8 June he was unable to stand, was coughing up blood, had severe chest pains and had to be carried on deck. He did recover however.

This was not the last of the bad news however; another of Ovtysn's initiatives ended badly. Early in the summer Ovtysn had sent a party led by praporshchik Perebodchikov northwards overland to the mouth of Obskaya Guba to meet and assist the Dvina-Ob' detachment (led by Murav'yev and Pavlov). All the Russian members of the party were killed by Nentsy.

By mid-August *Tobol* was back at Obdorsk and, continuing upriver was back at Tobol'sk by 5 October. Despite these two failures the Admiralty College decided to mount yet another attempt in the summer of 1736. Although a new vessel was under construction at Tobol'sk, again under the Koshelev's supervision,⁴¹ it was not ready in time and *Tobol* was to be used yet again. With 50 men on board it headed downriver from Tobol'sk on 23 May, again under Ovtysn's command but with the support of shturman Fedor Alekseyevich Minin, with previous experience in the Caspian and the Baltic. Also on board were podshturman Dmitriy Sterlegov and geodesist Mikhail Vykhodtsev.

Tobol passed Berezovo on 14 June and Obdorsk on the 20th. This year ice conditions were more favourable and the vessel reached 72°40'N, i.e. about the northern exit of Obskaya Guba, before it was brought to a halt by ice. Large amounts of driftwood were seen on shore and it was used for building beacons on the west shore for the guidance of Malygin's Dvina-Ob' detachment. Heading back south *Tobol* was passing Obdorsk around 12 August and had reached Tobol'sk by 5 October.

During the following winter, starting in February 1737 a party led by Mikhail Vykhodtsev accompanied by eight Cossacks and travelling with 180 reindeer, was dispatched overland to explore the coast east from Obskaya Guba to the Yenisey. Meanwhile Fedor Pryanishnikov started north and west from Turukhansk to meet him. Between them they were to investigate the tundra areas which Ovtysn had not been able to reach.

By the summer of 1737 the vessel under construction at Tobol'sk was complete. Named *Obi-Pochtal'on* it was 18 metres in length with a beam of 5 metres and a draft of 2.1 metres.⁴² Under the command of Ivan Koshelev and accompanied by two river-craft it started downriver on 5 May, reaching Obdorsk a month later. Here Ovtysn transferred to the new vessel and Koshelev to *Tobol*.⁴³ By 14 July the two vessels were passing Gusiniy Nos at the mouth of Tazovskaya Guba, and by 8 July they were almost at the north end of Obskaya Guba (at 74°02'N) but were halted by heavy pack ice. Ovtysn wisely decided to retreat some distance out of the marginal zone of dangerously churning ice floes. Two days later he pushed north again and reached the eastern cape at the north end of the gulf and set up a beacon there (at 73°15'N). Rounding Mys Mate-Sale the two vessels crossed the mouth of Gydanskiy Zaliv then rounded Severo-Vostochniy Mys (now Mys Minina). Polar bears were spotted on shore while beluga and large flocks of geese and ducks were seen. Heading south in Yeniseyskiy

⁴⁰ Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 58.

⁴¹ Romanov, *Kolumby*, p. 56.

⁴² Belov, *Arkticheskoye morplavaniye*, p. 294.

⁴³ Romanov, *Kolumby*, p. 57.

Zaliv and then up the Yenisey River the two vessels almost reached Turukhansk before freeze-up. *Obi-Pochtal'on* was forced to go into winter quarters only 30 km below that town on 2 October, and *Tobol* 70 km north of that again.

Meanwhile Vykhodtsev had been pursuing his goal of an overland survey. By 31 August he had reached the head of Gydanskiy Zaliv but there his Nenets guide refused to continue further east. Instead the party headed south up the Gydiya and then across country back to Obskaya Guba. At the extreme south end of that gulf Vykhodtsev received a message to the effect that Ovtsyn had reached Turukhansk and wanted him to join him there. Heading up the Taz past the old site of Mangazeya Vykhodtsev was deserted by his Nenets guides but nonetheless, near exhaustion and half starved he and his party continued across country, reaching Turukhansk on 14 February 1738. Thus after three years of effort the sea route from the Ob' to the Yenisey had been successfully surveyed and mapped, complete with numerous soundings and with details of conspicuous landmarks, while through the efforts of Vykhodtsev considerable information about the interior of the peninsula between the two great rivers had been accumulated.

Despite his achievement Ovtsyn was about to fall from grace. In Berezovo he had had the misfortune to become associated (perhaps just socially) with the political exile Prince Ivan Alekseyevich Dolgorukov who was evidently still considered dangerous.⁴⁴ In view of suspicions that Ovtsyn had also become tainted, as soon as he reached Turukhansk he was arrested, court-martialed, found guilty and demoted to seaman. He was then dispatched to join Vitus Bering on his voyage to America on board *Sv. Gavriil* in 1742, on which he played an important role.⁴⁵

The Yenisey-Taymyr detachment

In its original instructions to Ovtsyn the Admiralty College had specified that having reached the mouth of the Yenisey he was to survey and map 'the coast east from the Yenisey and Taymyrskiy Poluostrov until he met the Lena detachment'.⁴⁶ While he himself remained in Turukhansk Ovtsyn delegated this task to shturman Fedor Minin, again using *Obi-Pochtal'on*. In his own instructions to Minin he set him an even greater task, enjoining him to proceed around Poluostrov Taymyr all the way to the Khatanga.⁴⁷

With podshurman Dmitriy Sterlegov as his first officer, and a total crew of 56 Minin, he set off downriver from Turukhansk in late July 1738. *Obi-Pochtal'on* reached Golchikha on 3 August, and there Minin was able to hire two *promyshlenniki* (trappers/hunters) who knew the coastal area between the Yenisey and the Pyasina. By 6 August Minin had reached Volgina and by the 8th Yefremov Kamen', although by then loose drifting ice had started to present a problem. Despite this Minin persisted and by 23 August, despite delays caused by ice had rounded Mys Severo-Vostochniy and had reached Mys Dvukhmedvezhiy at 73°14'N. By then snow was falling frequently and the ship's rigging was becoming ice up.⁴⁸ Further progress became impossible as the sea ice formed, and having erected a substantial beacon and a notice with details of his visit, Minin started back. By 19 September *Obi-Pochtal'on* was back at the Kur'ya River which Minin selected as his winter quarters. A house, store-house and bath-house were built.

⁴⁴ Ibid, p. 297; Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 62.

⁴⁵ Armstrong, 'Siberia and Arctic exploration', pp. 123–5.

⁴⁶ Belov, *Arkticheskoye moreplavaniye*, p. 268.

⁴⁷ Ibid, p. 296.

⁴⁸ Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 62.



Fig. 2. Central Russian Arctic

The Admiralty College ordered Minin to try again in 1739. First, however he had to restock with provisions. On 30 June 1739 he himself started south to Turukhansk with this aim in view, leaving the ship and crew at the Kur'ya winter quarters. To Minin's disgust, however no provisions had been prepared for him, and accumulating them took time. As a result it was not until 31 July that *Obi-Pochtal'on* was able to start north again. Heavy seas brought the vessel to a halt for about a week (21–27 August) at the Kamenniye Ostrova (72°09'N). When a blizzard struck on the 27th and the ice was becoming a progressively more serious problem, Minin decided to start back south. The vessel was back at Gol'chikha by 31 August and at Angutskiy Zaliv, near Turukhansk by 1 October. Thus the 1739 season had been a disaster.

In November a message arrived from Khariton Laptev at Khatanga, enquiring as to how far Minin had advanced and as to whether beacons had been erected east of the mouth of the Pyasina. Motivated by this enquiry Minin decided to make an overland effort, since his seaborne efforts had been less than successful. Accordingly Dmitriy Sterlegov was dispatched with two sledges from Turukhansk in January 1740 with instructions to survey the coast from Mys Dvukhmedvezhiy to the mouth of the Taymyr River. Fighting almost continual blizzards by 14 April 1740 Sterlegov had reached a conspicuous cape at 75°29'N at which, plagued by snow-blindness, he decided to turn back.⁴⁹ First, however, he erected a beacon – a substantial post, to which he attached a note about his journey.⁵⁰ The cape is now named after him. By 29

⁴⁹ Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 63.

⁵⁰ Belov, *Arkticheskoye moreplavaniye*, p. 300.

April Sterlegov was back at Gol'chikha and a week later, at a settlement slightly further south he stopped to wait for *Obi-Pochtal'on* on its way north.

Minin, in *Obi-Pochtal'on* managed to get away from Turukhansk on 3 July, i.e. almost a month earlier than in 1739. Picking up Sterlegov en route the ship made steady progress northwards and rounded Severo-Vostochniy Mys without encountering any ice. By 7 August it was approaching the mouth of the Pyasina. The first ice was encountered at 75°N and the vessel was working through ice thereafter until forced to turn back at 75°15'N on 20 August. By 27 September the vessel was back at Dudinka, where Minin decided to winter.

The results of Minin's and Sterlegov's efforts are very significant. Poluostrov Taymyr had not featured at all on earlier maps, but although they had not managed to reach its northern limits, it was clear from their surveys that the continent extended north in a massive peninsula to the northeast of the mouth of the Pyasina. Minin dispatched Sterlegov to St Petersburg with their maps and reports but he himself stayed on the Yenisey making preparations for making one more attempt at rounding the peninsula by sea. The Admiralty College's reaction to their reports, however, was that no further attempts should be made. Undoubtedly the reputation which Minin had acquired must have played a role in this decision. He was accused of cruelty with regard to lower ranks and of drunkenness and bribery. It also came to light that he had quarreled with Sterlegov, who confirmed the accuracy of the charges made against him. Minin stubbornly defended himself and in his turn charged his subordinates with disobedience and drunkenness. There was a lengthy trial, as a result of which Minin was sentenced to demotion to seaman for two years.⁵¹ Even thereafter, however, Minin must have argued successfully for permission to make one more try. Available details are scanty, but in the summer of 1742 he again descended the Yenisey on board *Obi-Pochtal'on*, but appears not to have penetrated any further than on his earlier attempts.⁵²

The Lena-Khatanga detachment

A year after the Dvina-Ob' detachment set out from Arkhangel'sk to try to reach the Ob', two other detachments started down the Lena from Yakutsk, one with instructions to head west to the Khatanga, the other with the ambitious goal of reaching Chukotka and then Kamchatka. Both detachments were under the supervision of Vitus Bering who spent three years in Yakutsk on his way east to Okhotsk, Petropavlovsk, the coast of Alaska and ultimately his grave on Ostrov Beringa. Two vessels had been built at Yakutsk for these two detachments. The one which was to head west, named *Yakutsk*, had a length of 21.4 m, a beam of 4.6 m and a draft of 2.1 m. It was commanded by Leytenant Vasiliy Vasil'yevich Pronchishchev who, unusually was accompanied by his wife, Tatiyana Fedorovna, the first European woman known to have taken part in an arctic expedition.⁵³ The first officer was Semen Ivanovich Chelyuskin and the ship's total complement was 51, including a medical orderly and a priest. Accompanied by river craft *Yakutsk* set off down the Lena on 30 June 1735.⁵⁴

⁵¹ Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 64.

⁵² Belov, *Arkticheskoye moreplavaniye*, p. 302.

⁵³ She is nowhere named in any of the expedition's documents. In the literature she has generally become known as Mariya Pronchishcheva. It has been suggested that the error derives from the visit by the icebreakers *Taymyr* and *Vaygach* to the extensive inlet on the east coast of Poluostrov Taymyr in 1913. It has been argued that Kapitan Boris Vil'kitskiy of *Taymyr* had named one of the capes in this inlet after Vasiliy Pronchishchev and on a draft of his map had labelled it simply M. Pronchishcheva, i.e. as an abbreviation for Mys Pronchishcheva. A cartographer then mistook this as applying to the inlet, rather than the cape but thinking it had been named after the explorer's wife, had expanded it to Bukhta Marii Pronchischevoy.

⁵⁴ Belov, *Arkticheskoye moreplavaniye*, p. 304.

It reached Ostrov Stolb at the head of the Lena delta on 2 August. Quite rationally Pronchishchev tried to reach the sea by the Krestetskaya channel, the most westerly of the numerous distributaries, but found it too shallow for the *Yakutsk* to negotiate. Three groups were dispatched to find a navigable channel, and explored the delta for five days.⁵⁵ While several of the intermediate channels might have been deep enough for his vessel, relying on the reports of these groups, and on local knowledge Pronchishchev ultimately reached the sea via the Bykovskaya channel, the most easterly one. This meant that he had then to sail right around the seaward side of the massive delta. The result was that by 25 August *Yakutsk* had advanced west only as far as the mouth of the Olenek. There, since new ice was starting to form on the sea, Pronchishchev decided to winter, taking advantage of the somewhat limited facilities of the old Russian settlement of Ust'-Olenek, numbering 12 families.⁵⁶ The initial reaction of the inhabitants at the sight of *Yakutsk* was to flee. They later claimed that they were afraid that there might be smallpox on board the vessel. Pronchishchev felt it more likely that they were afraid of being attacked and/or raped.⁵⁷

Although some members of the expedition, including Pronchishchev and his wife, developed scurvy, the winter was otherwise uneventful. The river ice broke up on 21 June 1736 but it was not until 2 August that the sea ice had cleared enough to allow *Yakutsk* to continue its voyage.⁵⁸ It soon reached the mouth of the Anabar. Pronchishchev sent geodesist Nikifor Chekin up that river with a whaleboat to search for copper deposits. The residents of Ust'-Olenek had produced some samples of what they thought was copper ore and over the winter Pronchishchev had sent them south to Bering in Yakutsk and the latter had ordered him to investigate. During Chekin's absence Pronchishchev surveyed the mouth of the Anabar and made tidal measurements.⁵⁹ Chekin returned on 10 August with a small ore sample. It was forwarded to Yakutsk where Gmelin pronounced it to be of little value.

On 11 August *Yakutsk* continued westward, although hampered by two whaleboats towing astern since there was no room for them on deck. When fairly close ice was encountered off the southeast coast of Ostrov Begichev on 12 August one of the whaleboats was crushed by the ice.⁶⁰ Mistaking Ostrov Begichev for part of the continent Pronchishchev swung north, west and south around it to reach Khatangskiy Zaliv. It was not until 1908 that Nikifor Begichev corrected this error.⁶¹ Although again encountering ice as he crossed Khatangskiy Zaliv Pronchishchev managed to escape from it and headed north up the east coast of Poluoostrov Taymyr, making good progress. By 17 August *Yakutsk* had reached the group of island later named the Ostrova Petra, passing them on the seaward side since the sea to landward of them was still ice-covered.⁶² On the 18th the vessel was passing the mouth of Zaliv Faddeya which, however, Pronchishchev mistook for the inlet into which the Taymyr River debouches. Once again *Yakutsk* was working among ice, although a dark water sky was visible to the east. Many bears, beluga, walrus and gulls were seen in the inlet. An island in the inlet was found to lie at 77°29'N. On the 19th *Yakutsk* was passing to seaward of the Ostrova Samuila, later named the Ostrova Komsomol'skoy Pravdy.⁶³ Although the rigging was starting to become iced-up, nonetheless Pronchishchev persisted, still heading north for a further 48 km, but now along a lead in the ice, which became progressively narrower. Finally

⁵⁵ Romanov, *Kolumby*, pp. 14–15.

⁵⁶ *Ibid.*, p. 15.

⁵⁷ *Ibid.*; Vize, *Morya Sovetskoy Arktiki*, p. 70.

⁵⁸ Belov, *Arkticheskoye moreplavaniye*, p. 305.

⁵⁹ Romanov, *Kolumby*, p. 19.

⁶⁰ *Ibid.*

⁶¹ Barr, 'The discovery and exploration', pp. 15–24.

⁶² Romanov, *Kolumby*, p. 19.

⁶³ *Ibid.*, p. 20.

Yakutsk was halted by ice off the cape now named Mys Pronchishcheva; Pronchishchev determined his latitude to be 77°29'N (later determined to be 77°55'N).⁶⁴ Scurvy had appeared once again, and Pronchishchev himself was seriously affected. A council meeting was held in his cabin and it was decided to turn back. Now the problem initially was persistent calms which meant that rowing was the only option, but then a fair wind arose. Taking advantage of it, by 24 August *Yakutsk* was back at Khatangskiy Zaliv. The option of wintering here was considered but rejected; unlike Ust'-Olenek there was no resident population here and neither driftwood nor trees for fuel. *Yakutsk* therefore returned to the mouth of the Olenek.

By 25 August the vessel was off that river mouth but was unable to enter the river, prevented by a sudden head wind which suddenly started blowing from the south. For a week the vessel was fighting heavy seas trying to get into the river.⁶⁵ In the interim, Vasiliy Vasil'yevich Pronchishchev died at 8 pm on 29 August 1736.⁶⁶ *Yakutsk* reached Ust'-Olenek on 2 September; on the 6th Pronchishchev's body was buried on shore; and on the 11th his wife, Tatiyana Fedorovna, also died and was buried beside her husband.⁶⁷ A monument to their memory, consisting of three red granite pillars was unveiled at Ust'-Olenek on 19 September 1987.⁶⁸

Their skeletons were exhumed, examined, and then reburied by an expedition mounted by the Adventure Club [Klub Priklyucheniya] led by Sergey Yepushkin in July 1999.⁶⁹ The reburial was attended by Mikhail Yefimovich Nikolayev, the president of Sakha, and the service was conducted by Bishop Yakutskiy. Strangely, no signs of scurvy were detected in Pronchishchev's bones or teeth but he had suffered a fracture of his left tibia about two weeks before his death. The cause of Tatiyana's death was not definitely determined but there were indications of otitis (ear infection) possibly resulting in pneumonia. A bronze cross and a pair of high-heeled shoes were found in her grave. Forensic reconstructions of the heads of both individuals were made.

Semen Chelyuskin succeeded Pronchishchev as expedition leader. He sent a report on the season's voyage south to Bering in Yakutsk and shortly afterwards he and Chekin followed it. Then in the following summer (1737) bosun's mate Medvedev took *Yakutsk* south up the Lena to Yakutsk. Bering's initial reaction was that since the two seasons allocated by the Admiralty College for the work of the Lena-Khatanga detachment had elapsed, there should be no further attempts at rounding Poluoostrov Taymyr from the east. But once it had had an opportunity to examine Pronchishchev's report, on 20 December 1737 the Admiralty College decided to renew these attempts.

The officer appointed to take command was Khariton Prokop'yevich Laptev. He reached Yakutsk on 25 May 1739 and on 7 June he started down the Lena on board *Yakutsk*. On reaching the head of the Lena delta this time Laptev found the Krestetskaya channel to be navigable and on 22 July *Yakutsk* reached the sea. Firewood and 30 barrels of fresh water were loaded aboard before the vessel left the delta. Almost immediately Laptev found himself working through ice. *Yakutsk* passed the mouth of the Olenek on 24 July but next day it became beset in ice which started to carry it northwards; fortunately a lead opened and the vessel was able to escape. On the 26th another vessel was sighted; Laptev fired guns but there was no reply. The identity of this vessel still remains a mystery, although Romanov has suggested that this may have been an iceberg or a mirage.⁷⁰

⁶⁴ Ibid.

⁶⁵ Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 63.

⁶⁶ Romanov, *Kolumby*, p. 22.

⁶⁷ Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 67.

⁶⁸ Gavrilova, 'Unveiling of a memorial', p. 567.

⁶⁹ Adventure Club, *The land of Pronchishchev*.

⁷⁰ Romanov, *Kolumby*, p. 28.

By 27 July *Yakutsk* was off the southeast coast of Ostrov Begichev. Chekin was sent in a whaleboat to survey what was later named Bukhta Nordvik. On his return he reported, incomprehensibly, that there was no access to Khatangskiy Zaliv from that bay. Laptev therefore took *Yakutsk* north around Ostrov Begichev. Ice was still proving troublesome and the vessel had developed quite serious leaks. From 30 July until 6 August Laptev waited in a bay on Ostrov Begichev for ice conditions to improve. Getting under way again, on 6 August the vessel passed Ostrov Preobrazheniya. Swinging south into Khatangskiy Zaliv, at a convenient spot Laptev landed his guns, heavy equipment, provisions and a whaleboat in order to re-caulk much of the ship's hull to combat the leaks. All this material was left here under the care of one man; evidently Laptev planned to return there for the winter.⁷¹

Heading north again on 14 August, by the 16th the vessel was passing the Ostrova Petra. By the 19th *Yakutsk* had reached a cape which Laptev named Mys Svyatogo Ignatiya, and on which he set up a substantial cross about 12 feet high. It was because of the cross that members of the crew of the icebreaker *Vaygach* visiting the cape in 1913 named it Mys Krestovyy.⁷² Troitskiy would argue that Sergey Prokop'yevich Zhuravlev may have been unwittingly responsible for destroying this cross.⁷³ In 1934, while travelling from Bukhta Marii Pronchishchevoy to the Ostrova Samuila where the ships of the First Lena Expedition were wintering,⁷⁴ he hung the carcass of a bear he had killed on the cross to safeguard it against foxes or wolves; when he returned only about two weeks later he could find neither the cross nor the bear. Another bear had probably demolished the cross in trying to reach the bear carcass.

By the 21st *Yakutsk* had reached Zaliv Faddeya which, like Pronchishchev, Laptev mistook for Taymyrskaya Guba. Reaching Mys Faddeya Laptev's men built a large cairn 9 feet high, the remains of which are still visible there.⁷⁵ Members of Roald Amundsen's expedition demolished most of it in 1919 searching for a message but found nothing⁷⁶. Continuing north, by 21 August Laptev had reached the Ostrova Samuila. But beyond them there was nothing but close ice; on 22 August Laptev called a council meeting and it was decided to turn back and to winter in Khatangskiy Zaliv.⁷⁷ Laptev was no doubt disappointed that he had not penetrated as far north as Pronchishchev.

Yakutsk made remarkably fast progress back south. By 24 August it was back at the depot which had been left in Khatangskiy Zaliv. Heavy seas prevented a landing, however; the provisions and equipment were later retrieved by whaleboat. Continuing southwest Laptev found a suitable wintering site at the mouth of the Bludnaya River 200 km further southwest on 30 August. Two wintering huts, named Bol'shoye and Maloye Zimov'ye were built on shore with the assistance of local Evenki.⁷⁸ Khatangskiy Zaliv froze over on 13 September.

During the winter Laptev took several measures in preparation for the following season's travels. On 21 October he sent bosun's mate Medvedev by dog sledge west to the mouth of the Pyasina with instructions to survey the coast eastward from there. He was accompanied by Konstantin Khoroshiy who was to proceed to Turukhansk with a report for the Admiralty College. Medvedev reached the mouth of the Pyasina and started his survey eastward but was forced to turn back due to blizzard conditions and bitter cold before he had

⁷¹ Ibid; Belov, *Arkticheskoye moreplavaniye*, p. 308.

⁷² Troitskiy, 'Geograficheskiye otkrytiya,' p. 82, n. 1.

⁷³ Ibid,

⁷⁴ Barr, 'The first Soviet convoy', pp. 322-4.

⁷⁵ Troitskiy, 'Geograficheskiye otkrytiya,' p. 81. A party led by V. A. Troitskiy examined the remains of the cairn in 1972. It lies 50 m north of the tip of the cape, near a steep coastal slope. They represent a sort of breastwork 2 m in diameter and 0.5 m high.

⁷⁶ Amundsen, *Severo-vostochniy prokhod*, p. 253.

⁷⁷ Romanov, *Kolumby*, p. 29.

⁷⁸ Ibid.

covered 40 km. He then returned to the winter quarters on Khatangskiy Zaliv, arriving there on 22 April 1740. A month earlier geodesist Nikifor Chekin was dispatched to the mouth of the Taymyr with orders to survey west to the mouth of the Pyasina, since Laptev had already heard of Medvedev's failure from Khoroshiy, who had returned from Turukhansk. Chekin had no better luck, however; having discovered the vast lake of Ozero Taymyr he reached the mouth of the Taymyr and started west but had to turn back after only 100 km when his provisions ran out.⁷⁹ He arrived back at the winter quarters on foot, having lost all his dogs, on 17 May.⁸⁰ To prevent a recurrence of this problem on 23 May Laptev sent the Yakut Nikifor Fomin with one man, travelling by dog sledges driven by Nganasany, to the mouth of the Taymyr to lay in stocks of fish and reindeer meat.⁸¹

On what was now the third attempt to round Poluostrov Taymyr from the east, *Yakutsk* put to sea again on 13 July 1740, hugging the right shore of Khatangskiy Zaliv which was more clear of ice. By 1 August it had reached 74°15'N, well north in Khatangskiy Zaliv. Fighting drifting ice which gave the vessel at least one severe nip, by 13 August it had become beset in heavy ice at 75°09'N, i.e. even before reaching Bukhta Marii Pronchishchevoy. The vessel was badly holed and even with three pumps working the water level continued to rise. Provisions were moved ashore across the ice and on 16 August the sinking ship was abandoned. Two huts were set up on shore. On Laptev's orders Chekin made two attempts, on 23 and 29 August to head south to where a depot had been left the previous year (at 74°31'N). But each attempt was foiled by an extensive inlet which had still not frozen.⁸² It was not until the sea froze completely, on 20 September that an advance party (Laptev, Chekin and Tolmachev) started south; on reaching the base at the Bludnaya River, they dispatched a party of Evenki back north with provisions. Meanwhile Chelyuskin followed at a slower pace with the remainder of the crew.⁸³ Having taken 24 days for the trip, it was not until 15 October that Chelyuskin and his party reached the Blyudnaya River; by then four men had died of scurvy.⁸⁴ Even here, however supplies were very limited; salvation arrived on 15 November in the form of a relief party led by Rogachenov whom Laptev had sent from the Popigay to the mouth of the Anabar where a depot had been landed 18 months earlier. Convinced that it was impossible to round Poluostrov Taymyr by sea Laptev sent a messenger (seaman Koz'ma Sutormin) to the Admiralty College in St Petersburg via Turukhansk to request permission to continue the survey of this section of the coast overland.

Without waiting for permission, Laptev mounted a three-pronged attack. On 17 March 1741 Semen Chelyuskin set off westwards with three dog sledges to the mouth of the Pyasina, to survey the coast eastwards from there to the mouth of the Taymyr. Then on 22 April Nikifor Chekin, also with three dog teams, headed north along the east coast of Poluostrov Taymyr, hoping to continue the survey all the way to the mouth of the Taymyr. On 24 April, accompanied by four men including Fomin, Laptev himself set off for the mouth of the Taymyr, planning to head either east or west from there, to meet either Chekin or Chelyuskin, depending on circumstances. All remaining members of the former crew of the *Yakutsk*, led by bosun Medvedev, were to proceed overland to Dudinka on the Yenisey.⁸⁵

Khariton Laptev reached the mouth of the Taymyr on 6 May; he soon realized his earlier error of mistaking Zaliv Faddeya for Taymyrskaya Guba, and that the task he had set Chekin was much more than he had intended. To make Chekin's life easier Laptev now set

⁷⁹ Ibid, p. 30.

⁸⁰ Belov, *Arkticheskoye moreplavaniye*, p. 310.

⁸¹ Romanov, *Kolumby*, p. 31.

⁸² Ibid, p. 33. Romanov would argue that this was Bukhta Marii Pronchishchevoy.

⁸³ Ibid, p. 34.

⁸⁴ Ibid.

⁸⁵ Belov, *Arkticheskoye moreplavaniye*, p. 311; Romanov, *Kolumby*, p. 35.

off northeastwards intending to meet him. By 13 May he had reached 76°42'N but was brought to a halt by a blizzard and fog; in the white-out conditions he and all his companions were struck by snow-blindness. Leaving a beacon at his farthest point, Laptev started back and by 17 May was back at the mouth of the Taymyr. There he made the unpleasant discovery that bears and foxes had devoured almost the entire supply of *yukola* (dried fish) on which he had been counting.⁸⁶ He therefore set off westwards to meet Chelyuskin in the hope that he could spare some dogfood. Remarkably, by plotting Laptev's route on the basis of his journal entries, Troitskiy has established that Laptev rounded practically the whole of the Arkhipelag Nordenshel'da even including Ostrov Russkiy on the north, presumably mistaking the various islands for parts of the mainland.⁸⁷ Laptev and Chelyuskin met on 1 June near Mys Leman at 75°21'N and travelled together to the mouth of the Pyasina.

Since his dogs were in poor condition, Laptev remained there for some time then headed up the Pyasina and overland to Gol'chikha, but sent Chelyuskin to survey the coast west to Yeniseyskiy Zaliv and south along its east shore. At the mouth of the Lemborova River on Yeniseyskiy Zaliv, Chelyuskin was brought to a temporary halt because the ice was becoming flooded with water and his dogs were having to swim. From there he continued south by reindeer sleigh, then by boat to Gol'chikha where on 3 August he met Laptev who was waiting for him. Thereafter they continued south by boat to Turukhansk.⁸⁸

During his travels across Poluostrov Taymyr Laptev encountered mammoth tusks and also partial or complete bodies of mammoths emerging from the permafrost. Intriguingly, he became convinced that they were from a marine species and had reached their present positions during a phase with higher sea levels.⁸⁹

To their surprise as Chelyuskin and Laptev headed south up the Yenisey, at Dudinka they encountered Chekin. Surveying the east coast of Poluostrov Taymyr he had reached only the Ostrova Petra, at 76°35'N when he and his entire party were halted by snow-blindness; having waited, in vain for several days for the situation to improve Chekin had been forced to retreat to Khatangskiy Zaliv.⁹⁰ When they met him he too was heading for Turukhansk.

Laptev now entrusted Semen Chelyuskin with the task of 'filling the gap' between Pronchishchev's farthest point at Mys Pronchishcheva on the northeast coast of the peninsula and Laptev's own farthest at 76°42'N on the west coast. Chelyuskin set off from Turukhansk on 5 December 1741 with five dog teams. He eventually reached the depot on the Bludnaya River on Khatangskiy Zaliv on 15 February.⁹¹ Having stocked up with provisions at the depot on the Popigay River on 3 April he started north along Khatangskiy Zaliv with three men, Anton Fofanov, Andrei Prakhov and Sotnikov and three dog teams.⁹² He soon discovered, and made use, of a whole series of trappers' huts, spaced at fairly regular intervals along the east coast of Poluostrov Taymyr, for a total of fifteen from his starting point, and the last of them opposite the Ostrova Petra at 76°37'N. Chelyuskin reached Mys Pronchishcheva (Pronchishchev's turning point) on 1 May and on 6 May 1742 at the cape now named Mys Amundsena, from a sun-shot he determined his latitude to be 77°27'N. From there, at 17.00 on 8 May he reached a high, rocky cape which he named Severo-Vostochniy Mys (now named Mys Chekina), whose latitude he calculated to be 77°32.5'N (in fact 77°41'N).⁹³ Chelyuskin described this cape as follows: 'This cape is rocky, sheer, and of moderate height.

⁸⁶ Romanov, *Kolumby*, p. 36.

⁸⁷ Troitskiy, 'Geograficheskiye otkrytiya', p. 84 and map, p. 85

⁸⁸ *Ibid*, pp. 84–6.

⁸⁹ Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 76.

⁹⁰ Romanov, *Kolumby*, p. 36.

⁹¹ *Ibid*, p. 37.

⁹² Troitskiy, 'Geograficheskiye otkrytiya', p. 92.

⁹³ *Ibid*, p. 90.

The ice off the cape is smooth with no hummocks. I named this cape Vostochnoy Severnoy Mys [Cape Northeast].⁹⁴ Right at the cape he erected a beacon using a log he had brought with him.⁹⁵

From there with one man Chelyuskin headed north across the sea ice for 18 km in pursuit of a bear; beyond the initial belt of smooth land-fast ice, six km in width ‘a break [i.e. a lead] ¼ of a verst [250 m] wide was visible and beyond it there were hummocks’.⁹⁶ This was a clear indication that the ice off the cape might in some years break up.

After rounding a bay beyond this cape (now named Bukhta Vostochnaya) he reached a low, relatively inconspicuous cape which extends slightly further north and is in fact the northernmost point on the Asian mainland, and is now appropriately named Mys Chelyuskin. He calculated its latitude to be 77°33.1' (in fact 77°43'N).⁹⁷ He passed this cape around midnight on 8/9 May 1742.

Especially in light of Chelyuskin’s northward foray, since Proliv Vil’kitskogo is only 40.7 km in width, at first sight it would seem strange that he did not spot the mountains of Ostrov Bol’shevik (the southernmost island of Severnaya Zemlya) to the north. But it should be noted that several navigators after him, namely Nordenskiöld in 1878, Nansen in 1893, and Toll in 1901 also failed to spot the land to the north.⁹⁸ One can only assume that visibility was limited on each of these occasions. It was not until 1913 that Ostrov Bol’shevik was first spotted by Dr Leonid Mikhailovich Starokadomskiy, medical officer on board Boris A. Vil’kitskiy’s icebreaker *Taymyr*.⁹⁹

Heading southwest, on 15 May Chelyuskin encountered Konstantin Khoroshiy and Nikifor Fomin whom Laptev had sent to meet him. After a well-earned rest of three weeks at Fomin’s camp at the mouth of the Taymyr, Chelyuskin headed up that river to Ozero Taymyr then overland to Turukhansk which he reached on 20 July; there he met Laptev.¹⁰⁰ They continued south to Yeniseysk, and then, before the end of the year and accompanied by Chelyuskin and Minin Laptev started west for St Petersburg, arriving early in the new year (1743).

Thus, although the task had taken seven years, the entire coast from the Yenisey to the Lena had been accurately surveyed, revealing the true, massive extent of Poluoostrov Taymyr, which had not previously been suspected. In addition Khariton Laptev compiled a remarkably detailed report which covered not only the indigenous people (Evenki, Entsy and Nganasany), the trapping economy and the flora, but also a substantial amount of tidal information. This report was later published by Sokolov.¹⁰¹

⁹⁴ Romanov, *Kolumby*, p. 41.

⁹⁵ This beacon has never been found. See caption to sketch map in Troitskiy, ‘Pamyatniki ekspeditsii’, p. 253. In this article Troitskiy recounts in detail the complex history of the building, dismantling and restoration of the three historical cairns at or near Mys Cheluskin.

⁹⁶ Belov, *Arkticheskoye moreplavaniye*, p. 315.

⁹⁷ Troitskiy, ‘Geograficheskiye otkrytiya’, p. 90; p. 91.

⁹⁸ Nordenskiöld, *The voyage of the Vega*; Nansen, *Farthest north*; Toll, *Die Russische Polarfahrt*.

⁹⁹ Starokadomskiy, *Charting the Russian Northern Sea Route*, pp. 136–7.

¹⁰⁰ Romanov, *Kolumby*, p. 42.

¹⁰¹ Sokolov, *Severnaya ekspeditsiya*.

East Lena detachment

In terms of distance to be covered, the most ambitious of all the arctic detachments was the east Lena detachment, charged with coasting eastwards from the Lena delta to Bering Strait and south to Kamchatka. It was expected to achieve this task in two years. In command of this detachment was Lieutenant Petr Lasinius, a Dane in the Russian service. His second-in-command was Vasiliy Alekseyevich Rtishev.¹⁰² Their vessel, built at Yakutsk, was *Irkutsk*, a vessel with a length of 18 m, a beam of 5.4 m and a draft of about 2 m.¹⁰³; the vessel's total complement was 52 men.

In company with Pronchishchev's *Yakutsk*, *Irkutsk* set off down the Lena from Yakutsk on 30 June 1735. The two vessels kept company all the way to Ostrov Stolb at the head of the Lena delta where they separated on 2 August. Lasinius headed east down the Bykovskaya channel and thereby reached Buorkhaya Guba. Unfortunately northerly winds had packed heavy ice masses into the bay and despite his best efforts Lasinius was unable to get clear of the bay. Although it was still relatively early in the season, new ice was starting to form on the leads.¹⁰⁴ Lasinius was forced to accept the need to find winter quarters – something in which he succeeded on the Kharaulakh River on 18 August. There Lasinius and his men built a large hut of driftwood to house all 52 men. With a length of 20 metres and divided into four sections the hut was heated by three stoves, while a bath house capable of accommodating ten men, was built separately.¹⁰⁵ Unfortunately on 16 September a northerly gale broke up the ice, and flooded the wintering quarters; some of the men requested that the buildings be moved, but Lasinius refused. He ordered the discontented parties to head south to Yakutsk sending a report to Bering with them.¹⁰⁶ But soon Lasinius was faced with an even worse problem. He had ordered that his men dig a pit in the permafrost for storing tar. A junior officer Rosselius, a Dane, who was in charge, treated the men so viciously that they mutinied and even demanded that Rtishev take command of the detachment instead of Lasinius.¹⁰⁷ Rtishev wisely refused to take command and, while Lasinius remained in control, on 18 November Rosselius was sent off under escort to Yakutsk, in the hope that he would be tried. Bering, however, not only did not arrange for him to be tried, but even took him with him on his disastrous voyage to Alaska. Unfortunately, to make matters worse Lasinius decided to place his men on half rations since he was afraid that it would take more than another year to reach the Pacific. Scurvy soon made its appearance. Lasinius himself was the first to die of the illness on 19 December 1735 and by April 19, a total of 36 men had died.¹⁰⁸ Rtishev was thereby forced to take command. Fortunately, on 26 March a courier, travelling by dogteam, arrived from Yakutsk with messages from Bering; since the messenger was continuing to Pronchishchev's wintering quarters on the Olenek, Rtishev was able to send news of his disastrous situation to both the latter and to Bering. Pronchishchev dispatched a rescue party led by quartermaster Afanasiy Tolmachev which reached the Kharaulakh on 1 May 1736 to find only Rtishev and eight men still alive, although only two of them were still capable of moving about. Tolmachev and his men buried the numerous still unburied bodies in a mass grave.¹⁰⁹

¹⁰² Romanov, *Kolumby*, p. 59.

¹⁰³ Belov, *Arkticheskoye moreplavaniye*, p. 303

¹⁰⁴ Romanov, *Kolumby*, p. 60.

¹⁰⁵ Ibid; Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 81.

¹⁰⁶ Romanov, *Kolumby*, p. 60.

¹⁰⁷ Ibid, p. 61.

¹⁰⁸ Ibid, p. 63.

¹⁰⁹ Ibid, p. 64.

In 2001 the Adventure Club (Klub Priklyucheniya) mounted an expedition to try to locate and excavate the winter quarters and, it was hoped, the extensive graveyard which it was assumed must have developed. Although they did find a single grave (that of a twentieth-century Yakut woman) they failed to find any traces of Lasinius's party.¹¹⁰



Fig. 3. Eastern Russian Arctic

Vitus Bering appointed Dmitriy Laptev (Khariton's cousin) to replace Lasinius and, as his second-in-command, shturman Scherbinin. Scherbinin was sent north first to where *Irkutsk* still lay at the winter quarters on the Kharaulakh River, to make some much-needed repairs. Laptev followed later with the remainder of a new crew. *Irkutsk* finally got under way on 11 August 1736, i.e. only a week earlier than Lasinius's detachment had gone into winter quarters in the previous year. Somewhat puzzlingly at first sight Laptev first headed almost straight north, where he was stopped by heavy ice at $73^{\circ}13'N$. He had been misled by an earlier map which showed a narrow peninsula extending north to the east of the mouth of the Yana, to about $76^{\circ}N$, i.e. a badly distorted representation of Mys Svyatoy Nos which in reality extends to only $72^{\circ}52'30''N$. Blocked by heavy ice in every attempt at working his way east, and discouraged by reports of local trappers that the sea ice off Mys Svyatoy Nos never broke up, Laptev started back on 14 August. Reaching the Lena delta he ascended the river and found winter quarters at the mouth of the Borisov River (at $70^{\circ}40'N$) on 6 September. The crew wintered in five yurts which they built. Practically every member of the crew developed scurvy, but there was only one death; Laptev ascribed this to the fact that he treated

¹¹⁰ Adventure Club, *The mystery of Lassenius*.

the sick with an infusion of cedar, i.e. the Siberian equivalent of spruce beer. Laptev started south for Yakutsk on 30 May 1737; why he waited so long is unclear, since it meant the loss of the 1737 navigation season.

Dmitriy Laptev met with Bering in Yakutsk on 8 June 1737, and then started west, bound for St Petersburg. At Moscow he learned that on 20 December 1737 the Admiralty College had decided that the search for a sea route east from the Lena should continue, even if it took four years.¹¹¹ But at St Petersburg he was able to convince the Admiralty College of the extremely difficult ice conditions which he had encountered. The result was that in the orders which he received on 2 March 1738 he was given the option of surveying the coast overland, by travelling by sleigh, if the passage by sea was impossible.

While still on his way back east to Yakutsk Laptev sent messages ahead for two preliminary surveys to be started. Seaman Aleksei Loshkin was to survey the coast from the mouth of the Yana to Mys Svyatoy Nos, while geodesist Kindyakov was to travel east to the mouth of the Indigirka, sound the channel in the mouth of that river, and then survey the coast back west from there to Mys Svyatoy Nos. Having returned to the winter quarters on the Borisov River Laptev started down the Lena in *Irkutsk* on 6 June 1739. On the previous day Loshkin had arrived to report that he had exceeded his mandate, having surveyed the coast from Mys Buorkhaya to Mys Svyatoy Nos.

On emerging from the Buorkhaya Channel Laptev soon found himself battling ice in Buorkhaya Guba. By taking advantage of a shore lead, by 4 August *Irkutsk* had reached Mys Buorkhaya. There the crew had to hack a channel through a stubborn ice barrier but they did succeed in reaching the mouth of the Yana. On 8 August Laptev sent a party to sound various of the channels in the Yana delta, although it is unclear whether he was already looking for a wintering site, or just a safe place to wait until the sea ice moved out. Whatever his rationale the channels investigated were too shallow for *Irkutsk* to navigate. Fortunately, however the ice was driven off to the west during a storm. *Irkutsk* was able to continue eastwards and on 14 August reached Mys Svyatoy Nos. Laptev determined that it lay at 72°50'N / 110°07'E. Given that its actual position is 72°52'30"N / 140°43'73"E, this is a demonstration of the limitations of Laptev's instruments.

Soon afterwards a small island was sighted to the northeast and was named Ostrov Mercurius. A few hours later land was again sighted to the north-northeast and was named Ostrov Diomida. These were probably both parts of a single island, and indeed Laptev himself appears to have reached this conclusion since only one island, Ostrov Diomida, appears on his map.¹¹² That map shows this island as lying 65 km from Mys Svyatoy Nos on a bearing of 78°. ¹¹³ The island was next reported by Nikita Shalaurov, trying to reach Bering Strait in his vessel *Vera, Nadezhda, Lyubov*, on 6 September 1761.¹¹⁴ Significantly his map also shows to the north the south coast of Ostrov Bol'shoy Lyakhovskiy (which he named Ostrov Blizhiy).¹¹⁵ This was proof that the land sighted by Laptev was not part of that island. Over 40 years later the island again appeared on the map of surveyor Stepan Khvoynov who made three round trips to Ostrov Bol'shoy Lyakhovskiy over the period 1775–7.¹¹⁶ But by 1808 another government expedition, that of M. M. Gedenshtrom was unable to find the island and it does not appear on his map.¹¹⁷

¹¹¹ Belov, *Arkticheskoye moreplavaniye*, p. 318.

¹¹² Reproduced in Belov, *Arkticheskoye plavaniye*, facing p. 320.

¹¹³ Sukhotskiy, 'Novye sledy', p. 291.

¹¹⁴ Belov, *Arkticheskoye moreplavaniye*, p. 398.

¹¹⁵ Sukhotskiy, 'Novye sledy', p. 291.

¹¹⁶ Belov, *Arkticheskoye moreplavaniye*, pp. 404–7.

¹¹⁷ *Ibid.*, p. 501.

It appears very likely that the disappearance of this island was due to thermal abrasion, i.e. the combination of melting and wave erosion occurring in ice-rich sediments in permafrost, probably associated with massive ground-ice bodies. The disappearance of two islands, Ostrov Semenovskiy and Ostrov Vasilevskiy in the Laptev Sea from this cause within a relatively short period in historic time, is well documented.¹¹⁸ Quite strong supporting evidence of the disappearance of Ostrov Diomida is provided by the fact that during its famous one-season transit of the Northern Sea Route in 1934 the icebreaker *Fedor Litke* touched bottom on an unmarked shoal in the middle of the strait with a depth of only seven metres.¹¹⁹ The position and extent of this shoal were plotted by a hydrographic expedition in 1958–9,¹²⁰ its minimum depth was found to be 6.6 m and its position 64 km from Mys Svyatoy Nos on a bearing of 78°. There can be no doubt that this is all that remains of Laptev's Ostrov Diomida.

Continuing eastwards, by 20 August, having passed most of the Indigirka delta, *Irkutsk* was off the mouth of its eastern distributary, the Kolymaskaya. Here Laptev found himself in an extremely embarrassing situation. He had sent the only ship's boat ashore, but it had not returned after six days. A sort of coracle or currach was improvised from barrel hoops and canvas, and Scherbinin was sent ashore to locate the missing boat and boat's crew. But after four days he and his crew had not returned either. At this critical point the ice, and the ship with it, was driven some 40 km offshore. With a change of wind, *Irkutsk* was able to get clear of the ice and to close with the coast again. A party was sent ashore, presumably in another coracle or currach, to find both boats' crew alive, but near-frozen and half-starved.¹²¹ This was a much happier outcome than that suffered by Aleksei Il'yich Chirikov, who in a similar situation on board his vessel *Sv. Pavel* lost his only two boats and 14 men on the Alaskan coast in July 1741.¹²²

Irkutsk next became jammed in the ice off the Indigirka delta. With the help of local Koryaks the crew moved provisions and equipment ashore and cached it all. Leaving the vessel solidly beset in the ice, on 22 September Laptev and his crew moved inland to the settlement of Russkoye Ust'ye.¹²³ During the fall and early winter all the distributaries of the Indigirka delta were surveyed. Meanwhile Loshkin travelled east to the Alazeya River and surveyed the 90 km of coastline back to the winter quarters at Russkoye Ust'ye. By 2 December Laptev had compiled a detailed map of the lower Lena River and the coastline east to the Alazeya.¹²⁴ On that date Loshkin set off for St Petersburg with a copy of the map and Laptev's report.

The ice on the Indigirka started to break up on 23 May 1740. *Irkutsk*, meanwhile, was still firmly beset in the sea ice off the Kolymaskaya distributary. On 29 May her crew plus recruited local residents (for a total of 651 men) started cutting a channel in the ice from the ship out to the closest open water – a distance of about 1.8 km. They had completed this challenging task when ice movements occurred and the new channel closed. They then cut another channel and warped the vessel out to a nearby polynya. This was not the end of the challenges, however; further ice movements tore the ship from its anchors and drove it on to a shoal.¹²⁵

¹¹⁸ Barr, 'Retreating coasts,' pp. 103-11.

¹¹⁹ Vize, *Na 'Sibiryakove' i 'Litke'*, p. 224.

¹²⁰ Sukhotskiy, 'Novye sledy', p. 293.

¹²¹ Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, pp. 85–6.

¹²² Frost, *Bering*, pp. 140-42.

¹²³ Belov, *Arkticheskoye moreplavaniye*, p. 320.

¹²⁴ *Ibid*, facing p. 320.

¹²⁵ *Ibid*, p. 321; Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 87.

Irkutsk finally got under way, east-bound, on 13 July. It passed the mouth of the Alazeya and then on 3 August Ostrov Krestovskiy, the westernmost of the Medvezh'i Ostrova was spotted. Next day the vessel was off the middle of the Kolyma delta; Laptev sent word upriver to Nizhnekolymsk, but did not enter the delta. Continuing east he still had hopes of reaching Bering Strait before freeze-up. But this was not to be. On 9 August, off Mys Bol'shoy Baranov, about 100 km east of the Kolyma delta, *Irkutsk* ran into close ice. At a ship's council it was decided to turn back and to head south up the Kolyma to winter at Nizhnekolymsk, which they reached on 23 September.¹²⁶ It was found to be such a wretched settlement that Laptev's men had to build three huts to house themselves.

In the following summer (1741) Laptev tried once again to sail along the coast to Bering Strait but once again, in August, was brought to a halt by close ice off Mys Bol'shoy Baranov. Starting back on 6 August, by the 10th *Irkutsk* was back at Nizhnekolymsk.

At this period the Chukchi were proving to be very belligerent and for this reason the Admiralty College forbade Laptev to try to complete the survey of the coast east to Bering Strait overland. Instead he was directed to travel overland to Anadyrsk and to survey the Anadyr' River. Having sent most of his crew off on the long trip back to St Petersburg under the care of shturman Scherbinin, on 27 August with a small party, and travelling by dog sledges he set off eastwards overland to Anadyrsk, which he reached on 19 November 1741. In the following summer in mid-June he began his survey of the Anadyr' River, using six small boats. The survey was completed by 10 August 1742, and Laptev was able to determine that small seagoing vessels could ascend the river for 200 km. Meanwhile quartermaster Romanov surveyed an overland route southwestwards from Anadyrsk to Penzhina Guba at the northeast corner of the Sea of Okhotsk

During the winter Laptev started back west on the long trek to St Petersburg. By 8 March 1743 he had reached Yakutsk and by December he had reached the capital and was submitting the log of *Irkutsk*, along with his report and maps, to the Admiralty College. With this the work of the arctic detachments of the Great Northern Expedition was complete.

The lasting legacy of the Great Northern Expedition (including the detachments which reached Alaska and Japan) is a remarkably detailed map of their efforts. It was published by Belov as a foldout map. Compiled in 1746, it shows the entire arctic coast of Russia and Siberia in quite remarkable detail.¹²⁷ To place this achievement in perspective is to compare this map with the known geography of the North American Arctic at that same date. All that was known was Davis Strait, the southeastern shores of Baffin Island, Hudson Strait, Foxe Channel and Hudson Bay, including Wager Bay and Repulse Bay (Baffin's survey of Baffin Bay had by that date been forgotten). Everything further north and further west, all the way to Bering Strait, was a total blank!

Inland origins

One aspect of the personnel of the great Northern Expedition which at first sight may appear slightly anomalous was that a remarkably large number of the Navy personnel involved were natives of the two contiguous, landlocked provinces of Tul'skaya Oblast' and Kaluzhskaya Oblast', just south of Moscow and together known as the Priokskiy Kray. They included Vasilii Vasil'yevich Pronchishchev,¹²⁸ Semen Ivanovich Chelyuskin,¹²⁹ Aleksei Ivanovich

¹²⁶ Ostrovskiy, *Velikaya Severnaya Ekspeditsiya*, p. 88.

¹²⁷ Belov, *Arkticheskoye moreplavaniye*, between pp. 336 and 337.

¹²⁸ Romanov, *Kolumby*, p. 9.

¹²⁹ *Ibid*, pp. 25–6.

Skuratov,¹³⁰ Ivan Mikhaylovich Sukhotin,¹³¹ Nikifor Chekin,¹³² Vasiliy Alekseyevich Rtishev,¹³³ as well as Aleksei Il'ich Chirikov,¹³⁴ — all from Tul'skaya Oblast', and Ivan Nikitich Koshelev from Kaluzhskaya Oblast'.¹³⁵ In reality, this situation is not particularly surprising: various of these men knew each other. Thus, for example Pronchishchev and Chleyuskin had been childhood friends, had attended the Navigation College together and had served on various ships together.¹³⁶ Similarly Khariton Laptev and Pronchishchev had attended the Navigation College and the Naval Academy together.¹³⁷ It would have been natural for the various friends to encourage each other to enrol in the arctic detachments of the Great Northern Expedition.

Earlier knowledge forgotten or concealed

An intriguing aspect of the Great Northern Expedition was that a century earlier (and in some cases even earlier than that) Russian seafarers were already sailing sections of the Northern Sea Route, in some cases almost on an annual basis, and with numerous ships being involved in any one season, and yet knowledge of these voyages appears to have been lost in the interim. The earliest section to see all this traffic was the western section, from Arkhangel'sk to the Ob'. An account of a typical voyage, that of Leontiy Ivanov Shubin, nicknamed Plekhan and a native of Pinega, has survived.¹³⁸ Accompanied by 36 companions, sailing in four *kochi*, he left Arkhangel'sk in the summer of 1601, bound ultimately for the important fur-trading town of Mangazeya on the Taz River. Having emerged from the White Sea and having rounded Kanin Nos the vessels headed east, but encountering head winds and heavy ice they took refuge in the mouth of the Pechora River; Plekhan and companions wintered at Pustozersk. In the following summer Plekhan continued his voyage eastwards along with 44 other travellers. They reached Yugorskiy Shar (a distance of about 275 km) in two days and two nights. Running through that strait, the vessels continued east across the mouth of Baydaratskaya Guba and then north along the west coast of Poluostrov Yamal to the mouth of the small Mutnaya River. Poling or tracking their *kochi* up the Mutnaya the Russian seafarers then portaged their vessels between two lakes, Ozero Neyto and Ozero Yambuto located on the height-of-land. The portage was only about 500 m long 'and the land sandy'.¹³⁹ From the latter lake they floated down the wildly meandering Zelenaya, flowing down eastwards to Obskaya Guba and thus reached the latter at the site of the present settlement of Seyakha. One may fairly assume that earlier seafarers had attempted to round Poluostrov Yamal on the north and had found that that route would almost certainly be blocked by ice; therefore the portage route represented a sensible, if strenuous alternative. Heading south up Obskaya Guba, then east up Tazovskaya Guba the *kochi* then ascended the Taz River to the fur-trading town of Mangazeya. With fair weather, and if the ice cooperated, the entire voyage from Arkhangel'sk to Mangazeya might take only a little over a month. The numbers of vessels and men were quite substantial. Thus in 1601, 4 *kochi* (40 men) completed the trip; in 1602, 4 *kochi*; in

¹³⁰ Ibid, p. 45.

¹³¹ Ibid, p. 46.

¹³² Ibid, p. 31.

¹³³ Ibid, p. 59.

¹³⁴ Ibid, p. 91.

¹³⁵ Ibid, p. 55.

¹³⁶ Ibid, p. 26

¹³⁷ Ibid, p. 27.

¹³⁸ Belov, *Arkticheskoye moreplavaniye*, pp. 111–12.

¹³⁹ Vize, *Morya Sovetskoy Arktiki*, p. 41.

1610, 16 *kochi* (160 men); in 1612, 16 *kochi*; in 1613, 17 *kochi*.¹⁴⁰ Of course not every voyage was successful and unknown numbers of vessels and men were lost.

In 1616 and again in 1619, however, Tsar Mikhail Fedorovich prohibited the use of the Arkhangel'sk–Mangazeya sea route, especially the river/portage route across Poluostrov Yamal.¹⁴¹ To enforce the prohibition an order was even given that a military outpost should be established at the portage at the summit of the route across the peninsula.¹⁴² The rationale for this prohibition had two major foci. In part it was a defensive measure against foreign (i.e. West European) trading companies.¹⁴³ That this was a real concern was demonstrated in 1625 when the Dutch ship *de Cat* penetrated as far as Baydaratskaya Guba and even the mouth of the Mutnaya River.¹⁴⁴ Indeed two foreign vessels were spotted from shore in these waters that summer.¹⁴⁵

The other reason for this prohibition, was that goods were reaching Mangazeya without having paid any customs duties, i.e. it represented a significant loss to the state treasury. The main alternative route to Mangazeya was overland across the Urals to Verkhnotur'ye on the upper Tura River, or to Tobol'sk, and then by ship down the Irtysh', the Ob', Obskaya Guba and Tazovskaya Guba and up the Taz. The Tsar's prohibition had the strong support of the *voyevoda* (governor) of Tobol'sk, Ivan Kurakin, in that use of the sea-route represented loss of revenue for his town.¹⁴⁶ In time the prohibition of use of the Mangazeya sea route became forgotten, or was allowed to lapse, and some use of it built up again.¹⁴⁷ However the abandonment of Mangazeya by order of Tsar Aleksei Mikhailovich in 1672, and the transfer of its garrison to Turukhansk on the Yenisey, largely eliminated the rationale for use of the Mangazeya sea route with its portage route across Poluostrov Yamal.¹⁴⁸

If any voyages around Gydanskiy Poluostrov, i.e. from the Ob' to the Yenisey or vice-versa, were completed or even attempted prior to the Great Northern Expedition, no record of them appears to have survived. Voyages eastward from the Yenisey are a different matter, however. In 1610 the Arkhangel'sk traders Kindratiy Kurochkin and Osip Shepunov set off in two *kochi* down the Yenisey from Turukhansk (founded in 1607 from Mangazeya).¹⁴⁹ Delayed by ice in Yeniseyskiy Zaliv for five weeks, when a south wind started to blow, clearing the ice out, they were able to get under way again, and two days later reached the mouth of the Pyasina.¹⁵⁰ Kurochkin reported the useful fact that there is no shallow bar at the mouth of the Yenisey, and that it was therefore accessible for large ships.¹⁵¹ While there are no reliable records of any ships heading further east from the Pyasina prior to the Great Northern Expedition some researchers believe that one expedition did so and may even have penetrated through Proliv Vil'kitskogo into the Laptev Sea, i.e. may have rounded the northern tip of Poluostrov Taymyr.

On 14 September 1940 a party from the survey vessel *Nord* of the Hydrographic Department of Glavsevmorput (the Chief Administration of the Northern Sea Route) landed on the northernmost island of the Ostrova Faddeya, lying about 130 km southeast of Mys

¹⁴⁰ Ibid, p. 42.

¹⁴¹ Belov, *Arkticheskoye moreplavaniye*, p. 119.

¹⁴² Vize, *Morya Sovetskoy Arktiki*, p. 44.

¹⁴³ Ibid, p. 43

¹⁴⁴ Holland, C., *Arctic exploration*, p. 48

¹⁴⁵ Belov, *Arkticheskoye moreplavaniye*, p. 120.

¹⁴⁶ Vize, *Morya Sovetskoy Arktiki*, p. 43.

¹⁴⁷ Belov, *Arkticheskoye moreplavaniye*, p. 126.

¹⁴⁸ Ibid, p. 125.

¹⁴⁹ Ibid, 129; Lantzeff and Pierce, *Eastward to Empire*, p. 128.

¹⁵⁰ Ibid.

¹⁵¹ Vize, *Morya Sovetskoy Arktiki*, p. 43.

Chelyuskin.¹⁵² A member of the party spotted some copper pots sticking out of the beach gravels, and further investigation revealed an axe, scissors, a small bell, pewter plates, a large number of silver coins, ear rings, finger rings, small crosses and blue beads and, remarkably, an arquebus or musket, with a bent barrel, its stock rotted away. Perhaps most surprising of all, they found large quantities of partly rotted furs.

In the following spring another party from *Nord* discovered the remains of a hut, built of driftwood, on the shores of Zaliv Simsa, about 75 km west of the Ostrova Faddeya. In or near it they found more copper pots, silver coins, beads, crosses, rings, bells and human and animal bones including parts of two human skulls, one of them female.¹⁵³ In June 1944 a party of geologists from the ship *Yakutiya* landed on Ostrov Faddeya and found a similar range of items as those found earlier, but also the remains of a small vessel which clearly had been wrecked.¹⁵⁴

Despite the restrictions and disruptions of the immediate post-war period, in August 1945 an expedition led by archeologist A. P. Okladnikov of the Arkticheskiy Institut visited both sites and carried out careful, detailed excavations. Okladnikov excavated the remains of the small vessel and also the remains of the hut. Remains of another arquebus were found, but also 47 metal arrow heads and arrow shafts, 13 knives, 3 knife handles and 10 knife sheaths. Also found were axes, spoke-shaves, an adze, two chisels, two pairs of scissors, needles and a small shovel, as well as more copper pots, copper basins, pewter plates, a wooden ladle and a wooden spoon. Just as with the earlier searches, various ornamental objects were found: 27 copper rings, 3 silver earrings and over 1000 blue beads as well as 12 small personal crosses. Remains of clothing and footwear were found, some of it female. A total of 3,482 Russian silver coins was also found, kopeks or coins of smaller denomination, and amounting in total to little more than 34 rubles. And finally, as with the earlier searches the abundant rotten remains of a large quantity of furs were found, somewhat more than half being of arctic fox, and most of the remainder sable.¹⁵⁵

From the style of clothing and footwear recovered and especially from the coins, the expedition which had come to grief here was clearly Russian. Probably the most crucial question which the researchers have attempted to answer was the date of this shipwreck. The latest of the coins were minted during the reign of Tsar Mikhail Fedorovich (1613–45) and I. Spasskiy determined that most of them were minted during the first few years of his reign, and that the collection of coins was accumulated around 1615–17.¹⁵⁶ On the strength of this Okladnikov argued that the expedition had occurred shortly after that date.¹⁵⁷ Since the coins included samples of the output of all the Russian mints over a period of several decades, Spasskiy has argued that they must have been accumulated in an area of intense economic activity. Since by that time Russian eastward penetration had not advanced beyond Poluostrov Taymyr (Yakutsk, for example was founded only in 1632) Spasskiy and Okladnikov would argue that thus, inevitably, the remains found on Ostrov Faddeya and at Zaliv Simsa are those of an expedition which was heading eastward from Russia or Western Siberia, to trade in Eastern Siberia. Lantzeff and Pierce have accepted this interpretation as to the direction in which the expedition was travelling.¹⁵⁸ If this reconstruction is correct the expedition's ship(s) must already have passed Mys Chelyuskin, the most northerly point on the mainland of

¹⁵² Dolgikh, 'Novye dannye o plavanii', p. 117; Okladnikov, 'Arkheologicheskiye nakhodki', p. 7.

¹⁵³ Dolgikh, 'Novye dannye o plavanii', p. 124; Okladnikov, 'Arkheologicheskiye nakhodki', p. 21.

¹⁵⁴ Okladnikov, 'Arkheologicheskiye nakhodki,' p. 9.

¹⁵⁵ Fokanov, 'Ostatki shkur', p. 193.

¹⁵⁶ Spasskiy, 'Denezhniy sklad', p. 127.

¹⁵⁷ Okladnikov, 'Arkheologicheskiye nakhodki,' p. 28

¹⁵⁸ Lantzeff and Pierce, *Eastward to Empire*, p. 184.

Eurasia.¹⁵⁹ While agreeing with these findings in principle, however, Belov would argue that the expedition may have occurred significantly later. He has pointed out that the coins that were found were in circulation throughout the 17th century and that the Pskov, Novgorod and Moskva mints, responsible for over 96% of the coins found did not mint any new coins for a considerable period after 1617. On this basis Belov would argue that the expedition may well have occurred considerably later than 1617.¹⁶⁰

Some reports of just such an expedition have survived, namely that of Ivan Tolstoukhov in 1686, as recorded by the Dutchman Nicolaes Corneliszoon Witsen.¹⁶¹ As Belov has pointed out Fedor Minin found traces of Tolstoukhov's expedition on the shores of Yeniseyskiy Zaliv and on Pyasinskiy Zaliv, well to the east of Dikson, during his own voyage on board *Obi-Pochtal'on* in 1738.¹⁶²

A different interpretation has been proposed by V. A. Troitskiy on the basis of his visits to the sites on Ostrov Faddeya and at Zaliv Simsa in the summers of 1971 and 1972.¹⁶³ Among other items he found on Ostrov Faddeya were the barrel and lock of another old arquebus which has been identified as 'a flintlock of the period of about 1620–50, of Russian workmanship, most likely of northern or Siberian manufacture'.¹⁶⁴ As in the reports of the earlier investigators Troitskiy also found the remains of substantial remains of furs – arctic fox and sable. Combining the presence of these fur remains with the potentially later date of the expedition, Troitskiy argues that the expedition was probably heading from east to west, probably from the Lena basin. By that time there would have been sufficient time for the sort of economic activity to develop in Yakutsk, for example, to produce the number and mix of coins that have been found. He further argues that it seems very improbable that an expedition heading towards the Lena valley would have been carrying such large quantities of furs. An interesting conclusion from Troitskiy's argument is that the expedition was wrecked, the vessel possibly damaged in ice, very close to where Pronchishchev's vessel was forced to turn back on his attempt at rounding Poluostrov Taymyr in 1736.

That there is no historical record of such a voyage is really not surprising in that it was probably clandestine. Belov has made the point that the prohibitions (1616 and 1619) of the use of the Mangazeya sea route were by no means isolated phenomena. For example, Ostrov Begichev, off the mouth of Khatangskiy Zaliv, a major source of mammoth ivory, was the object of a similar prohibition. Having sent Ivan Rebrov to the island to investigate the trade in 1642 on the basis of Rebrov's report the *voyevoda* at Yakutsk ordered the Olenek commander 'to watch, and to firmly implement with soldiers, his orders to arrest all traders and hunters, so that nobody should make their way there'.¹⁶⁵

Later in the seventeenth century the areas covered by prohibitions of this type increased enormously. Private individuals were prohibited from travelling not only to the Anabar and Ostrov Begichev, but also farther east, to the Yana, Indigirka or Kolyma, unless such trips were officially sanctioned. In the light of such far-reaching prohibitions, it would seem quite probable that a clandestine attempt (or attempts) might have been made to circumvent them by traders, by way of the Northern Sea Route.¹⁶⁶

Surprisingly perhaps, the southwestern shores of the Laptev Sea (Khatangskiy Zaliv and the coast east to the Anabar) were first visited by Russians coming from Turukhansk on

¹⁵⁹ Okladnikov and Pinkhenson, 'Znachenie nakhodok,' p. 212.

¹⁶⁰ Belov, *Morya Sovetskoy Arktiki*, p. 212.

¹⁶¹ Witsen, *Nord en Oost Tartarye*, p. 846; p. 854.

¹⁶² Belov, *Mangazeya*, pp. 115–16.

¹⁶³ Troitskiy, 'Novye nakhodki,' pp. 62–3.

¹⁶⁴ *Ibid*, p. 63.

¹⁶⁵ Belov, *Mangazeya*, p. 111.

¹⁶⁶ Lantzeff and Pierce, *Eastward*, p. 184.

the Yenisey via the Pyasina, Kheta and Khatanga rivers. In 1630 the Mangazeya *voyevoda* sent Ivan Patrikeyev with a party of 103 men to the Kheta River via the Pyasina to establish a settlement which was named Pyasinskiy gorodok.¹⁶⁷ Patrikeyev and his men found Russians already established on the Pyasina and Kheta, and purchased dogs and dogfood from them.

Even earlier than this Russians had already reached the Khatanga River from the Yenisey. In 1625 the Mangazeya *voyevoda* sent Grigoriy Dyrovatiy to collect *yasak*, i.e. tribute in the form of furs, from the indigenous people, on the Khatanga.¹⁶⁸ Then in the early 1630s a party led by Ivan Yelfimov and a *promyshlennik* named Kirillov, having descended the Kheta and Khatanga, reached the head of Khatangskiy Zaliv at the confluence with the Popigay which flows in from the southeast.¹⁶⁹ Then in 1643 Vasiliy Sychkov was sent from Turukhansk to the Anabar River to establish a *yasak*-collection point. He sailed down the Yenisey and via the Pyasina and the usual portage routes to the Khatanga. It is not known whether he travelled by sea to the Anabar, or reached it overland from Khatangskiy Zaliv. A few years later a party led by Yakov Semenov, sent to relieve Sychkov, left Turukhansk in the late summer of 1647 but having been caught by freeze-up was forced to winter at some point on the Kheta. Break-up on the Kheta in the following spring came early and Semenov and party were able to get under way down the river by the early date of 30 May 1648.¹⁷⁰ Their *kochi* travelled down the Kheta and the Khatanga and then coastwise via Khatangskiy Zaliv and Vostochniy Proliv, past Mys Paksa to Anabarskiy Zaliv and the mouth of the Anabar. This was the first known voyage by sea from the mouth of the Khatanga to that of the Anabar.

The earliest known sea voyages farther east in the Laptev Sea occurred significantly earlier. Soon after the founding of Yakutsk in 1632, in the spring of 1633 a party of Yeniseysk and Tobol'sk Cossacks led by Il'ia Perfiryev headed north down the Lena.¹⁷¹ Having wintered at some point, on reaching the head of the Lena delta the party split into two. One group led by the Tobol'sk Cossack Ivan Rebrov headed down the westernmost distributary to Olenekskiy Zaliv and the Olenek River; his first collection of *yasak* from the local residents, in the form of furs, reached Yakutsk that same summer.¹⁷² Meanwhile Perfiryev and party headed down the eastern or Bykovskiy channel and travelled coastwise to the Yana. His first record of having collected *yasak* on the Yana River is dated 9 October 1635. Less than two years later he was joined on the Yana by Ivan Rebrov on 18 February 1637; the latter had thus made the first known voyage from the mouth of the Olenek to that of the Yana. In June 1638 Rebrov continued eastwards through Proliv Dmitriya Lapteva to the mouth of the Indigirka where he and his men built an *ostrog* (a stockaded fortification); Rebrov returned to the Lena in the summer of 1641.¹⁷³

Further progress eastwards from the mouth of the Indigirka occurred in the summer of 1642. A party led by Dmitriy Zyryan built two *kochi* at their winter quarters at Nizhnoye Indigirskoye, then sailed down the river to the sea then eastwards to the mouth of the Alazeya and up that river to the tree-line where they established winter quarters.¹⁷⁴ Having been joined by a party led by Mikhail Stadukhin and the Cossack Semen Dezhnev, in the summer of 1643 Zyryan travelled back down the Indigirka then eastwards along the coast for two weeks to the mouth of the Kolyma. Ascending that river they established winter quarters near the present

¹⁶⁷ Belov, *Arkticheskoye moreplavaniye*, p. 130.

¹⁶⁸ *Ibid.*, p. 132, fn. 5.

¹⁶⁹ *Ibid.*, p. 132.

¹⁷⁰ *Ibid.*, p. 133.

¹⁷¹ Lantzeff and Pierce, *Eastward to Empire*, p. 184.

¹⁷² Belov, *Arkticheskoye moreplavaniye*, p. 150.

¹⁷³ *Ibid.*

¹⁷⁴ *Ibid.*, p. 153. Vize, however, lists the leader of this party as being Dmitriy Yerastov (Vize, *Morya Sovetskoy Arktiki*, p. 54).

settlement of Malaya Stadukhina about half way between Cherskiy and Nizhnekolymsk, and the following year moved to the site of the latter settlement.¹⁷⁵ Thereafter the sea route from the Lena to the Kolyma and back again became extremely well travelled. This was particularly the case following the establishment of the Kolyma trade-fair in 1647. Vize lists 24 voyages between various of the Lena, Yana, Alazeya, Indigirka and Kolyma rivers between 1633 and 1702, the bulk of them being during the period 1633 and 1656.¹⁷⁶ After 1702, however, this traffic ceased almost completely, largely due to the rapacious demands of the *yasak*-collectors, which had resulted in the various river basins having been practically ‘trapped out’.¹⁷⁷

The first recorded voyage eastwards from the Kolyma dates to 1646. A party led by Isay Ignat'yev from Mezen' and Semen Alekseyev from Pustozersk sailed eastwards in a *koch*, and despite encountering some ice, in two days from the mouth of the Kolyma reached a bay, inhabited by Chukchi. This was Chaunskaya Guba.¹⁷⁸ Even by this early date there were rumours that somewhere east of Chaunskaya Guba there must be a strait joining the Arctic Ocean to the north with the Pacific Ocean to the south, i.e. separating Asia from America. This would provide a sea route to the Anadyr' River which was rumoured to be rich in furs.

In 1647 a group of 50 Nizhnekolymsk *promyshlenniki*, led by Fedot Alekseyev from Kholmogory (nicknamed Popov¹⁷⁹) set off in four *kochi*, to try to test this hypothesis. At Alekseyev's request the Cossack, Semen Dezhnev was assigned to the expedition as its military commander and thus its effective leader. How far eastwards they managed to proceed is unknown, but they encountered extremely heavy ice and were forced to turn back.¹⁸⁰

Alekseyev tried again in the following year, and once again Dezhnev was assigned to accompany the expedition. Alekseyev was joined by a number of other traders including Afanasey Andreyev Voron and Besston Astaf'ayev, and ultimately the expedition consisted of six *kochi* with a total complement of 60 men.¹⁸¹ It was joined by a further seven vessels led by a Lena Cossack, Gerasim Ankudinov, something of a loose cannon, who was trying to forestall Alekseyev's and Dezhnev's initiative, but nevertheless sailed with them independently.

This small fleet sailed downriver from Nizhnekolymsk on 20 June 1648. Somewhere off the north coast of Chukotka the *kochi* were caught in a storm and two vessels were sunk. Most of the crew members who made it ashore were killed by the Chukchi. On 1 September five surviving *kochi* reached what was then known as Severo-Vostochniy Mys (now Mys Dezhnev).¹⁸² Dezhnev was well aware of the significance of this cape as being the easternmost point of Asia., separating what he called the ‘Frozen Sea’ to the north and the ‘Eastern Sea’ to the south. To seaward Dezhnev spotted an island, Ostrov Ratmanova, the larger of the Diomed Islands.

Off Mys Dezhnev another storm struck and several more *kochi* were sunk, including that of Akudinov, who with his men transferred to some of Alekseyev's *kochi*. As the reduced fleet continued south and southwest along the Chukchi coast, the *kochi* were scattered by a series of storms. Ankudinov and Alekseyev ended up in Kamchatka, where they and their

¹⁷⁵ Belov, *Arkticheskoye moreplavaniye*, p. 150; Vize, *Morya Sovetskoy Arktiki*, p. 55.

¹⁷⁶ *Ibid*, p. 57.

¹⁷⁷ *Ibid*, p. 58.

¹⁷⁸ Belov, *Morya Sovetskoy Arktiki*, p. 158.

¹⁷⁹ Although Vize would argue that Popov was his surname: Vize, *Morya Sovetskoy Arktiki*, p. 55, fn. 31.

Belov, *Morya Sovetskoy Arktiki*, p. 158.

¹⁸⁰ *Ibid*, p. 163.

¹⁸¹ *Ibid*, p. 164.

¹⁸² *Ibid*, p. 165.

men survived for an unknown period.¹⁸³ Meanwhile Dezhnev's *koch* made landfall at Mys Olyutorskiy on the south coast of Anadyr'skiy Zaliv. From there Dezhnev and his surviving 23 men travelled overland to the Anadyr' River. Having wintered near its mouth, in the following summer Dezhnev built an *ostrog* on the middle course of the Anadyr', thus fulfilling his mandate.¹⁸⁴

Thus during the first half of the 17th century Russian seafarers had sailed along most of the arctic coasts of Russia and Siberia, even including one section, namely the north coast of Chukotka, which the ships of the Great Northern Expedition failed to negotiate a century later. At first sight it seems remarkable that the Russian naval officers in command of the various vessels of the Great Northern Expedition appear to have been unaware of these earlier achievements. In fact this is not really surprising. For one thing, what would nowadays be referred to as local 'traditional knowledge' was of little assistance. This was in part due to prohibitions of the use of various routes e.g. the prohibitions of the use of the Mangazeya sea route, which meant that while various of the detachments of the Great Northern Expedition employed local pilots, their expertise was often quite limited. Elsewhere, for example, on the Lena-Kolyma route, the substantial decrease in its use after 1700 meant that by the time of the Great Northern Expedition details of the route had largely been forgotten.

As Belov has clearly revealed in his extensive footnotes a substantial amount of detail about these earlier voyages had survived in various Russian archives such as the Arkhiv Akademii Nauk SSSR [Archives of the Academy of Sciences of the USSR] or Gosudarstvennyy Arkhiv Voenno-Morskogo Flota [State Archives of the Navy]. However, while the relevant documents commonly include the dates and general route of a particular voyage, rarely if ever do they include geographical coordinates or maps of reasonable accuracy. In a few instances, such as Kurochkin's revelation that there is no bar at the mouth of the Yenisey, information useful to a ship's captain is included. And, naturally, the remarks as to the location and characteristics of sea ice, and the dates on which it was encountered, would have proved very useful. In that both periods of exploration/navigation fall within the limits of the Little Ice Age, there is unlikely to have been significant changes in terms of the dates of sea ice formation and break-up between the two periods. But that is assuming that the officers involved had the time or the knowledge in order to access these archival sources. That they were unable to benefit from them, is therefore not really surprising.

References

Adventure Club, *The land of Pronchishchev*, 1999,
www.shparo.com/proncheshev/proncheshev_results.htm

—, *The mystery of Lassenius*, 2001, www.shparo.com/lassenius/lassenius_results.htm

Amundsen, R., *Severo-vostochniy prokhod ekspeditsii na "Mod" vdol' severnogo poberezh'ya Azii*, Leningrad, 1936.

Armstrong, T. E., 'Siberian and Arctic exploration' in Orcott Frost, ed., *Bering and Chirikov: the American voyages and their impact*, Anchorage, Alaskan Historical Society, 1992, pp. 117–26.

Barr, W., 'Retreating coasts and disappearing islands in the Arctic', *The Musk-Ox*, 18, 1976, pp. 103–11.

¹⁸³ Vize, *Morya Sovetskoy Arktiki*, p. 56.

¹⁸⁴ Belov, *Arkticheskoye moreplavaniye*, p. 165.

—, ‘Baron Eduard von Toll’s last expedition: the Russian Polar Expedition, 1900–1903’, *Arctic* 34(3), 1981, pp. 201–24.

—, ‘The first Soviet convoy to the mouth of the Lena’, *Arctic* 35(2), 1982, pp. 317–26.

—, ‘The “discovery” and exploration of Ostrov Begichev’, *Terrae incognitae*, 16, 1984, pp. 15–24.

Belov, M. I., *S drevneishikh vremen do serediny XIX veka. Istoriya otkrytiya i osvoyeniya Severnogo morskogo puti*, tom I, Moscow, Izdatel’stvo “Morskoy Transport”, 1956.

—, *Mangazeya*, Leningrad, Gidrometroizdat, 1969.

Bown, S. R., *Island of the blue foxes. Disaster and triumph on the world’s greatest scientific expedition*, New York, Da Capo Press, 2017.

Dolgikh, B. O., ‘Novye dannye o plavanii russkikh Severnym morskim putem v XVII veke’, in A. P. Okladnikov, ed., *Russkiye polyarnye morekhodi XVII veka u beregov Taymyra*, Leningrad and Moscow, Izdatel’stvo Glavsevmorputi, 1948, pp. 117–57.

Fisher, R. H., *Bering’s voyages. Whither and why*, London, C. Hurst & Co., 1977.

Fokanov, V. A., ‘Ostatki shkur mlekopitayushchikh’, in A. P. Okladnikov and D. M. Pinkhenson, eds., *Istoricheskiy pamyatnik russkogo arkticheskogo moreplavaniya XVII veka*, Leningrad and Moscow, Izdatel’stvo Glavsevmorputi, 1951, p. 193.

Frost, O., ed., *Bering and Chrikov: the American voyages and their impact*, Anchorage, Alaska Historical Society, 1992.

—, *Bering. The Russian discovery of America*, New Haven, Yale University Press, 2003.

Gavrilova, M. K., ‘Otkrytiye pamyatnika Pronchishchevami’, *Izvestiya Vsesoyuznogo Geograficheskogo Obshchestva*, 120 (6), 1988, pp. 567–8.

Holland, C., *Arctic exploration and development, c. 500 B.C. to 1915. An encyclopedia*, New York, Garland, 1994.

Lantzeff, G. V. and Pierce, R. A., *Eastward to Empire. Exploration and conquest on the Russian open frontier to 1750*, Montreal and London, McGill-Queen’s University Press, 1973.

Nansen, F., *Farthest north; being the record of a voyage of exploration of the ship Fram 1893–96*, London, Constable, 1897.

Nordenskiöld, N. A. E., *The voyage of the Vega around Asia and Europe*, London, Macmillan, 2 vols, 1881.

Okladnikov, A. P., ‘Arkheologicheskiye nakhodki na Ostrove Faddeya i na berege Zaliv Simsa’, in A. P. Okladnikov and D. M. Pinkhenson, eds., *Istoricheskiy pamyatnik russkogo arkticheskogo moreplavaniya XVII veka*, Leningrad and Moscow, Izdatel’stvo Glavsevmorputi, 1951, pp. 7–40.

- and D. M. Pinkhenson, ‘Znacheniiye nakhodok u vostochnogo poberezh’ya Taymyra’, in A. P. Okladnikov and D. M. Pinkhenson, eds, *Istoricheskii pamyatnik russkogo arkticheskogo moreplavaniya XVII veka*, Leningrad and Moscow, Izdatel’stvo Glavsevmorputi, 1951, pp. 205–12.
- Ostrovskii, B. G., *Velikaya severnaya ekspeditsiya*, Arkhangel’sk, Severnoye Izdatel’stvo, 1937.
- Romanov, D. M., *Kolumby Arktiki*, Tula, Priokskoye Knizhnoye Izdatel’stvo, 1982.
- Sokolov, A. P. ‘Severnaya ekspeditsiya 1733–43 goda’, *Zapiski Gidrograficheskogo departamenta*, 9, 1851.
- Spasskiy, I., ‘Denezhniy sklad’, in A. P. Okladnikov and D. M. Pinkhenson, eds, *Istoricheskii pamyatnik russkogo arkticheskogo moreplavaniya XVII veka*, Leningrad and Moscow, Izdatel’stvo Glavsevmorputi, 1951, pp. 112–29.
- Starokadomskiy, L. M., *Charting the Russian Northern Sea Route. The Arctic Ocean Hydrographic Expedition 1910–15*, Montreal and Kingston, McGill-Queen’s University Press, 1976.
- Sukhotskiy, V. I., ‘Novy sledy Ostrova Diomid v More Laptevykh,’ *Letopis’ Severa*, 6, 1972, pp. 291–5.
- Toll, E., ed., *Die Russische Polarfahrt der “Sarja” 1900–1902, aus den hinterlassenen Tagebüchern von Baron Eduard von Toll*, Berlin, Georg Reimer, 1909.
- Troitskiy, V. A., ‘Novye nakhodki na Ostrove Faddeya’, *Izvestiya Vsesoyuznogo Geograficheskogo Obshchestva*, 105(1), 1973, pp. 62–7.
- , ‘Geograficheskiye otkrytiya V. V. Pronchishcheva, Kh. P. Lapteva i S. I. Chelyuskina na Taymyre’, *Letopis’ Severa*, 7, 1975, pp. 78–92.
- , ‘Pamyatniki ekspeditsii’, in *Polyarnyy krug*, Moscow, “Mysl”, 1980, pp. 250–57.
- Vize, V. Yu., *Morya Sovetskoy Arktiki*, Moscow/Leningrad, Izdatel’stvo Glavsevmorputi, 1948.
- Witsen, N. C., *Nord en Oost Tartarye*, Amsterdam, 1707.

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