

= Last voyage of the Karluk =

The last voyage of the Karluk , flagship of the Canadian Arctic Expedition of 1913 ? 16 , ended with the loss of the ship and the subsequent deaths of nearly half her complement . On her outward voyage in August 1913 , Karluk , a brigantine formerly used as a whaler , became trapped in the Arctic ice while sailing to a rendezvous point at Herschel Island . After a long drift across the Beaufort and Chukchi seas , the ship was crushed and sunk . In the ensuing months , the crew and expedition staff struggled to survive , first on the ice and later on the shores of Wrangel Island . In all , eleven men died before help could reach them .

The Canadian Arctic Expedition was organised under the leadership of Canadian @-@ born anthropologist Vilhjalmur Stefansson , and had both scientific and geographic objectives . Shortly after Karluk was trapped , Stefansson and a small party left the ship , stating that they intended to hunt for caribou . As Karluk drifted from her fixed position it became impossible for the hunting party to return to the ship . Stefansson reached land and then devoted himself to the expedition 's other objectives , leaving the crew and staff on board the ship under the charge of its captain , Robert Bartlett . After the sinking , Bartlett organised a march to Wrangel Island , 80 miles (130 km) away . Conditions on the ice were difficult and dangerous ; two parties of four men each were lost in the attempt to reach the island .

After the survivors had landed , Bartlett and an Inuk companion set out across the ice for the Siberian coast , in search of help . The pair eventually reached Alaska , but sea ice conditions prevented any immediate rescue mission . On Wrangel Island , the stranded party survived by hunting game , but were short of food and troubled by internal dissent . Before their rescue in September 1914 , three more of the party had died , two of illness and one in violent circumstances .

Historians have divided views on Stefansson 's decision to leave the ship . Some of the voyage 's survivors were critical of his seeming indifference to their ordeal and the loss of their comrades . He escaped official censure , and was publicly honoured for his later work on the expedition despite the Canadian government 's reservations about its overall management . Although Bartlett was criticised by an admiralty commission for taking Karluk into the ice , he was hailed as a hero by the public and by his former Karluk shipmates .

= = Canadian Arctic Expedition = =

= = = Background = = =

The Canadian Arctic Expedition was the brainchild of Vilhjalmur Stefansson , a US @-@ based , Canadian @-@ born anthropologist of Icelandic extraction who had spent most of the years between 1906 and 1912 studying Inuit life in the remote Arctic Canada . His fieldwork had resulted in the first detailed information on the life and culture of the Copper Inuit , the so @-@ called " blond Eskimos " . Stefansson had returned home with plans for another expedition to continue his Arctic studies , and obtained promises of financial backing totalling US \$ 45 @,@ 000 (around US \$ 750 @,@ 000 in 2010) from the National Geographic Society (NGS) in Washington and the American Museum of Natural History in New York . However , he wanted to extend his plans to include geographical exploration in the Beaufort Sea , then a blank space on the world 's maps . For these expanded aims he needed more money , and approached the Canadian government for assistance .

The area known as the " High Arctic " was subject to claims of sovereignty not only from Canada , but also from Norway and the United States . The Canadian government was concerned that an American @-@ financed expedition would give the United States a legal claim to any new land discovered in the Beaufort Sea , so when the Canadian prime minister Robert Borden met Stefansson in Ottawa in February 1913 he offered to assume financial responsibility for the entire expedition . Borden 's government was hopeful that the expedition would strengthen Canada 's

claim to sovereignty over the Arctic islands . The American sponsors agreed to withdraw , subject to an NGS condition that the Society could reclaim its rights to the expedition if Stefansson failed to depart by June 1913 . This created a narrow deadline and hurried preparations for the journey north , although Stefansson maintained in his 1921 account that " forethought appeared to have anticipated every eventuality " .

= = = Objectives and strategy = = =

The Canadian government 's financial involvement represented a shift in the expedition 's emphasis , towards geographical exploration rather than the original purpose of ethnological and scientific studies . In a letter to the Canadian Victoria Daily Times , Stefansson set out these separate aims . The main object was to explore the " area of a million or so square miles that is represented by white patches on our map , lying between Alaska and the North Pole " . The expedition also aimed to be the most comprehensive scientific study of the Arctic ever attempted . While a Northern Party searched for new lands , a mainly land @-@ based Southern Party under zoologist Rudolph Anderson would carry out surveys and anthropological studies in the islands off the northern Canadian coast .

The Northern Party 's ship , Karluk , would proceed north from the Canadian coast until it either found land or was stopped by ice . It would explore any land it encountered ; otherwise it would follow the ice edge eastward and attempt to winter at either Banks Island or Prince Patrick Island . If the ship was trapped in the ice and forced to drift , the party would study the direction of Arctic currents and carry out oceanographic research . Meanwhile , Rudolph Anderson 's party was expected to continue with the anthropological studies of the " blond Eskimo " , to collect varieties of Arctic flora and fauna , to carry out geological research , and to seek open @-@ water channels in the hope of establishing new trade routes .

= = = Organisation and personnel = = =

Stefansson 's plan was to take the expedition to the old whaling station at Herschel Island off the Canadian Arctic coast , where the final composition of the Northern and Southern Parties would be decided and where equipment and supplies would be divided among the different strands of the venture . The haste to meet the NGS deadline led to concerns among the expedition 's members about the adequacy of the provision of food , clothing and equipment . Stefansson , who was largely absent in the hectic weeks immediately before sailing and who revealed few of his plans to his team , dismissed such concerns as " impertinent and disloyal " . There were disputes between Stefansson and the scientists over the chain of command ; the Canadian Geological Survey , which had provided four scientists to the expedition , wanted these men to report to them rather than to Stefansson . Southern Party leader Rudolph Anderson threatened to resign over Stefansson 's claim to the publication rights of all private expedition journals .

The scientific team , made up of some of the most distinguished men in their fields , included representatives from the United States , Denmark , Norway and France , as well as from Britain and its Empire . Only two , however , had previous polar experience : Alistair Forbes Mackay , the expedition 's medical officer , had visited Antarctica with Sir Ernest Shackleton 's Nimrod expedition in 1907 ? 09 , and had been one of the party of three to discover the location of the South Magnetic Pole . Another Nimrod veteran , the 46 @-@ year @-@ old James Murray , was Stefansson 's oceanographer . Among the younger scientists were William Laird McKinlay (1889 ? 1983) , a 24 @-@ year @-@ old science teacher from Glasgow who was recommended by the Scottish explorer William Speirs Bruce , and Bjarn Mamen (1893 ? 1914) , a 20 @-@ year @-@ old skiing champion from Christiania , Norway , who was taken on as a forester , despite lacking scientific experience .

Stefansson had wanted American whaling skipper Christian Theodore Pedersen to captain Karluk , the ship designated for the Northern Party . When Pedersen withdrew , the captaincy was offered to 36 @-@ year @-@ old Newfoundland @-@ born Robert Bartlett , an experienced polar navigator who had commanded Robert Peary 's ship on the latter 's 1909 polar expedition . Bartlett did not

have time , however , to select Karluk 's crew , which was hurriedly assembled from around the Royal Navy Dockyard at Esquimalt in British Columbia . McKinlay later wrote of the crew that " one was a confirmed drug addict ... another suffered from venereal disease ; and in spite of orders that no liquor was to be carried , at least two smuggled supplies on board . " McKinlay worried that this crew might lack the qualities and character necessary in the arduous months ahead , concerns shared by Bartlett , whose first act on arrival in Esquimalt was to fire the first officer for incompetence . In his place he appointed the 22 @-@ year @-@ old Alexander " Sandy " Anderson .

= = = Ships = = =

Karluk had been chosen by Pedersen and bought by Stefansson for the bargain price of US \$ 10 @, @ 000 . Stefansson was advised by Pedersen that , of four ships that were available , Karluk was " the soundest and best adapted for our purpose " , but Bartlett had deep reservations about her fitness for prolonged Arctic service . The ship , a 29 @-@ year @-@ old brigantine , was 129 feet (39 m) in length with a beam of 23 feet (7 @. @ 0 m) . She had been built for the Aleutian fishing industry (karluk is the Aleut word for " fish ") and later converted for whaling , when her bows and sides had been sheathed with 2 @-@ inch (51 mm) Australian ironwood . Despite 14 arctic whaling voyages , including six overwinterings , she had not been built to withstand sustained ice pressure , and lacked the engine power to force a passage through the ice . She did not match the expectations of Bartlett , or of many of the more experienced crew .

The ship spent most of April and May 1913 undergoing repairs and refitting at the dockyard in Esquimalt . When Bartlett arrived in early June he immediately ordered further repair work . In addition to Karluk , Stefansson had purchased sight unseen a small gasoline @-@ driven schooner , Alaska , to act as a supply ship for the Southern Party . He later added a second schooner , Mary Sachs , when the hold space in Alaska proved inadequate . In the confusion surrounding the expedition 's departure , McKinlay notes , no attempt was made to align men or equipment to their appropriate ships . Thus anthropologists Henri Beuchat and Diamond Jenness , both designated for the Southern Party , found themselves sailing with Karluk , while their equipment was on board Alaska . McKinlay himself , aboard Karluk as magnetic observer , discovered that most of his equipment was with Alaska . Stefansson insisted that all would be sorted out when the ships reached their Herschel Island rendezvous . " Heaven help us all if we failed to reach Herschel Island " , McKinlay wrote .

= = = Towards Herschel Island = = =

Karluk left Esquimalt on 17 June 1913 , sailing north towards Alaska . The immediate destination was Nome , on the coast of the Bering Sea . There was trouble from the beginning with the steering gear and with the engines , both of which needed frequent attention . On 2 July Karluk reached the Bering Sea in mist , fog and rapidly falling temperatures ; six days later she arrived at Nome where she joined Alaska and Mary Sachs . While the ships were being loaded in Nome , some of the scientists pressed for a meeting with the leader to clarify plans , particularly with regard to the Northern Party whose schedule was vague . The meeting was unsatisfactory . Stefansson 's attitude offended several of the men , some of whom threatened to leave the expedition . They had read press reports in which Stefansson had apparently said that he expected Karluk to be crushed , and that the lives of the staff were secondary to the scientific work . Stefansson would not explain these matters , nor give further details of his plans for the Northern Party . Despite the scientists ' alarm and dissatisfaction , none resigned .

At Port Clarence , just north of Nome , 28 dogs were taken on board before Karluk sailed north on 27 July . The next day she crossed the Arctic Circle , and almost immediately encountered rough weather which resulted in flooded cabins and seasickness . However , McKinlay noted that " whatever defects she had , Karluk was proving herself a fine sea @-@ boat . " On 31 July they reached Point Hope , where two Inuit hunters , known as " Jerry " and " Jimmy " , joined the ship .

On 1 August the permanent Arctic ice pack was seen ; Bartlett made several attempts to breach the ice , but each time was forced back . On 2 August , about 25 miles (40 km) from Point Barrow , Karluk thrust her way into the ice but was soon trapped , and drifted slowly eastward for three days before reaching open water off Cape Smythe . Meanwhile , Stefansson had left to travel over the ice to Point Barrow . He rejoined the ship at Cape Smythe on 6 August , bringing with him Jack Hadley , a veteran trapper who required passage east . Hadley , a long @-@ time acquaintance of Stefansson 's , was entered in the ship 's books as carpenter .

At Cape Smythe two more Inuit hunters , Keraluk and Kataktovik , joined the expedition , together with Keraluk 's family ? wife Keruk and their two young daughters Helen and Mugpi . As the voyage proceeded , Bartlett became increasingly anxious about the extent of ice in the area , and noted that the brass stemplates on the ship 's bow had already been damaged . Over the next few days Karluk struggled to make headway , as Bartlett took the ship northwards away from the coast , following channels of open water . The only scientific tasks of substance that could be carried out during this period were Murray 's dredging operations , through which he collected many species of Arctic sea life , and the regular depth soundings . On 13 August Bartlett calculated their position as 235 miles (378 km) east of Point Barrow , with a similar distance to travel to Herschel Island . However , this proved to be the ship 's farthest point east , as at that position she became firmly trapped in the ice and began to move slowly westward ; by 10 September Karluk had retreated nearly 100 miles (160 km) back towards Point Barrow . Shortly afterwards , Stefansson informed Bartlett that all hopes for further progress that year had ended , and that Karluk would have to winter in the ice .

= = In the ice = =

= = = Drifting west = = =

On 19 September , with Karluk ice @-@ bound and largely stationary , Stefansson announced that in view of the shortage of fresh meat and the likelihood of a long sojourn in the ice , he would lead a small hunting party that would search for caribou and other game in the area of the Colville River . He would take with him the two Inuit " Jimmy " and " Jerry " , the expedition secretary Burt McConnell , the photographer George Wilkins , and the anthropologist Diamond Jenness . Stefansson expected to be gone for about ten days ; Bartlett was instructed by letter that , if the ship should move from its present position , he should " send a party ashore , to erect one or more beacons giving information of the ship 's whereabouts . " The next day the six men departed . On 23 September , following a blizzard , the ice floe in which Karluk was trapped began to move , and soon the ship was travelling at between 30 and 60 miles (48 and 97 km) a day ? but to the west , steadily further from Herschel Island and from Stefansson 's party who , it soon became clear , would not be able to find their way back to the ship .

In an unpublished journal and later correspondence , McKinlay suggested that Stefansson 's departure amounted to abandoning the ship to its fate . The expedition 's historian S.E. Jenness (son of Diamond Jenness) rejects this view , pointing out that Stefansson and the hunting party members had left valuable property aboard Karluk ; a possible motive for the trip , Jenness surmises , was to train the younger staff . The anthropologist Gísli Pálsson , writing of the expedition , asserts that while the anger of Bartlett and the crew is understandable , there is no evidence that Stefansson deliberately abandoned the men . It is arguable , Pálsson says , that Stefansson acted responsibly in attempting to secure a supply of fresh meat which would counter the possibility of scurvy , should Karluk be trapped in the ice for a long time . The historian Richard Diubaldo writes " The evidence suggests that this was a normal hunting trip " and " ... there is strong evidence to suggest he [Stefansson] wished he had never left [the ship] " .

The constant snow and thick mists made it difficult for Bartlett to calculate the Karluk 's position accurately , although during a brief break in the weather on 30 September they glimpsed land which they took to be Cooper Island , in the vicinity of Point Barrow where they had been at the start of August . On 3 October the anxiety of crew and staff increased when , with Point Barrow just 5 miles

(8 km) distant , the drift turned northwards , away from the land . There were fears among some that Karluk would repeat the experience of the Jeannette , an American vessel that 30 years previously had drifted in the Arctic ice for months before sinking , with the subsequent loss of most of her crew . Bartlett became aware that Murray and McKay , the two veterans of Shackleton 's Nimrod expedition , were openly contemptuous of their captain 's leadership . They were making plans to leave the ship at an appropriate time , and head for land on their own .

As the weather grew worse Bartlett ordered supplies and equipment to be transferred on to the ice , both to lighten the ship and as a precaution should it be necessary to abandon the vessel in a hurry . Food supplies were augmented by seal hunts ? two or three seals a day was the average bag , according to McKinlay ? and by a single polar bear that had wandered near the ship in mid @-@ November . On 15 November Karluk reached 73 ° N , the most northerly point of its drift , and then began moving south @-@ west , in the general direction of the Siberian coast . By mid @-@ December the estimated position was 140 miles (230 km) from Wrangel Island . Despite the bleak outlook ? Bartlett was privately convinced that Karluk would not survive the winter ? a determined effort was made to celebrate Christmas , with decorations , presents , a programme of sports on the ice , and a banquet . By then they were just 50 miles (80 km) north of Herald Island , a rocky outpost east of Wrangel Island ; on 29 December land was visible in the distance , though whether this was Herald Island or Wrangel Island was not clear . The sighting of land briefly raised morale , but in the New Year the ice began breaking up and forming pressure ridges . Over the next few days , wrote McKinlay , " the twanging , drumming , ominous ice sounds got louder and nearer . "

= = = Sinking = = =

Early in the morning of 10 January 1914 , McKinlay records , " a severe shudder shook the whole ship " as the ice attacked the hull . Bartlett , still hoping to save his ship , gave orders to lighten her by removing all accumulated snow from the decks . He also ordered all hands to have warm clothing ready . At 6 @.@ 45 in the evening a loud bang indicated that the hull had been punctured ; Bartlett went immediately to the engine room and observed water pouring in through a gash 10 feet (3 @.@ 0 m) long . There was no possibility that the pumps could deal with the inflow , and the captain gave the order to abandon ship . Weather conditions , says McKinlay , could hardly have been worse , but the crew and staff worked throughout the night , in pitch darkness and driving snow , to add to the quantities of rations and equipment already stashed on the ice . Bartlett remained on board until the last moments , playing loud music on the ship 's Victrola . At 3 : 15 p.m. on 11 January , Bartlett put on Chopin 's Funeral March as a final salute to the ship , and stepped off . Karluk sank within minutes , her yardarms snapping off as she disappeared through the narrow hole in the ice . McKinlay took stock of the stranded party : 22 men , one woman , two children , 16 dogs and a cat .

= = = Shipwreck Camp = = =

Bartlett 's decision to deposit stores on the ice ensured that an ice camp , known as " Shipwreck Camp " , was more or less established by the time Karluk sank . Two shelters had been built , one a snow igloo with a canvas roof , the other constructed from packing cases . To the latter was added a kitchen with a large stove rescued from Karluk 's engine room . A small , separate shelter was built for the five Inuit , and a rough perimeter created from coal bags and assorted containers . In McKinlay 's words , the camp provided " substantial and comfortable houses on which we could rely for shelter for a long time . " Stores were plentiful , and the party was able to eat well . Much of the time in the first days of the camp was spent preparing and adjusting clothing and sleeping gear , in readiness for the forthcoming march to Wrangel Island . The ice drift was slowly moving the camp in the direction of the island , but as yet there was insufficient daylight to attempt the march .

Amid this activity Mackay and Murray , now joined by the anthropologist Henri Beuchat , played little part in the general life of the camp and expressed their determination to leave it , independently , as soon as possible . Bartlett wanted to wait for the longer daylight hours of February before attempting the march , but was persuaded by McKinlay and Mamen to send a trailbreaking group to set up an

advance camp on Wrangel Island . A party of four , led by Karluk 's first officer Alexander Anderson and including crew members Charles Barker , John Brady and Edmund Golightly , left Shipwreck Camp on 21 January with instructions from Bartlett to establish their camp at or near Berry Point on the north shore of Wrangel Island . On 4 February Bjarn Mamen , who accompanied the party as a scout , returned to Shipwreck Camp and reported that he had left the group a few miles short of land that was evidently not Wrangel Island , and was probably Herald Island , 38 miles (61 km) from their intended destination . This was the last sighting of Anderson 's party ; their ultimate fate was not established until ten years later , when their remains were found on Herald Island .

= = = March to Wrangel Island = = =

Bartlett decided to send a team back to establish the exact location of the island that the Anderson party had approached , and to determine if Anderson had actually landed there . An injury to his knee ruled Mamen out from this mission , which was undertaken by ship 's steward Ernest Chafe , with the Inuit pair , Kataktovik and Kuraluk . Chafe 's group came within 2 miles (3 km) of Herald Island before being stopped by open water . A careful examination through binoculars revealed no signs of the missing party , and Chafe concluded that Anderson and company had not reached the island . Chafe and his party then returned to Shipwreck Camp .

Meanwhile , on 4 February , Mackay and his group (Murray and Beuchat , joined by seaman Stanley Morris) announced they were leaving the next day , to seek land . Mackay presented Bartlett with a letter dated 1 February that began : " We , the undersigned , in consideration of the present critical situation , desire to make an attempt to reach the land . " The letter requested appropriate supplies , and concluded by emphasising that the journey was on their own initiative and absolving Bartlett from all responsibilities . Bartlett allocated them a sledge , a tent , six gallons of oil , a rifle and ammunition and food for 50 days . They left on 5 February ; the last sighting of them was a few days later , by Chafe and the Inuit , returning from their abortive trip to Herald Island . They found Mackay 's party struggling to make headway , with some of their provisions lost and clothing and other equipment discarded to lighten their load . Beuchat in particular was in a distressed state , nearly delirious and in the throes of hypothermia . However , the party refused assistance and rejected Chafe 's pleas that they return with him to Shipwreck Camp . Thereafter the only hint of their fate was a sailor 's scarf belonging to Morris , later found buried in an ice floe . It was assumed that the four had either been crushed by the ice , or had fallen through it .

Bartlett 's party now consisted of eight Karluk crew members (himself , engineers John Munro and Robert Williamson , seamen Hugh Williams and Fred Maurer , fireman George Breddy , cook Robert Templeman , and Chafe) , three scientists (McKinlay , Mamen and geologist George Malloch) , John Hadley , and five Inuit (the family of four and Kataktovik) . Hadley , nearing 60 years of age , was one of the few , along with Bartlett and the Inuit , with experience of travelling for distances over ice . Bartlett sent his forces out , in groups , to blaze a trail and lay down supply depots on the route to Wrangel Island , thus preparing his inexperienced party for the hazards of ice travel . When he felt they were ready for the main journey he divided them into four teams and sent the first two away on 19 February . Bartlett himself led the last two groups from the camp on 24 February , leaving a note of the party 's location in a copper drum in case the camp should drift into an inhabited area . The distance to Wrangel Island was estimated at 40 miles (64 km) , but the journey proved to be twice that in length .

The ice surface was very broken up , making travel slow and difficult . At first the parties were able to travel along a track that had been marked out by the advance parties . However , recent storms had destroyed much of the trail , and in places progress was held up by breaking ice which at one point almost wrecked Bartlett 's camp as his team slept . On 28 February all the parties came together in front of the first of a series of high ridges , from 25 to 100 feet (7 @. @ 6 to 30 @. @ 5 m) in height , that halted their progress . These stretched east and west , blocking any route to the island . McKinlay , Hadley and Chafe were sent on a risky journey back to Shipwreck Camp to pick up supplies that had been left there , while the rest slowly chopped and cut a pathway through the towering ridges . When McKinlay 's group returned to the main party a week later , the path forward

had been advanced by only three miles (5 km) , but the worst of the ridges had been overcome . Hadley claimed that the ridges were worse than anything he had seen in his long years of Arctic experience . The later stages of the journey were easier , as the group travelled over steadily smoother ice , and on 12 March they reached land , a long spit of sand stretching out from the northern shores of Wrangel Island .

= = Bartlett 's journey = =

Bartlett 's initial plan had been for the group to rest briefly on Wrangel Island and then to move on together to the Siberian coast . However , because three men ? Mamen , Malloch and Maurer ? were injured , and others were weak and frostbitten , Bartlett decided that the main party should remain on the island while he went for help taking only Kataktovik . The pair started off on 18 March , with seven dogs and provisions for 48 days (30 days for the dogs) , and took an extended route round the island 's southern shores to look for signs of Anderson 's or Mackay 's parties . After finding nothing , they headed across the ice towards Siberia , but progress was slow over a surface that was frequently shifting and breaking up to form leads of open water . More time was lost digging out their provisions from the steadily drifting snow . As they drew nearer to the mainland , Kataktovik became nervous ; he had heard that the Alaskan Inuit were disliked in Siberia by the native Chukchi people , and feared for his life . Bartlett did his best to reassure him as they moved slowly forward .

On 4 April the pair reached land near Cape Jakan , west of Cape North on the northern Siberian coast . The presence of sledge marks in the snow showed they had landed in an inhabited area . They followed these tracks for a day , before arriving at a small Chukchi village . Here , contrary to Kataktovik 's fears , they were received hospitably , and given shelter and food . On 7 April they set out for East Cape and the villages on the Bering coast . Bartlett had not previously experienced such relentlessly cold weather , with blizzards , hurricane @-@ force winds , and temperatures often below ? 50 ° C (? 58 ° F) . On the way they passed through other Chukchi villages , where Bartlett traded goods for necessary supplies ? he exchanged his Colt revolver for a young , strong dog . Bartlett was touched by the kindness and generosity shown by many of those they encountered on the way , " typical of the true humanity of these kindly people " . On 24 April they arrived at Emma Town , a settlement a few miles west of East Cape . Bartlett calculated that in the 37 days since leaving Wrangel Island , he and Kataktovik had travelled about 700 miles (1 @ , @ 100 km) , all but the last stage on foot .

At Emma Town Bartlett met Baron Kleist , a distinguished Russian official who offered to take him to Emma Harbour on the coast , a week 's journey away , where he could look for a ship to Alaska . Bartlett accepted , and on 10 May , though still weak from his journey and an attack of tonsillitis , said goodbye to Kataktovik (who was remaining for the time being in Emma Town) , and set off with the baron . On the way they learned that Captain Pedersen was in the area . On 16 May they reached Emma Harbour ; five days later Pedersen arrived in the whaler Herman and , without delay , took Bartlett on board and set out for Alaska . They arrived off Nome on 24 May , but ice prevented them reaching the shore . After three days ' waiting they turned south , and landed at St Michael , where Bartlett was at last able to send a radio message to Ottawa informing the government of Karluk 's fate . He also made enquiries about the whereabouts of the United States revenue cutter Bear , which he saw as a possible rescue vessel for the stranded party .

= = On Wrangel Island = =

The landfall from Shipwreck Camp had been on the north side of Wrangel Island , at a spot which they named " Icy Spit " . Before his departure , Bartlett asked the party to set up several camps around the island , which would increase the hunting areas . The captain also felt that separation into smaller groups would assist general harmony by keeping incompatible characters apart . He wanted all groups to reassemble at Rodgers Harbor , on the south side of the island , about the middle of July .

However , dissension broke out almost immediately after Bartlett 's departure over the sharing of

food . It had not been possible to drag all the supplies from Shipwreck Camp , and the trek had taken longer than expected ; consequently there were shortages of biscuit , pemmican (a compound of dried meat , fat and sugar) and dog food . There was little prospect of augmenting supplies by hunting birds and game until the weather improved in May or June . When Hadley and the Inuit , Kuraluk , returned from a seal hunt on the ice , Hadley was widely suspected of concealing the proceeds of the hunt for his own consumption ; the same pair were also accused of wasting scarce cooking oil . McKinlay records that the circumstances depressed morale and destroyed comradeship : " The misery and desperation of our situation multiplied every weakness , every quirk of personality , every flaw in character , a thousandfold . "

Two attempts were made to travel back to Shipwreck Camp to pick up extra food , but both failed , the second resulting in further losses of dogs and equipment . Chafe , whose feet had become gangrenous after severe frostbite , had his toes removed by second engineer Williamson , with improvised tools . McKinlay and Munro risked their lives by travelling over the sea ice towards Herald Island , in a final effort to locate either of the missing parties . They could get no nearer than 15 miles (24 km) , and from an examination of the distant island through binoculars could see no indications of life .

Other health problems persisted ; Malloch 's frostbitten feet failed to heal , and Mamen 's knee , which he had dislocated during the days at Shipwreck Camp , troubled him continuously . A worrying illness began to affect many of the party , the general symptoms were swelling of the legs , ankles and other body parts , accompanied by acute lethargy . Malloch was the worst affected ; he died on 17 May , but his tent mate Mamen was too ill to see to his burial , so the body lay in the tent for several days , creating a " frightful smell " , until McKinlay arrived to help . Mamen himself died ten days later of the same debilitating disease .

From early June the diet was augmented with the appearance of birds . These birds and their eggs became a vital source of food ; as the supply of seal meat dwindled to nothing , the party was reduced to eating rotten flippers , hide , or any part of a seal that was remotely edible . The sharing of birds became another bone of contention ; according to Williamson " Wednesday last , [Breddy and Chafe] really obtained 6 eggs and 5 birds instead of 2 eggs and 4 birds as they reported . " Breddy was suspected of other thefts . On 25 June , after a gunshot was heard , Breddy was found dead in his tent . The circumstances of his death , whether accident , suicide or in Hadley 's view , murder (with Williamson as the chief suspect) could not be determined . Williamson later called Hadley 's suspicions " hallucinations and absolutely untrue . " Various items stolen from McKinlay were found among Breddy 's personal effects .

Despite the sombre outlook , the Canadian flag was raised at Rodgers Harbor on 1 July in honour of Dominion Day . Later in the month the party 's spirits improved when Kuraluk caught a 600 @-@ pound (270 kg) walrus , which provided fresh meat for several days . As August came without sign of a ship and the weather began to turn wintry again , hopes of rescue fell ; the party began to prepare for another winter .

= = Rescue = =

The revenue cutter Bear arrived in St Michael , Alaska , midway through June . Her master , Captain Cochran , agreed to go to Wrangel Island as soon as he got permission from the United States government . It would be impossible , in any event , to attempt the rescue before mid @-@ July ; ice conditions in the Arctic that year were reported as severe . After receiving permission , Bear , with Bartlett aboard , left St Michael on 13 July ; the ship had many calls to make along the Alaskan coast before she could proceed with the rescue . On 5 August , at Port Hope , Bartlett met with Kataktovik and gave him his expedition wages and a new suit of clothing . At Point Barrow on 21 August Bartlett encountered Burt McConnell , Stefansson 's erstwhile secretary , who gave details of Stefansson 's movements after leaving Karluk the previous September . In April 1914 , McConnell reported , Stefansson had headed north with two companions , searching for new lands .

McConnell left Point Barrow for Nome aboard King and Winge , an American @-@ registered

walrus hunter , while Bear finally sailed for Wrangel Island . On 25 August Bear was stopped by ice 20 miles (32 km) from the island , and after failing to force a way through , Cochran had to return to Nome for more coal ? a decision which , says Bartlett , gave him " days to try a man 's soul " . Back in Nome Bartlett met Olaf Swenson , who had chartered King and Winge for the season and was about to sail for Siberia . Bartlett requested that , if possible , King and Winge stop by Wrangel Island and look for the stranded Karluk party . Bear left Nome on 4 September , a few days after Swenson 's ship . King and Winge , with McConnell still aboard , reached Wrangel Island on 7 September . That morning the group at Rodgers Harbor were awakened early in the morning by the sound of a ship 's whistle , and found King and Winge lying a quarter of a mile offshore . They were rapidly transferred to the ship , which then picked up the remainder of the stranded party who were camped along the coast at Cape Waring . By the afternoon all 14 survivors were aboard .

After a futile attempt to approach Herald Island , the ship began the journey back to Alaska ; next day she encountered Bear , with Bartlett aboard . McConnell records that the party were unanimous in their desire to remain with the ship that had effected their rescue , but Bartlett ordered them aboard Bear . Before returning to Alaska , Bear made a final attempt to reach Herald Island ; ice limited their approach to 12 miles (19 km) , and they saw no signs of life . The reunited party arrived at Nome on 13 September , to a great welcome from the local population .

= = Aftermath = =

Bartlett , celebrated as a hero by press and public , was honoured for " outstanding bravery " by the Royal Geographical Society . However , he was later censured by an admiralty commission for taking Karluk into the ice , and for allowing Mackay 's party to leave the main group ? despite the letter that Mackay and the others had signed , absolving the captain from responsibility . Stefansson , too , was privately critical of Bartlett 's conduct . Bartlett resumed his career at sea , and over the next 30 years led many more excursions to the Arctic . During the Second World War he carried out surveying and supply work for the Allies ; he died , aged 70 , in April 1946 . His account of the Karluk disaster , published in 1916 , makes no direct criticism of Stefansson or anyone else ; Niven records , however , that to his friends Bartlett was highly uncomplimentary about his former leader .

In 1918 Stefansson returned after four years ' absence , reporting the discovery of three new islands . He was honoured by the National Geographical Society , received tributes from polar veterans such as Peary and Adolphus Greely , and was given the presidency of the Explorers Club of New York . In Canada his reception was more muted ; there were questions relating to the overall costs of the expedition , its poor initial organisation , and his handling of the Southern Party which , under Rudolph Anderson , completed its work independently of Stefansson . Anderson and other members of the Southern Party later petitioned the Canadian government to investigate statements made by Stefansson in his 1921 book *The Friendly Arctic* , which they felt reflected poorly on their honour . The request was declined on the ground that " no good could come of the enquiry . " In his book Stefansson takes responsibility for the " bold " decision to take Karluk into the ice rather than hugging the coast on the way to Herschel Island , and accepts that he " chose the wrong alternative " . However , McKinlay felt that the book gave an inaccurate account of the Karluk voyage and its consequences , " putting the blame ... on everyone but Vilhjalmur Stefansson . " The historian Tom Henighan believes that McKinlay 's biggest complaint against his leader was that " Stefansson never at any time seemed able to express an appropriate sorrow over his lost men . " Stefansson , who never returned to the Arctic , died in 1962 at the age of 82 .

The fate of First Officer Alexander Anderson 's party remained unknown until 1924 , when an American vessel landed at Herald Island and found human remains , with supplies of food , clothing , ammunition and equipment . From these artefacts it was established that this was Anderson 's party . No cause of death was established , though the plentiful unconsumed supplies ruled out starvation . One theory was that the tent had blown away in a storm and that the party had frozen to death . Another was carbon monoxide poisoning within the tent .

The mystery illness which affected most of the Wrangel Island party and accelerated the deaths of Malloch and Mamen was later diagnosed as a form of nephritis brought about by eating faulty

pemmican . Stefansson explained this by saying that " our pemmican makers has failed us through supplying us with a product deficient in fat . " Peary had emphasised that a polar explorer should " give his personal , constant and insistent attention " to the making of his pemmican ; McKinlay believed that Stefansson had devoted too much time selling the idea of the expedition , and too little ensuring the quality of the food that its members would depend upon .

Of the survivors , Hadley continued working for the Canadian Arctic Expedition , becoming second officer and later master of the supply ship Polar Bear . He died of influenza , in San Francisco in 1918 . Hadley and McConnell wrote accounts of their experiences for Stefansson , who incorporated them in *The Friendly Arctic* . Chafe also wrote and published a short account . Most of the others quickly returned to relative obscurity , but in 1922 Fred Maurer was persuaded by Stefansson to join an attempt to colonise Wrangel Island . To the embarrassment of the Canadian government , Stefansson insisted on going ahead , even though Wrangel Island was indisputably part of what had then become the Soviet Union . A party of five , including Maurer , was sent to the island ; only one , an Inuit woman Ada Blackjack , survived . Despite their ordeal , many of the Karluk survivors lived long lives ; Williamson , who declined to speak or write of his experiences in the Arctic , lived to be 97 , dying in Victoria , Canada , in 1975 . McKinlay died in 1983 , aged 95 , having published his account of the expedition in 1976 . Kuraluk , Kuruk and their daughters , Helen and Mugpi , returned to their former life at Point Barrow . The two girls , says Pálsson , had provided " important sources of cheer at the darkest moments . " Mugpi , who later was known as Ruth Makpii Ipalook , became the very last survivor of the Karluk voyage , dying in 2008 after a full life , aged 97 .

= = Published voyage accounts = =

Six first @-@ hand accounts of Karluk 's last voyage have been published . These include Stefansson 's account which only covers the June to September 1913 period . Expedition secretary Burt McConnell wrote an account of the Wrangel Island rescue which was published in *The New York Times* , 15 September 1914 . A version of McConnell 's account appears in Stefansson 's book .