

The polar ship *Frithjof*

Kjell-G. Kjær

Torsvåg, 9136 Vannareid, Norway (kkjaer@online.no)

Received January 2006

ABSTRACT. *Frithjof* participated in several North Pole expeditions between 1898 and 1907 and was also involved in several relief expeditions. Her most frequent commander was Captain Johan Kjeldsen, who was an internationally famous ice pilot. *Frithjof* was built in 1884 at Stokke on Oslo fjord, Norway. After being employed in the sealing trade for some years, *Frithjof* was sold to an Icelandic concern. In 1891 she returned to Norwegian ownership and, in 1898, was chartered for Walter Wellman's North Pole expedition of the years 1898–1899. In 1900, she was the expedition ship for the Kolthoff expedition to Greenland, Spitsbergen and Jan Mayen. Between 1901 and 1904 she was engaged in Ziegler's North Pole expeditions both as expedition ship and as relief vessel. In 1903 the Swedish government chartered *Frithjof* in order to search for the Nordenskjöld expedition in the Antarctic. In 1906–7 the ship was again chartered for Wellman's North Pole airship expeditions. In late September 1907, *Frithjof* sailed from Tromsø on a relief expedition to search for *Laura*, an expedition vessel to Greenland that had not been heard of for three months. On 5 October 1907 she was lost in a storm off Iceland and only one man survived from her crew of 17.

Contents

Introduction	281
Early years of sealing and whaling	281
A polar ship	281
Captain Johan Kjeldsen	282
The Wellman North Pole expedition, 1898–99	282
Kolthoff expedition to Greenland, Spitsbergen and Jan Mayen	283
Tender for the Baldwin-Ziegler North Pole expedition 1901	284
Relief expedition to Svalbard, November 1901	285
Relief expedition to Franz Joseph Land 1902	285
Relief expedition to Antarctica in 1903	286
Relief expedition to Franz Joseph Land, 1904	286
Expedition to Svalbard late 1905	287
The first Wellman airship expedition, 1906	287
The second Wellman airship expedition, 1907	287
<i>Frithjof's</i> last voyage	288
Acknowledgements	289
References	289

Introduction

Frithjof is not one of the most famous polar vessels but, during her 10 years as an expedition ship, she was engaged in three North Pole expeditions, one scientific expedition to high latitudes, five relief expeditions to the Arctic and one relief expedition to the Antarctic. This paper describes the history of this remarkable vessel and her role in these expeditions.

Early years of sealing and whaling

Frithjof (Fig. 1) was constructed by Ole Ellefsen of Tønsberg, Norway. She was built at his shipyard, Skjærnsnæs Skibsverft A/S, at Stokke on the west coast of Oslo fjord. Her dimensions were 121.4 × 25.9 × 12.9 feet. She was 259.8 gross tons and 139 net tons. She was built of oak and pine, had one main deck and a raised

quarterdeck. There were three masts and she was originally rigged as a barquentine. The vessel was equipped with a two cylinder 50 hp steam engine at Nyland Verksted, Christiania (Oslo). She was owned by Rederiselskabet *Frithjof* of Tønsberg, a company managed by her constructor.

In 1885 she joined the large Tønsberg sealing fleet but this activity from southern Norwegian ports was already in decline and *Frithjof* had no success (Sørensen 1912). In 1891, she was transferred to Ellefsens' whaling station at Ønundarfjord on the northwest coast of Iceland. Icelandic regulations required that whaling from Icelandic ports could only be done by Icelandic citizens living in Iceland. Moreover, the vessels being used had to be registered in Denmark or Iceland. *Frithjof* was therefore transferred to the Icelandic ship register and her ownership was transferred from Ole Ellefsen to his brother Hans Ellefsen, who had become an Icelandic citizen. For seven years, *Frithjof* was engaged in Iceland with Captain Lars Iversen as her master. She transported whale oil from Iceland to England and returned with coal from Newcastle. In Iceland she worked mainly as a tug, towing whales from whaling vessels out at sea to the whaling stations on land (Det Islandske Skibsregister 1895).

A polar ship

In 1898, Hans Ellefsen sold *Frithjof* to Aktieselskabet *Frithjof* of Christiania, a company owned by Johannes Giäver owner of the Anglo-Norwegian Whalefishing Co. at Skorøy north of Tromsø (Bill of sale 1898). Giäver's aim in purchasing *Frithjof* was to equip her for exotic hunting expeditions to the Arctic and to charter her to wealthy people. He transferred her to his son, Magnus K. Giäver, who owned and managed Arctic Sport Bureau A/S, Christiania and who equipped her with good cabin facilities, a large saloon aft and a library and changed her rig to that of a barque. Her first master in Giäver's ownership was Captain Henrik Næss. The previous year

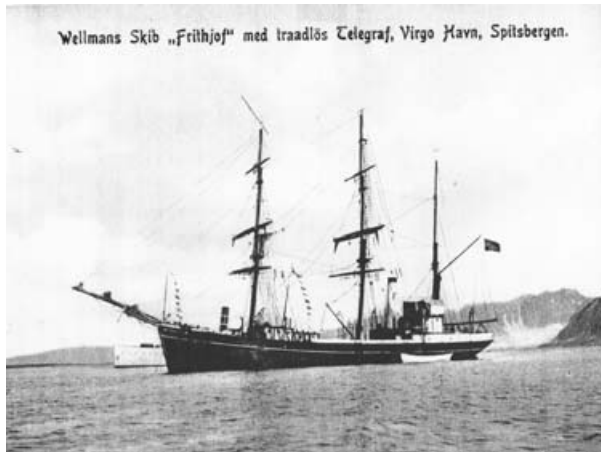


Fig. 1. *Frithjof* was engaged in three North Pole expeditions, relief expeditions to the Polar regions and one polar scientific expedition. Photo from 1906 when she had a wireless installed (Courtesy of Norsk Polar Institutt, Tromsø).

he had been ice pilot on Sir Robert Baden Powell's yacht *Otaria* during a voyage to Novaya Zemlya to observe a total solar eclipse.

Frithjof maintained a busy schedule. Every June she sailed to the Arctic, often chartered as an exploration ship and in September she sailed to the British-Norwegian whaling station at Skorøy, which was managed by Giäver senior, and collected barrels of whale oil and whalebone for export. In the autumn of each year, she was docked at Trondheim for maintenance and repairs and then carried timber to north Norway before being laid up in Tromsø until the early summer of the following year (*Tromsø Tollsted Vaktjournal 1897–1907*).

Captain Johan Kjeldsen

In 1898, Captain Johan Kjeldsen, (Fig. 2) who had already achieved international fame as an ice pilot and as an outstanding Arctic skipper, signed on as *Frithjof*'s master. Born in 1844, he made his first voyage to the Arctic at the age of 13. In 1871, he was the master of the sloop *Isbjørnen* on the Austrian Arctic expedition lead by Julius Payer and Karl Weyprecht. In the following year *Isbjørnen*, with Kjeldsen as captain, was chartered by Count Wilczek. The expedition laid depots for the famous *Tegethof* expedition, and after the voyage Kjeldsen and his wife were invited to visit the Count at his country seat at Franenbad.

He then sailed for some years as a sealing master and, in 1876, he rediscovered Kvitøya (White Island) at 80° 14' N, 32° 1'E, which had originally been discovered by Cornelis Giles in 1707 (Holland 1994: 84, 298). In 1894, Kjeldsen was *Saide*'s ice pilot on Feilden and Parker's voyage to Spitsbergen and 1896 he was the *Saxon*'s captain on Henry Pearson's expedition to the Russian Arctic. The following year he was captain of Giäver's *Laura* on Pearson's expedition to Novaya Zemlya and Vaygach Island.



Fig. 2. Capt. Johan Kjeldsen, master of *Frithjof*, was decorated for bravery at sea after a successful relief voyage to Isfjord, Svalbard, in November 1901.

From 1898 until 1904, he was master of *Frithjof* on several polar expeditions and in 1901 he was decorated for bravery at sea. In 1905 he was the master of *Terra Nova*, the vessel of Scott's last expedition, on a successful relief expedition to Franz Joseph Land. He was for some years ice pilot on tourist steamers in the Arctic and, in 1907, he sailed on board Prince Albert of Monaco's yacht *Princesse Alice*. He died in Tromsø in 1909.

The Wellman North Pole expedition, 1898–99

The American explorer Walter Wellman made several attempts to reach the North Pole. His first attempt was in 1894. However, in May of that year, his ship *Ragnvald Jarl* sank at Walden Island, north of Spitsbergen. In 1898, Wellman began a new attempt and chartered *Laura*, with Kjeldsen as captain. *Laura* proved to be insufficiently large for Wellman's purposes, and was therefore replaced by *Frithjof*, again with Kjeldsen in command. Wellman and Evelyn B. Baldwin, his second in command, arrived in Tromsø on 11 June 1898 (Fig. 3). Four days later *Frithjof* sailed for Archangel where some 80 dogs and housing material were taken on board. From there the voyage continued to Franz Joseph Land. On 7 July, the expedition met difficult ice at 77° N and *Frithjof* had to return to Vardø to replenish her coal supply (Fig. 4).

Returning to Franz Joseph Land, on 20 July *Frithjof* met the sealer *Victoria*, a steam vessel owned by the British explorer Arnold Pike. *Victoria* took her mail for



Fig. 3. Wellman expedition onboard *Frithjof* in 1898: From left standing: Andr. Aagaard, (Wellman's agent in Norway), E. Baldwin, unknown, Walter Wellman (in white jacket), Captain Kjeldsen, Magnus Giäver (*Frithjof*'s owner), unknown.



Fig. 4. *Frithjof* in the Arctic Ice. The Wellman expedition 1898. (Courtesy of Reidar Stenersen, Tromsø.)

posting in Norway. On 28 July, they approached Cape Flora named by 'an English expedition that had been here earlier' (Bjørvig 1909). They also visited one of the depots of Salomon August Andrée established to support his ill fated attempt to reach the North Pole by balloon. The expedition visited Benjamin Leigh-Smith's hut in which he and his crew had wintered in 1881–82 after the destruction of their ship *Eira*. This was the English expedition referred to by Bjørvig (Holland 1994: 328–329). *Frithjof* then continued to Hall Island where, on 3 August, the crew started to carry *Frithjof*'s cargo ashore (Bjørvig 1909).

After having discharged her cargo, *Frithjof* sailed along the coast engaged in sealing and hunting walrus before continuing to Kong Karls Land. On 12 August, A.G. Nathorst's expedition from Cape Altman spotted a sailing ship far out at sea and hoped that it was *Frithjof* (Nathorst 1900). Nathorst's intention had been to take his ship *Antarctic* to Franz Joseph Land to search for Andrée's

expedition and he hoped that Kjeldsen could inform him about the condition of the ice. Kjeldsen informed him that he had been attempting sealing all along the south coast of Franz Joseph Land. He had also visited Andrée's depot and he doubted that *Antarctic* would be able to penetrate the ice or reach Cape Flora because of her weak engine. Fog had prevented sealing at Franz Joseph Land and Kjeldsen therefore decided to sail *Frithjof* back to Kong Karls Land. On 30 September, *Frithjof* finally arrived in Tromsø with a catch of 44 walrus, 14 polar bears, 22 seals and a huge fossil tree root found, by Kjeldsen in Franz Joseph Land, and which was subsequently given to Tromsø museum (Bjørvig 1909).

The original plan had been for *Frithjof* to return to Franz Joseph Land during the next summer to bring the Wellman expedition back to Norway but the Swedish owners of *Capella*, the sister ship of Nordenskiöld's *Vega*, underbid *Frithjof*. Arthur, Walter Wellman's brother, chartered *Capella* and collected the expedition.

Kolthoff expedition to Greenland, Spitsbergen and Jan Mayen

In 1900, *Frithjof*, with Kjeldsen as master and a crew of 17 Norwegians, was chartered by the Swedish explorer Gustav Kolthoff for an expedition to East Greenland, Spitsbergen and Jan Mayen (Fig. 5). Kolthoff had sailed as taxidermist and zoologist on Nordenskiöld's expedition in *Sofia* to Greenland in 1883 and on Nathorst's expedition to Svalbard on board *Antarctic* in 1898. On 15 May *Frithjof* sailed from Christiania to Trondheim where members of the expedition had arrived by train from Sweden. The voyage continued to Tromsø. The original plan was for *Frithjof* to sail as far north as possible before crossing to northeast Greenland. She carried provisions for 14 months in case they were forced to overwinter (*Tromsø Stiftstidene* May 1900). *Frithjof* left Tromsø on 1 June and stopped at the whaling station at Skorøy to take on coal and fresh water.

While *Frithjof* lay at anchor at Skorøy another Arctic exploring vessel, the little steamer *Express* under



Fig. 5. In 1900 *Frithjof* was the expedition ship for Kolthoff expedition to Greenland, Jan Mayen and Spitsbergen. Gustav Kolthoff in front of mast. Capt. Kjeldsen sitting next to him.

Captain Søren Johannesen, came alongside with a German hunting party consisting of Captain Roth, Dr. Berger and Count Zedliss. The German expedition was invited on board *Frithjof* before she sailed north (Roth and others 1902).

1900 was a severe ice year. On 6 June, ice was met 10 nm from Bjørnøya (Bear Island) and this prevented a landing. Kjeldsen recorded that he had hardly before seen so many seals on the ice and in the water and never so much snow at Svalbard (Kjeldsen 1900). The expedition had planned to visit both Advent Bay and Green Harbour but the fjords were blocked with ice. The ship moored at the ice edge at Green Harbour while the expedition used the steam launch for an excursion. On 15 June, a serious fire broke out above the engine room where the doctor had his laboratory. An oil lamp had exploded and the room caught fire. The fire was extinguished by the engineers but Kjeldsen, who came into the engine room to survey the situation, was nearly asphyxiated. The fire so seriously damaged both the engine and the engine room that repairs had to be carried out before the voyage could continue. An attempt to tow a trawl at the mouth of Green Harbour failed when the net became tangled in the propeller. *Frithjof* returned to Green Harbour under sail for repairs.

Then *Frithjof* sailed north to Fuglesangen at the northwest tip of Spitsbergen, before setting course for northeast Greenland using sails to economise on fuel. On 8 July, she passed through a narrow lead into heavy pack-ice. Captain Kjeldsen was uncomfortable with the situation and Kolthoff wrote: 'The *Frithjof*, the fine high-rigged ship, here seemed to me like a mosquito, which the forces of nature might crush at any moment' (Liljequist 1993: 297).

They reached Cape Broer Ruys and on 31 July *Frithjof* anchored in Myggbukta (Mackenzie Bay) before proceeding north to Sabine Island to inspect and to deliver letters to Otto Sverdrup's depot which had been laid out there the previous year. Sverdrup wintered between 1898–1902 in the southern part of Ellesmere Island and had made an agreement with the Swedish explorer Nathorst that the latter should lay out a depot at Sabine Island. Here they met the sealer *Cecilie Malene* about to start homeward with four live musk ox calves that were later sold to London Zoo.

Frithjof weighed anchor and sailed into Moskusfjorden to catch live musk oxen for release in Sweden. The crew attempted to drive animals towards a net held up by sticks on a hillside (Solvang 1947). But the herd stopped close to the net and a bull skewered it with his horn, smashed the sticks and collapsed the whole thing. The bull was shot but a cow trapped by her feet in the net rolled downhill and was captured and taken onboard *Frithjof* but died the following day. Two calves were also captured alive and carried on board.

On 23 August, *Frithjof* sailed from Franz Joseph Fjord to Myggbukta where ballast was taken onboard. By then it was time to leave. Large ice floes had begun

to drift into the bay in addition to which the ship had to manoeuvre through recently formed ice. On 26 August, *Frithjof* steamed into open water and on 3 September she sailed into Trondheim from whence the expedition returned to Sweden by train.

Early in October her crew signed off and *Frithjof* was laid up until she was employed by the Baldwin-Ziegler North Pole expedition.

Tender for the Baldwin-Ziegler North Pole expedition 1901

In 1901 the Baldwin-Ziegler expedition had three ships at their disposal: *America*, *Belgica* and *Frithjof* again under Kjeldsen's command. *Belgica*, which had recently been the first ship to winter in the Antarctic, sailed to northeast Greenland to lay a depot and build houses for the expedition's return from the pole.

America sailed from Tromsø to Vardø where she took onboard dogs from Russia before continuing to Franz Joseph Land. The leader of the expedition was E. B. Baldwin, who had been the deputy leader of Wellman's 1898 expedition.

According to Kjeldsen, an agreement was made that *Frithjof* could hunt walrus and seals before proceeding to Cape Hofer on Franz Joseph Land to join *America* and discharge her cargo. On 8 August, off Cape Flora, they spoke to the Russian ice breaker *Yermak* which had sailed from Novaya Zemlya. *Frithjof* had caught 50 walrus, 9 polar bears and some seals as food for the expedition's dogs (Fig. 6). They met *America* on 14 August after the latter had spent time searching along the coast for *Frithjof* (Kock 1980). There had not only been a misunderstanding about where the two vessels should meet but the charts onboard *America* and *Frithjof* were neither accurate nor corresponded.

Ejnar Mikkelsen, a member of the expedition and himself soon to be famous as an expedition leader, ice navigator and author later stated what happened when *America* finally met *Frithjof* at Cape Hofer. Baldwin had openly put the blame for the failure of the two vessels to meet earlier on Kjeldsen. Kjeldsen took him into a cabin on board *America* and after a short time



Fig. 6. In 1901 the crew killed 50 walrus as food for the dogs for the Baldwin-Ziegler expedition. (Courtesy of Odd Magnus Heide Hansen, Tromsø).

everyone on deck could hear a heated discussion going on behind the door. Kjeldsen finally stormed out of the cabin, marched across the deck past barking dogs, kicked some boxes and jumped on board *Frithjof* from where he gave Baldwin 'a lecture in leadership' (Kock 1980). After having dispatched her cargo *Frithjof* immediately returned to Tromsø arriving on 30 August.

Relief expedition to Svalbard, November 1901

The information about this relief expedition is based on an interview with Eilert Hansen, helmsman on the voyage, made by the historian Jens Solvang (Solvang 1947) and the *Frithjof*'s logbook (Isachsen 1919).

In the summer of 1901, some men had sailed in the smack *Petrell* to Green Harbour and Advent Bay in Svalbard, to catch and can Arctic char. They did not return. *Petrell*'s owner, master and expedition leader was Captain Søren Zakariassen who had participated in the voyage of the vessel *Jan Mayen*, under Captain Elling Carlsen that had rediscovered Kong Karls Land in 1859 (Isachsen 1919). Zakariassen had also discovered coal on Spitsbergen in 1862. Kjeldsen and Zakariassen were close friends and neighbours.

On 7 November, the Norwegian Government chartered *Frithjof* for NOK 20,000 (NOK 1 million at present costs) to sail to Svalbard and bring the expedition home. The rescue operation, attracted great public attention. 'Experts' considered it had little chance of success so late in the year. Kjeldsen certainly recalled that, late in December 1872, he had sailed to Isfjorden in the sloop *Isbjørnen* in a vain attempt to rescue 17 Norwegians. Zakariassen had been his mate on that voyage. *Isbjørnen* was forced to return and all 17 were found dead the following summer (Holland 1994: 289).

Frithjof sailed from Tromsø on 10 November 1901. Kjeldsen had a hand-picked crew of fourteen, including several experienced sealing masters. For the men at Advent Bay the situation was critical. *Petrell* had hit an ice floe during a westerly storm and had sunk while the men were away hunting reindeer. They were trapped at 78°10'N, 15°10'E with little food and no winter clothes as all their provisions and equipment had gone down with the smack.

West of Bear Island, *Frithjof* met heavy seas and a northeast wind. Sails set in an attempt to bring the vessel up against the wind were blown to tatters. The sluice ports froze and the deck filled with water. The bolts that fastened the boiler armature to the deck loosened and water poured into the engine room. The engine room skylight was damaged and the pumps stopped. After the pumps were repaired and the skylight was sealed, Kjeldsen gathered the other masters to discuss what to do. The final decision being left to him, he resolved to try one more time. They managed to turn the ship despite a ferocious storm. The temperature sunk below minus 20°C and *Frithjof*'s deck and rigging were covered with ice. Ropes and tackle for the boats were put into barrels of brine. They passed Bellsund and, on 19 November,

made their landfall at Daudmannsøyra before sailing into Green Harbour. Here they could not get the anchors out because the winch was frozen in a lump of ice. The solution was to wrap it up in paraffin soaked cloths and set it alight. 'Like a fire-breathing iceberg, *Frithjof* moved slowly between Alkhornet and Green Harbour' (Solvang 1947) lighting up both sides of the fiord. Kjeldsen turned to the helmsman and said: 'Now we should have had a photograph of *Frithjof*. That would be a magnificent!' They used searchlights, sent up rockets but found no one in Green Harbour so the voyage continued to Advent Bay. Zakariassen and this crew were found in poor condition, frost-bitten on their hands and feet and dressed in oilskins in an attempt to protect themselves from the cold, but they were saved. On 24 November they made landfall in Norway at Magerøya (North Cape). The following day they sailed into Honningsvåg, from where a telegram was sent to the county governor. The local brass band came onboard *Frithjof* by the governor's order and played for the crew before they sailed to Tromsø that they reached the following day. After the voyage Kjeldsen was decorated for his bravery.

Relief expedition to Franz Joseph Land 1902

In 1901, the Baldwin-Ziegler Expedition had sailed to Franz Joseph Land with *America* and *Frithjof*. An agreement was made that the following year a ship would be sent to Cape Flora to contact the expedition. In June 1902, William Ziegler's secretary, William Camp, had come to Tromsø and had chartered *Frithjof*, to be captained by Kjeldsen, 'for a relief expedition to Franz Joseph Land' (Giäver 1944). The owner, Magnus Giäver, was invited by Camp to sail with the expedition. The information about this voyage in 1902 is based mainly on Giäver (1944) and on Kjeldsen's report (Kjeldsen 1902).

Besides William Camp and Magnus Giäver, Dr. George Shorkley, Ziegler's dog expert, Pierre Le Royer and Francis Long sailed with the expedition (Giäver 1944: 25). *Frithjof* took on board coal for both her own use and for *America* that had burned more coal than budgeted for in 1901. The plan was to sail *America* back to Norway in the event that Baldwin had left the expedition ship for the North Pole. Six of the men who sailed with *Frithjof* were intended to winter on Franz Joseph Land in case the expedition was not found (*Tromsø Stiftstidende* 26 June 1902).

On 1 July, *Frithjof* sailed from Tromsø for Vardø with a crew of 20 men. In Vardø, 34 dogs were brought on board 'in case the expedition had to be relieved by sleighs' (Giäver 1944) together with a great quantity of dried fish for the dogs. Shortly after entering the ice *Frithjof* was stopped by the sealer *Freya* and was asked if the expedition had a doctor onboard. The sealer *Lydia* had a seriously wounded man who needed medical treatment. The patient was the cook, a boy of thirteen who had been scalded by boiling water. The coffee table in *Frithjof*'s saloon was turned into an operating table on which Dr. Shorkley treated the patient (Giäver 1944: 26).

On the voyage north the passengers shot 34 polar bears and some seals. One day they heard a strange noise through the fog from the ice. Kjeldsen believed this to be probably seals and the engine was stopped. Through the mist they could see 'Frithjof surrounded by seals on all floes' (Giäver 1944). The passengers and the crew made ready for a rich kill but then all the dogs started barking, scared the seals and the catch was poor. *Frithjof* was stopped by ice. On 30 August after a fruitless week spent butting the ice edge a decision was made to return to Tromsø (Giäver 1944: 35–36).

In the meantime, *America* had returned to Tromsø. She had left Franz Joseph Land in late July and had arrived in Honningsvåg on 1 August where Captain Carl Johanson went ashore and sailed to Tromsø with the coastal steamer. Baldwin had replaced him with the first mate Johan Menander. Johanson sent several telegrams, including one to the American Embassy in Oslo. After a few days, a telegram from the Embassy ordered *America* to remain in Tromsø and wait for the return of William Camp in *Frithjof*. (*Tromsø Stiftstidende* August 1902.)

On 5 September, *Frithjof* anchored in Tromsø and in the following months Johanson, Menander and others made public the trouble that had taken place onboard *America* even before the expedition had left Dundee. (*Tromsø Stiftstidende* September–October 1902) The following year Anthony Fiala replaced Baldwin and *America* returned to Franz Joseph Land with the Fiala-Ziegler expedition.

Relief expedition to Antarctica in 1903

In May 1903, *Frithjof* was chartered by the Swedish Government for a relief expedition to Antarctica to search for Otto Nordenskiöld's expedition on *Antarctic*.

Hans O. F. Gylden, who knew the Antarctic well, was *Frithjof*'s master. He had been the master of *Antarctic* in 1901 on the De Geer expedition to Spitsbergen. Axel Blom, who had been second-in-command of *Antarctic* in 1901, was now *Frithjof*'s second in command. The expedition's doctor, Jacob Torgesruud, had also sailed in *Antarctic* in 1901. Among the officers were S. R. Bergendahl who later was to sail as the deputy expedition leader on *Belgica* in 1905 and 1907. Axel Klinckowström, a paying member of the expedition, had sailed onboard *Lofoten* on Adolf Erik Nordenskiöld's Arctic expedition in 1890. *Frithjof* was chartered with the option of purchase of the vessel in the event of overwintering and provisions for three years were taken on board.

Frithjof sailed from Stockholm on 18 August and reached Buenos Aires on 30 October. She continued to South Shetland but arrived almost a month too late to take part in the evacuation of Nordenskiöld's expedition. Blom, Bergendahl and Klinckowström left the ship by sledge and reached Nordenskiöld's base at Snow Hill Island where they found a note left by the Argentine vessel *Uruguay* explaining that the base had been evacuated and the Nordenskiöld expedition had been saved.

On her northward voyage, *Frithjof* ran into a terrifying storm off Staten Island and was close to being wrecked and the situation was desperate (Liljequist 1961: 375). It seems that the problem was the same as had occurred on her relief expedition to Isfjorden in November 1901 and was to occur again when she was wrecked in 1907. It was probably a weakness in her construction. Water flowed into the engine room after the bolts that fastened the boiler armature to the deck loosened. When the engine stopped, the pumps stopped working because the deck pump and the engine pump were both driven by steam from the same boiler tubing that delivered steam to the winches (Giäver 1944). The ship managed to reach Staten Island under sail. The lashings that had wrapped zoological collections on the deck had loosened and all the specimens were lost. The relief expedition finally reached Gothenburg in the beginning of April 1904.

After *Frithjof* had returned to Norway, a long dispute started between Magnus Gäver and Captain Gylden regarding compensation for not having returned the ship fully repaired and cleansed of rats and lice (Giäver 1904).

Klinckowström wrote a poetic drama of some 980 verses about this international rescue operation. The drama *The voyage of the Frithjof (Fritjof's färd)* was presented in Stockholm in December 1908 (Klinckowström 1908). The villain in the play is *Frithjof*'s owner, Magnus Gäver while the hero is Captain Gylden who brought his crew safe home.

Relief expedition to Franz Joseph Land, 1904

In 1903, the Fiala-Ziegler Expedition sailed to Franz Joseph Land onboard *America*. At the same time *Laura* captained by Kjeldsen sailed to Bass Rock in northeast Greenland to inspect the expedition's depots and the houses put up by *Belgica*'s crew in 1901. *Frithjof* had returned from the Antarctic to Norway in May 1904 and was shortly afterwards chartered for an expedition to Cape Flora to establish contact with the American expedition. William Camp was the expedition leader. *Frithjof*, with Kjeldsen, in command, sailed twice during 1904 to Franz Joseph Land without reaching the Fiala-Ziegler Expedition at Cape Flora.

The first attempt sailed from Honningsvåg on 7 June but on 9 June they met ice floes several miles long at 76°48'N, 35°46'E. On 21 June at 78°30'N, 46°10'E, it was decided to return to Vardø for coal. In addition to their own consumption, they had a cargo of coal for *America* that they expected to meet at Cape Flora. What they did not know was that *America* had been wrecked six months previously.

On the second voyage, the armour-plate of iron above and below the waterline on *Frithjof*'s bow loosened, broke into pieces and fell off as they tried to penetrate the ice. *Frithjof* returned to Tromsø in fair weather and was docked soon after her arrival on 17 September.

The following year William Ziegler purchased *Terra Nova*, and this vessel, captained by Kjeldsen, brought the expedition safe to Tromsø.

Expedition to Svalbard late 1905

In the summer of 1901, three sealing masters from Tromsø sailed their vessels north to Svalbard. The purpose for these voyages was to dig coal and to stake claims for coal mining. These men, all Arctic veterans, had thorough knowledge of the region but they had neither capital nor knowledge of coal mining. One of the masters, Captain Berhard Pedersen, found investors in Bergen and the mining company Aktieselskapet Bergen – Spitsbergen Kullkompani was established.

In 1905, the mining company sent a British-Norwegian expedition of four mining experts, 21 miners, equipment and provisions to Svalbard with the steamer *Bjølfur*. The expedition was led by P. Muscamp. *Bjølfur* sailed out of Tromsø in late September but did not manage to penetrate the ice and reach Isfjorden. The expedition therefore returned to Tromsø where Muscamp chartered *Frithjof*, captained by Jens Øien, as Kjeldsen was in London returning *Terra Nova*. Equipment, provisions and building material were transferred from *Bjølfur* to *Frithjof* that sailed out of Tromsø on 3 October with the Muscamp expedition on board. During the crossing a hurricane developed, heavy waves damaged the engine room skylight and *Frithjof* had to return to Skjervøy in Norway under sail. On her second attempt *Frithjof* reached Isfjorden successfully but had severe difficulties when returning. ‘She had a narrow escape because of a north westerly wind which blocked Isfjorden with drifting ice floe’ (Hoel 1958). *Frithjof* returned safely to Tromsø on 3 November (*Tromsøposten* 4 November 1905).

The following year the newly established Arctic Coal Company (ACC) made arrangements for the lease of *Frithjof* for £800 for each season but in the meantime Walter Wellman chartered her for three months for £2000 (Dole 1922).

The first Wellman airship expedition, 1906

For Wellman’s charter of the ship, Captain Karl Nordby, a teacher at the navigation school, signed on as master and Paul Bjørvig who had been the ice pilot on Wellman’s expedition in 1894 and a member of the Wellman expedition in 1898, was the ice pilot. This North Pole expedition intended to start in an airship from Virgohamna at Danskøya, from where Andrée had started his fatal balloon journey in 1896.

The plan was that *Frithjof* should tow the airship around the headland from where it would be released and fly north to the Pole. The expedition’s base was Arnold Pike’s house that the British explorer had transported to Danskøya in his vessel *Seggur* in 1888. At the same time, the Wellman expedition established a wireless station at Hammerfest, in Norway, which was intended to maintain contact with the expedition and transmit news to the outside world. Hence, *Frithjof* was also equipped with a wireless set (Fig. 1). On 2 June, seven members of the expedition arrived in Tromsø, some of whom

continued to Hammerfest where the wireless station was about to be established. Others waited for the arrival of *Frithjof* from Harstad where she was being refitted for the expedition.

Frithjof took onboard 56 boxes of tent canvas for the air ship hangar and a great quantity of equipment and provisions before sailing from Tromsø on 15 June. Wellman himself was not onboard. A few days later Fuglehuken at Forlandet on the west coast of Svalbard was sighted and the ship sailed north along the coast without meeting any ice until reaching Danskøya. *Frithjof* managed to penetrate the ice and arrived in Virgohamna that was covered with ice. This was taken advantage of and the crew immediately started to discharge the cargo onto the ice and carry it ashore (Bjørvig 1909). After three days unloading, *Frithjof* returned to Tromsø where Wellman had arrived on 30 June. *Frithjof* took on board more cargo and provisions and then returned to Virgohamna.

Wellman made no attempt to fly to the North Pole but instead, on 4 September 1906, *Frithjof* returned from Danskøya with most of the expedition onboard and reached Hammerfest three days later where Wellman inspected the wireless station. *Frithjof* continued to Tromsø. A group wintered in Pike’s house at Virgohamna. Paul Bjørvig, a member of the wintering party, wrote a report on the Wellman expeditions (Bjørvig 1909).

The second Wellman airship expedition, 1907

After maintenance in Trondheim, where the engine was overhauled, *Frithjof* was laid up in Tromsø for the winter of 1906–1907. By 25 May, the date from which she had been chartered, a crew of 10 had signed on and preparations had been made to take on board the Wellman expedition’s equipment, provisions and a motor launch built of oak. The purpose of the launch was to make weather observations prior to the launch of the airship. Wellman was a popular man in Tromsø owing to the way he spoke to the press about *Frithjof*’s hardworking Norwegian crew and toiling wintering party. On 2 June, *Frithjof*, captained by Karl Norby, sailed out of Tromsø watched by hundreds of people gathered on the waterfront. Ships in the harbour hoisted their flags and saluted the expedition. The last visitor Wellman spoke to was Hjalmar Johansen, Nansen’s companion on his epic expedition, who was there to meet the Scottish explorer William Bruce (*Tromsø* 4 June 1907).

On 9 June, *Frithjof* arrived at Virgohamna without having met any ice. On 14 June she left for Tromsø where she arrived four days later and took on board 40 dogs from Russia. Bjørvig, who had wintered at Danskøya, returned with the ship to take care of the dogs. On 24 June, *Frithjof* arrived at Danskøya with the dogs. On 4 July, a southwesterly storm destroyed the airship hangar. The airship was undamaged except for the rudder. *Frithjof* returned to Tromsø to collect material for repairs.

On 2 September, Wellman decided to launch his airship and *Frithjof* sailed north to Fuglesangen, off the

northwest corner of Spitsbergen, to watch the airship, called *America*, fly north.

The little steamer *Express*, the German explorer Theodor Lerner's expedition ship, was carrying out a cartographic programme in the region. She was captained by Johannes Bottolfesen who had been Wellman's master in 1894. *Express* towed the airship around the headland and released her into a northwesterly wind and snow in which she was soon lost from view.

Late that evening *Express* returned to Virgohamna: 'We knew the expedition had failed because we heard barking dogs onboard the *Express*' (Bjørvig 1909). Bottolfesen explained that *Express* had been sent to Virgohamna to fetch men and sledges with which to reach the wrecked airship on the side of the mountain Isfjellet where she had crashed. The airship was cut into three pieces and transported down to *Frithjof*. On 8 September, with the expedition, dogs and the equipment onboard, *Frithjof* returned to Danskøya and two days later sailed south with the entire Wellman North Pole expedition onboard. A week later she anchored in Tromsø. Wellman's third and final airship expedition took place from the same base in 1909 (Holland 1994: 480–481).

Frithjof's last voyage

In middle of September 1907, shortly after *Frithjof* arrived in Tromsø a new crew came on board. This time the purpose of her voyage was to search for the expedition ship *Laura* which had sailed to northeast Greenland with an Austrian hunting party but which had not been heard of since June.

Captain Johan Larsen, a respected town councillor and an experienced sealing master, signed on as *Frithjof's* master and organized the relief expedition. He knew *Frithjof* well having captained her before. *Frithjof's* first mate was Sigurd Stenersen who had arrived from the western ice as master of *Gottfried* only two days previously. All 15 men who sailed on board *Frithjof* on this expedition had sailed in the Arctic for many years: in fact four of them were masters. Captain Larsen had a handpicked crew.

In June 1906 *Laura's* owner had organised a wintering expedition for three trappers at Jan Mayen. The plan had been that *Laura* should collect them on her homeward voyage from Greenland. Therefore, on leaving Tromsø on 24 September, *Frithjof* sailed directly to Jan Mayen.

Meanwhile, on 6 October, *Laura* arrived in Tromsø without having met *Frithjof*. *Laura* had called at Jan Mayen, as intended, and found a note stating that *Frithjof* had been there, had taken the wintering party onboard and had continued westward along the ice edge searching for *Laura*.

When *Laura* arrived in Tromsø, no one knew that *Frithjof* had already been wrecked with the loss of almost her entire crew and the three trappers: only one man, the second engineer, having survived.

Just after leaving Tromsø, *Frithjof* had sailed into a heavy storm and started taking in water. A minor leak was located aft but, on her way to Jan Mayen, the pumps stopped working. The weather improved as she approached Jan Mayen on 29 September and two days were spent off Jan Mayen repairing damage. With the pumps functioning again and the wintering expedition and their cargo onboard, the voyage continued southwest in good weather along the edge of the ice. After two days search the captain decided to sail north. The weather was good but heavy seas resulted in some violent impacts with the ice. Then the weather gradually worsened and *Frithjof* spent 12 hours manoeuvring out of the ice. A heavy wave destroyed the coal hatch above the engine room, water poured in and the engine stopped. An emergency cover of planks was made to replace the hatch but the crew did not know that, at this critical moment, the ship had sprung a serious leak. For a day and a half the crew and the trappers bailed with buckets and worked the pumps and finally got the engine started again. Then the axle shaft of the deck pump broke. The captain decided to seek shelter but determined not to sail to Norway because the north westerly storm would have exposed the ship to heavy wind on her starboard side and flooding with which the pumps would not have been able to cope. Instead she sailed to Iceland, this keeping the wind in her port quarter. At 21.00 on 5 October the captain informed the second engineer Elias Samuelsen that they were about five miles from the coast and that he would wait until daylight before manoeuvring into a bay south of Cape Langenæs. Shortly afterwards, Samuelsen returned to the engine room and the mate cried out 'full speed, full speed!' A second later *Frithjof* grounded and immediately took a heavy list. Water poured into the engine room and all men were ordered on deck. The men in the engine room escaped through the engineer's cabin. Out on deck Samuelsen saw the captain, the first mate and five or six men washed overboard. The next breaker washed him overboard too, but holding on to a plank he eventually floated safe ashore. From a cliff he saw the *Frithjof* aground, only about ten metres from the beach, breaking into two. Her stern was pointing ashore with three men on the deck. *Frithjof* was lost at 22.00 on 5 Oct. 1907. The Statutory Declaration stated that *Frithjof* was a solid ship with an outstanding crew. The wreck was caused by violent weather with drifting snow, uncontrollable leaking and the master having manoeuvred her too close to the coast before turning her up against the wind in an attempt to beach her. (*Tromsø Stiftstidende* 27 October 1907; *Aarbog for Norges Handelsmarine* 1907).

The loss of *Frithjof* was a devastating shock to Tromsø. Money was collected for the families of the crew and the trappers. Donations came from all over the country and abroad, including from Prince Albert of Monaco and Louis Phillipe, Duke of Orleans.

In 1967, 60 years after the *Frithjof* was lost, Arktisk Forening (The Arctic Society) of Tromsø erected a

monument to *Frithjof* at Cape Langenæs. It was unveiled by Inger Stenersen who lost both grandfathers when *Frithjof* was wrecked.

Acknowledgements

The author would like to thank the following for their assistance. Sigurd Rødsten, Statsarkivet, Oslo; Marlin Joakimson, Statens Maritima Museer, Stockholm; Tore Sørensen and Tor Larsen, Statsarkivet, Tromsø; Nina Linder and Nils Ekwel, Riksarkivet, Stockholm; Ann Kristin Balto and Fred Inge Presteng, Norsk Polarinstitut, Tromsø; Helen Furu, Norsk Sjøfartsmuseum, Oslo; Anne Melgård, Nasjonalbiblioteket, Oslo; Per Eliassen, *Tromsø* newspaper, Tromsø; Ingomar Kjeldsen, Tromsø (Capt. Johan Kjeldsen's grandson); Odd Magnus Heide Hansen, Tromsø; Oddleif Moen, Seljelvnes; Jan Fyhn Johansen, Tromsø, Reidar Stenersen, Tromsø. Special thanks are due to Nicholas Tyler, University of Tromsø.

References

- Aarvog for Norges Handelsmarine*. 1907.
 Bill of sale. 1898. *Frithjof*. 22 February 1898. Oslo: Statsarkivet.
- Bjørvig, P. 1909. Diary 1906–09. Wellman's nordpolsferd med luftskib 1906-09. Norsk Polarinstitut.
- Det Islandske, Skibsregister. 1895. Nationalitet -og Registerings-Certifikat. 27. May 1895. Oslo: Statsarkivet.
- Dole, N.H. 1922. *America in Spitsbergen*. Boston: Marshall Jones Company.
- Giäver, M.K. 1904. Correspondence with Captain Gyldén. Stockholm: Statens Maritima Museer.
- Giäver, M.K. 1944. *Turister og jegere I ishavet*. Oslo: Johan Grundt Tanum.
- Hoel, A. 1958. Svalbards Historie 1898–1958. Manuscript. Cambridge; Scott Polar Research Institute MS468.
- Holland, C. 1994. *Arctic exploration and development c. 500 B.C. to 1915*. New York and London: Garland Publishing, Inc.
- Isachsen, G. 1919. *Fra ishavet*. Oslo: A. W. Bøggers Boktrykkeri.
- Kjeldsen, J. 1900. Telegram to *Tromsø Stiftstidene*, September 1900.
- Kjeldsen, J. 1902. Interview *Tromsø Stiftstidende*, September 1902.
- Kjeldsen, J. 1904. Telegram to *Tromsø Stiftstidene*, June 1904.
- Klinckowström, A. 1908. *Fritjof färd*. Unpublished manuscript. Stockholm: Riksarkivet: Thora Dardels Archive.
- Kock, P. 1980. *Kaptajnen. Logbog over polarforskeren Ejnar Mikkelsen's togt gennem tilværelsen*. København: Gyldendal.
- Liljequist, G.H. 1993. *High latitudes: a history of Swedish polar travels and research*. Stockholm: The Swedish Polar Research Secretariat.
- Nathorst, A.G. 1900. *Två somrar i Norra Ishavet; Kung Karls Land, Spetsbergens kringsegling, spanande efter Andrée i nordöstra Grönland*. Stockholm: Beijers Bokforlagsaktiebolag. 2 vols.
- Roth, J., U. Berger, and O. Zedliss. 1902. *Deutsches Weidwerk unter der Mitternachtsonne*. Berlin: Paul Parey.
- Solvang, J. 1947. Kaptein Johan Kjeldsen og ishavsferdene hans. *Håløygminne* 28(2): 333–342 (Hålogaland Historielag).
- Sørensen, G. 1912. *Hvalfangsten dens historie og mænd*. Kristiania: A/S Det Norske Forlagskompani Ltd.
- Tromsø*. 1898–1907.
- Tromsø Stiftstidene*. 1898–1907.
- Tromsø Tollsted Vaktjournal*. 1897–1907.