AIRSHIPS IN THE ARCTIC

Steve Allen
Although never employed in the Antarctic, airships played an important role in arctic exploration particularly in the 1920’s and 1930’s.

The first detailed plans for a lighter-than-air expedition to the North Pole in a balloon were put forward in 1872 by the French balloonist M. Sivel to the French Society of Aerial Navigation. Sivel’s death in a balloon accident three years later prevented him from putting his plans into action. However interest has been aroused in the use of balloons for arctic explorations.

However, it was not until Solomon Andrée from Sweden attempted his balloon flights in 1896 and 1897 that an actual attempt was made. Even though the success of this expedition was uncertain there was now a belief that exploration by air was possible.

It was the expeditions of Walter Wellman in 1906, 1907 and 1909 that first introduced airships to the Arctic.

Following these pioneering flights by Wellman there were three major airship expeditions. On the first of these, in 1926, the North Pole was seen, quite possibly for the first time, and the Arctic Ocean crossed. The second in 1928 was a notorious disaster. The third, in 1931, was an eminently practical demonstration of the airship’s capabilities to survey otherwise inaccessible lands.

This display attempts to highlight the major airship expeditions whilst examining other historic polar flights.
Autograph letter, Signed, by Henry Reese, M.R.C.S. to Edwards Pierrepont, the American Ambassador in Britain. London: 12 March 1877. Anticipating the Arctic expedition planned by Captain Henry W. Howgate, Henry Reese offers a method of balloon exploration to the American diplomat, encouraging Pierrepont to attend a lecture that he would be giving on the topic.
ON THE
DIFFICULTIES OF ARCTIC EXPLORATION
AND THE MEANS OF SURMOUNTING THEM BY
THE EMPLOYMENT OF BALLOONS.

A LECTURE
On this subject will, by the kind permission of the Vestry, be delivered in
The Vestry Hall, St. James's, Piccadilly,
ON THURSDAY, THE 24TH OF MAY, AT 3 P.M.

EXPERIMENTS
( Believed to be new), showing the power of Steering Balloons, and securing the safe return of the Aeronauts to the Exploring Vessels will be shown.

A DISCUSSION will follow, in which Members of the Aeronautical and Geographical Societies and Officers connected with Polar Expeditions are respectfully invited to take part.

There will be no charge for admission, but, as the accommodation is very limited, Scientific Gentlemen who intend to honour the Lecturer with their attendance, are requested to communicate their intention to
MR. OLLIVIER, 38, OLD BOND STREET.
At a lecture in 1895 to the Royal Swedish Academy of Sciences, a Swedish engineer Salomon Andrée thrilled the audience of geographers and meteorologists by proposing a voyage by hydrogen balloon from Spitsbergen to either Russia or Canada, which was to pass, with luck, straight over the North Pole on the way. The scheme was received with patriotic enthusiasm in Sweden, a northern nation that had fallen behind in the race for the North Pole. Spitsbergen was chosen due to its geographical location being convenient for making attempts at reaching the North Pole.

After Andrée, Strindberg, and Frænkel lifted off from Svalbard in July 1897, the balloon lost hydrogen quickly and crashed on the pack ice after only two days. The explorers were unhurt but faced a grueling trek back south across the drifting icescape. Inadequately clothed, equipped, and prepared, and shocked by the difficulty of the terrain, they ended up exhausted on the deserted Kvitøya (White Island) in Spitsbergen.

For 33 years the fate of the Andrée expedition remained one of the unsolved riddles of the Arctic. The chance discovery in 1930 of the expedition’s last camp created a media sensation across the world.
“As the support team cut away the last ropes holding the balloon and it rose slowly, it was pulled so far down by the friction of the several-hundred-meter-long drag ropes against the ground as to dip the basket into the water. The friction also twisted the ropes round, detaching them from their screw holds. Before it was well clear of the launch site, the Eagle had turned from a supposedly steerable craft into an ordinary hydrogen balloon with a few ropes hanging from it, at the mercy of the wind, with no ability to aim at any particular goal and too little ballast. Lightened, it rose to 700 metres, an unimagined height, where the lower air pressure made the hydrogen escape all the faster through the eight million little holes”

The remains of the three explorers are returned to Gothenburg in 1930, beginning “one of the most solemn and grandiose manifestations of national mourning that has ever occurred in Sweden”. The best-known and most widely credited suggestion is that the explorers succumbed to poisoning they contracted from eating undercooked polar bear meat.
The opening of tourism in northern Norway in the 1870s coincided with the emergence of Tromsø as a port for Arctic research expeditions, as well as with the founding of modern whaling stations along the North Norwegian coast, tourist attractions themselves. One of the first entrepreneurs of tourism to northern Norway was a German by the name of Captain Wilhelm Bade. He was the first to regularly accompany cruise tourists to the Arctic Svalbard archipelago (Spitzbergen). Bade was a survivor of an 8-month drift on an ice floe after the wreck of a German polar expedition ship in 1869/1870.

Spitzbergen tourism proved its economic potential, with Bade and Sons continuing to chart cruise ships to Spitzbergen until 1908.
Walter Wellman Spitsbergen Expedition 1894

Walter Wellman was a life-long journalist and Washington correspondent for a major Chicago newspaper, the Chicago Record Herald.

In 1893, at age thirty-five, Wellman journeyed to Norway in search of knowledge of ice conditions around Spitsbergen, in the process, a short cut to the North Pole. In the spring of 1894, Wellman sailed for Spitsbergen on a Norwegian ice-steamer called Ragnvald Jarl, eventually pitching camp in early May at British sportsman Arnold Pike's House on the shores of Virgo Harbor. Wellman sailed north and east on the Jarl and arrived at the Seven Islands forty-eight hours later. After leaving the Ragnvald Jarl and taking to sledges and aluminum boats, Wellman's party scarcely progressed north at all when a courier overtook them and reported that ice had holed the Jarl along the western shore of tiny Walden Island.

Letter by the ice pilot of the Ragnvald Jarl sent from Table Island at the North of Spitsbergen shortly before the ship was crushed by ice.

This experience led Wellman to his first consideration of the use of some method of aerial exploration in the Arctic.
THE WALTER WELLMAN NORTH POLAR EXPEDITION.

ORGANIZED IN WASHINGTON, D.C., U. S. A.

Led by: WALTER WELLMAN.

Astronomical Observer: Prof. OWEN R. FRANCIS.

Assistant Officer: THOMAS R. MORRIS.

Artist and Photographer: CHARLES C. DOUGL.

Address, May 1st to October 31st.

Casa: ANGELICA, TROMSØ, NORWAY.

Cable Address: "WELLMAN-AACRES, TROMSØ."
The disappearance of the Andrée expedition had only increased the fascination with the Arctic for the general public, and several expeditions were sent out to try and find the explorers. In the spring of 1898, Wellman charted an ice-steamer, the Frithjof, and headed north to Franz Joseph Land for a brief and ultimately futile search for the missing balloonists who had disappeared over the polar pack ice a year earlier. There was a belief that Andrée and his expedition had proved that exploration by air was possible.

Letter on headed expedition notepaper by Walter Wellman written shortly before he departed for his expedition. In the letter, he notes that some of his friends including President McKinley have ordered polar bear skins.
Another attempt on the North Pole was made by the American Baldwin-Ziegler expedition which started from Tromsø, Norway on 17th July 1901. The expedition consisted of the main ship, America, with supply ships Fridtjof and Belgica.

The expedition leader Evelyn Briggs Baldwin had a strong interest in aeronautical exploration in the Arctic, and had made a failed attempt to join the Andrée expedition in 1897. The expedition carried fifteen balloons of various sizes which were filled with hydrogen and released with messages attached to buoys.

Baldwin’s poor planning and bad luck with ice conditions around Franz Josef Land caused him to use his balloon buoys not to reach northwards to the pole as planned, but to send relief messages southwards towards civilisation.

One dispatch sent in June 1902 was picked up in Iceland eight months later, and referred to the need for more coal and stores to be sent by relief ships!

Postcard showing the main ship of the expedition, America (spelt Amerika in Norwegian) docked at Tromsø harbour in 1901.
On December 31, 1905, Wellman announced he would make an attempt to reach the North Pole, but this time with an airship. His newspaper, the Chicago Record Herald, provided funds of $250,000, and in 1906 at Virgo Harbour in Spitsbergen, a large airship hangar and expedition base camp was assembled. But the hangar was not completed until August and when tested the airship’s engines promptly self-destructed.
Wellman returned to Virgo Harbour in the summer of 1907 with an airship called America configured in Paris by Melvin Vaniman, who had scrapped the original Louis Godard car and designed one of his own. As originally constructed, the America was 50.3 m long and 15.8 m at its greatest diameter and enclosed a volume of 7,300 m³ of hydrogen. The envelope was of three layers of fabric and three of rubber, and contained no internal formwork. The gondola could hold a crew of five, and power was supplied by three internal-combustion engines delivering a total of 80 hp. When the airship returned to Spitsbergen in 1907 it had a new centre-section sewn into it to increase its length to 56.4 m and volume to 7,700 m³.
August 1907 came and went, and still the airship remained tethered in her shed. The winds did not abate until early September, at which time Wellman ordered a short trial flight of fifteen miles.

Shortly into its first attempt in 1907, Wellman’s airship the America encountered a snowstorm and landed on a nearby glacier.

This was the first time a motorized airship had flown in the Arctic.
Wellman returned to Spitsbergen one more time in 1909, and on 15 August, launched the airship. The flight began well enough, but two hours and 64 km later, a device Wellman called the “equilibrator” failed. This was a long, leather tube filled with ballast that was intended to help gauge and maintain a fixed altitude over the ice. The airship gained altitude rapidly, until brought under control at 1,500 m and gradually lowered back to the ground by venting Hydrogen. The crew was rescued by the Norwegian steamer, the Farm.

Wellman began plans to extend the hangar so that he could return the following year with a larger airship, but on learning of the Dr Cook’s claim to have reached the pole, abandoned the adventure.
The Royal Engineers’ interest in aeronautics began in the 1860’s when they explored the possibilities of using air balloons for aerial observation purposes. This interest developed into an interest in fixed winged aircraft. In 1912 the Royal Flying Corps, the fore runner of the Royal Air Force (RAF), was formed from the Royal Engineers.

In 1890 a balloon section and depot had been formed as a permanent unit of the Royal Engineers. By 1907 the Royal Engineers had been working on their own airship, and travelled to Spitsbergen to view the airship America.

In October 1907, Colonel Capper of the Royal Engineers and team flew the military airship Nulli Secundus from RAE Farnborough around St Paul’s Cathedral in London and back raising enormous public interest.
Prince Albert I of Monaco is generally regarded as the father of modern oceanography and he made several trips to the Arctic regions on his research ship, the Princess Alice. Prince Albert’s plans did not include expeditions by air but he used metrological balloons to investigate the upper atmosphere.

The meteorological observations were sometimes hampered by a lack of wind or by fog. Nonetheless the expedition achieved 28 ascents with kites, captive balloons and pilot balloons. The latter, ‘whose tracking was facilitated by clear weather on the coast, were released under the best conditions and their heights were analyzed by several methods that provided, in addition to the direction and speed of upper air currents, an interesting indication of the purity of the Arctic atmosphere; these balloons remained visible at distances of up to 80 km’
In 1910, just one year after Wellman’s last airship flight, a group led by Germany’s Count Zeppelin made a trip to Spitsbergen to study the possibility of using Zeppelin airships in polar exploration. The group arrived on the west coast of Spitsbergen in July to search for a base for their airship.

After stops at Andrée’s and Wellman’s old bases the party returned to Germany. The consensus at the time appeared to be that airship technology had not yet reached the point that polar travel was feasible.
The Norwegian explorer Roald Amundsen, who in 1911 had discovered the South Pole, wrote:

“An ambitious dream had taken hold of me; to fly from continent to continent across the Arctic. . . . The Pole itself held no interest for me - Peary’s brilliant deed in 1909 had destroyed its value for all subsequent explorers”

Amundsen first tried to fly across the Arctic in a heavier than air craft from Wainwright Alaska during the Maud Expedition. On 11 May 1923 the first test flight was made. Amundsen wrote in his diary:

“Oskar Omdal approached the houses, losing altitude very quickly, and barely missing them. He ended up down on the lagoon, a few metres from where he had taken off. The left ski cut across under the engine, flipped a half circle and overturned on the right wing. He was never in any danger. We all ran over to the aircraft. The landing gear that was fastened to the left ski was broken. Omdal said that the engine had been working very unsatisfactorily … after this, I have little hope of a flight”.

They tried to do some repairs, but by 10 June it was clear that they had to give up and cancel any future attempts. Despite the lack of success this was still the first aircraft flight in the Arctic.
To raise funds for the expedition Amundsen created a series of four “surrounds” for United States postage stamps and addressed flight covers to sponsors of the expedition and influential contacts that he had made.

This cover was signed by President Warren Harding, the Postmaster General Herbert Work and Roald Amundsen himself, and posted from Wainwright the scene of the first flight attempt.
Early in 1925 the United States Navy was forced to scrub a projected Arctic flight of the airship Shenandoah when the airship was damaged in a storm. It appeared that Roald Amundsen, the distinguished Norwegian explorer, would soon be ready to fly toward the North Pole. The timing seemed right for an Arctic flight with Navy planes. Teaming up Richard Byrd was Donald MacMillan, a former college professor and longtime Arctic explorer who had also been with Peary in 1909 and was a lieutenant commander in the Navy Reserve.

The final expedition destination was the port of Etah, a small settlement on Greenland’s northwest coast, about 700 miles south of the Pole. While exploratory flights were made, these early flights, which went low over nearby ice floes, convinced the expedition leaders that the ice was so rough that the planes could not land on them, even if skis were added to their landing gear.

Cover carried during the first stage of the expedition from Philadelphia to Boston.
Roald Amundsen North Pole Expedition Flight 1925

The second attempt by Roald Amundsen to reach the North Pole by aircraft was in 1925 when he joined forces with Lincoln Ellsworth, the son of an American millionaire. Amundsen took two Dornier flying boats, the N-24 and N-25 to 87° 44’ north. It was the northernmost latitude reached by plane up to that time.

The planes landed a few miles apart without radio contact, yet the crews managed to reunite. One of the aircraft, the N-24 was damaged. Amundsen and his crew worked for over three weeks to clean up an airstrip to take off from ice. In the end, six crew members were packed into the N-25. In a remarkable feat, the pilot Riiser-Larsen took off, and they barely became airborne over the cracking ice. They returned triumphant when everyone thought they had been lost forever.
To raise funds for the Polar Flight expedition postcards were produced, and were advertised as due to be carried on the flight. However, due to weight restrictions they were only posted from Kings Bay in Spitsbergen and were not carried.

In 1925 the Norwegian Post Office created a set of postage stamps showing an aircraft flying over a polar bear to celebrate the expedition. This set on cover was posted by Oscar Wisting, who reached the South Pole with Amundsen in 1911, and who was involved in several of his expeditions. It is postmarked by the special Amundsen memorial postmark that was used for all mail posted in Oslo on 14 December 1928.
After his two failures by heavier than air craft, Amundsen decided to use for his next attempt a lighter-than-air airship. Their first choice for a lighter-than-air craft was the Italian airship NR-1. Designed by the Italian Army Colonel Umberto Nobile, an aeronautical engineer, the NR-1 was a small, semi-rigid airship. She was 106 m long, with a hydrogen gas capacity of 14,000 m³.

When contacted by Amundsen, Nobile was enthusiastic about using the NR-1 for an Arctic flight, since he had been considering just such a venture. Emphasising that the trans Arctic flight was a joint Norwegian and American project, Amundsen offered to purchase the airship, including paying for modifications for the Arctic trip, for the sum of $75,000. The offer was accepted by the Italian government, and in March 1926, Amundsen and Ellsworth were in Ciampino, Italy, to accept the NR-1. In an elaborate ceremony Mussolini formally transferred the airship to Amundsen, and she was renamed the Norge (“Norway”). Amundsen and Ellsworth soon left by sea for King’s Bay, leaving Nobile to follow with the Norge.
The airship Norge landing in Pulham, England on April 11 1926 during the flight from Rome to Spitsbergen. This postcard was produced in Japan during Roald Amundsen’s tour in 1926.

“It was a historical moment when Norway’s Colonel Amundsen successfully crossed the North Pole in his Zeppelin with his team of explorers consisting of 17 members. The journey started in Spitzbergen, King’s Bay, and there were long, anxious moments when the ground crew was unable to maintain contact soon after the Zeppelin took off. Many feared that the Zeppelin and its crew had to be given up, but there was relief all around when on May 25, at 2 A.M. the ship members made contact again with the news that they had landed in Alaska. This historical achievement, flying over one of the earth’s mysteries, was accomplished in 97 hours.”

The airship reaching Oslo, Norway on April 14th.
On 9 May, while the Norge was being serviced in her roofless hangar, American Navy Lieutenant Richard E. Byrd took off in a Fokker ski plane. Fifteen and a half hours later, Byrd was back in King’s Bay reporting that he had successfully reached the North Pole. Many doubted Byrd’s claim, believing that his Fokker airplane lacked the range to make such a round-trip. Amundsen now rushed to achieve his ultimate objective, to fly from continent to continent across the Arctic.
On the morning of 11 May 1926, sixteen men boarded the Norge: eight Norwegians, including Amundsen, Hjalmar Riiser-Larsen (who had piloted Amundsen’s Dornier airplane in the failed attempt of 1925 to fly across the Arctic), and Oscar Wisting; one American, Ellsworth; one Swede; and Nobile and five other Italians. Sixteen hours later, after battling wind, cold, snow, fog, and frozen water in the engine fuel lines, the Norge reached the North Pole. The Norge then pushed on across the arctic making landfall near Point Barrow and groped its way south through fog and violent crosswinds. Nobile decided to bring the Norge down near the small Eskimo settlement of Teller, Alaska.

The airship voyage across the Arctic had covered 5,117 km and taken 70 hours and 40 minutes at an average speed of 72 km per hour. Amundsen was not the first to reach the North Pole, but he was the first to fly across the Arctic. However, he and Wisting became the first men to reach both the North and South poles.
The Flight of the “Norge”
The “Norge” started the epic journey in Rome, Italy at 9:30 AM on April 10, 1926 and proceeded across France. A mooring mast had been erected for the balloon at Cuers Pierrefeu, France; however, it was not used. At 5:50 PM on April 11, 1926 the dirigible arrived at the airfield located in Pulham, England. The lighter than air vessel departed at 11:00 PM on April 12th and reached Oslo, Norway on April 14th at 1:00 PM. The “Norge” departed later that evening and arrived at the Salizy Air Station, which is located in Galina near Leningrad, Russia on April 15, 1926. The “Norge” stayed in Russia for several weeks and did not leave until on May 5, 1926. The expedition arrived in Vadsø, Norway on the morning of May 6th. The airship departed later the same day and arrived in Kings Bay, Spitsbergen at 6:40 AM on May 7, 1926.
The history making flight to the North Pole began at 8:50 AM on May 11, 1926. The elusive North Pole was reached at 11:30 AM on May 12, 1926. The flags of all three nations were dropped over the Pole. The coast of Alaska was sighted at 7:35 AM on the morning of May 14, 1926. At 8:20 AM Eskimos were spotted on the ground. Twenty minutes later Wainwright, Alaska was below the “Norge”. The city of Nome, Alaska was intended to be the final destination. However, heavy fog brought the “Norge” down at Teller, Alaska at 4:30 PM on May 14, 1926.
Due to weight restriction only a limited amount of philatelic material was carried during the Norge flight over the North Pole. The pilot, Hjalmar Riiser-Larsen, did carry a small number of the Trans Polar postcards left over from the expedition the previous year and signed them to confirm authenticity.

Postcard of the airship, stating the time that the Norge passed over the North Pole, and signed by Colonel Umberto Nobile.
A limited number of philatelic covers were produced by crew members and marketed to raise funds.
Nobile and the other Italian crew members returned to great public acclaim, and Mussolini’s government trumpeted the genius of Italian engineering.
The Italia Airship Expedition 1928

Nobile announced that he would make another polar flight, this time under the Italian flag. Benito Mussolini, eager for more Italian exploits, agreed to provide a new airship and crew, with Nobile’s native city, Milan, paying the expenses. Nobile would supervise the airship’s design and construction and the Italian Royal Geographic Society lent its prestige as a sponsor of the expedition. In March 1928 the new airship Italia was officially delivered.
SPEDIZIONE ITALIANA
PER L’ESPLORAZIONE AEREA DELLE REGIONI ARTICHE

- CONTRATTO FRA LA REALE SOCIETÀ GEOGRAFICA ITALIANA ED IL SIG. ETTORE PEDRETTI -

Tra la Reale Società Geografica Italiana ed il sig. Ettore PEDRETTI si è convenuto e si conviene quanto appresso.


ART. 3. Il sig. Ettore PEDRETTI s’impegna a dare tutta la sua attività per il buon successo della spedizione sia a terra che in volo, e pertanto dichiara esplicitamente di essere pronto fin da ora a compiere non solo il lavoro inerente alle particolari sue attitudini, ma qualsiasi altro gli fosse dal Capo richiesto per la buona riuscita dell’impresa.
On 15 April 1928 the Italia departed from Milan with Nobile and 19 other men on board. With stops at Stolp, Germany, and Vadso, Norway, the Italia eventually reached Kings Bay, Spitsbergen on 4 May.

Postcards sent by crew members of the supply ship to the Italia, Citta di Milano. The bottom card is addressed to Ettore Arduino, chief mechanic on the Italia.
On 23 May 1928, the Italia set off for her run to the North Pole. After 20 hours, the Italia reached the North Pole, but strong winds and fog prevented a landing. Radio messages were flashed to the world, and the news media of Rome proudly announced to the world that the Italians had again conquered the North Pole.

On board the Italia, due to the weather forecast it was decided to return to King’s Bay, Spitsbergen, rather than fly on to Alaska. The Italia struggled against strong winds, fog, and the added weight from ice buildup. At about 10 a.m. on 25 May, the Italia hit the ice. Her control gondola and stern engine compartment were torn from the hull. Suddenly lightened, the Italia soared upward and disappeared forever, with six men still aboard (including Ettore Arduino). The crash left ten men on the ice. One was killed and four injured, including Nobile. The survivors were about 290 km northeast of King’s Bay. Twelve days after the crash, their distress signal was picked up. At last the world knew, and seven nations were ready to assist in the search and rescue of Nobile and his remaining men.
Norway dispatched a ship, Sweden sent a ship with three aircraft aboard, and the Russian icebreaker Krassin departed from Leningrad. On 20th June, an Italian plane at last spotted Nobile's red striped tent. The next day Swedish pilot Einar Lundborg managed to land on the ice to fly out the reluctant Nobile that he should be the first to fly out, to better coordinate the rescue efforts from King's Bay.

Almost three weeks after Nobile had been flown off the ice, the Krassin sighted and rescued two of the three men who had struck out on foot; the third had died. Soon after, the Krassin reached the ice camp of the remaining Italia survivors. They had survived in the Arctic wilderness for 49 days.
Postcards published in Russia showing the rescue of the expedition members from the ice.
Roald Amundsen had come out of retirement to help. Amundsen took off from Tromsø, Norway, in a French flying boat and was never seen again. Combined with the loss of the six men from the Italia who were never seen again, the criticism of Nobile began to amount. The press accused him of cowardice in consenting to be evacuated before his men. The Italian government held him responsible for the crash, charging him with poor judgment and operation of the airship.
The ice breaker Krassin steamed back to Kings Bay arriving on 19th July, and transferred the expedition members to the Citta di Milano supply ship. The supply ship sailed to Narvik, Norway where the Italian government had arranged to have two special train coaches sent up from Paris for the expedition to return to Italy.

Postcards sent by crew members of the Citta di Milano, one from King’s Bay and one from Narvik.
Postcard stamped with expedition cachet from the Citta di Milano supply ship, signed and posted by Umberto Nobile.

Cover with the Citta di Milano cachet posted by expedition member Guiseppe Biaggi, radio operator, with expedition cinderella stamp attached. The cinderella stamp was privately produced in four colours by an Enzo Cano in Naples in 1927. Very few of these labels have been attached to mail forwarded by the post office.
Disgusted by his treatment, Nobile resigned his commission and accepted an appointment in Russia to work with that country’s nascent airship program, later immigrating to the United States and settling in Chicago, where he taught aeronautical engineering. After World War II, he returned to Italy, and before his death in 1978 he had the satisfaction of having his name cleared and polar achievements recognized.

The rescuer of Nobile, the Swedish aviator Einar Lundborg became a national hero and toured the United States to great acclaim in 1929. Sadly he was killed in a test flight accident in 1931.
At the same time as the Italia expedition was in progress, the Australian explorer George Herbert Wilkins was making an exploratory flight in a Lockheed aircraft piloted by Carl Eielson. The objective was to find unknown lands and they made no attempt to fly over the North Pole. They flew from Point Barrow, Alaska to Spitsbergen. Their route of flight took them close to the northern coast of Greenland and they determined there was no additional land between Greenland and the North Pole.
The Graf Zeppelin Expedition 1931

In 1926 the famed polar explorer Fridtjof Nansen founded an organization with the lengthy name International Association for Exploring the Arctic by Means of Airships. Nansen contacted Dr Hugo Eckener in 1928 and requested the use of the Graf Zeppelin for a journey of exploration in the Arctic. A meeting was held with Eckener, Nansen, and the polar explorer from Australia Sir George Hubert Wilkins. Eckener was enthusiastic, convinced that an airship was the best vehicle for such an expedition, but other projects were first in priority. With the sudden death of Nansen in 1930, Eckener committed to an Arctic flight.

Sir George Hubert Wilkins told Eckener that he planned to acquire a surplus U.S. Navy submarine, sail submerged under the arctic ice pack to the North Pole, and then surface by means of an ingenious ice-auger. Lincoln Ellsworth would be aboard the submarine and the project was being labeled the Wilkins-Ellsworth Trans-Arctic Expedition. Wilkins proposed to Eckener that the submarine, renamed the Nautilus and the Graf Zeppelin should rendezvous at the North Pole.

Registered covers signed by Wilkins, and Sloan Danehower who was in charge of the submarine.
Unfortunately, or perhaps fortunately, the Nautilus was plagued by mechanical problems and got no farther than Trondheim. However, the sponsor William Randolph Hearst was still interested in an Arctic project, and the agreement with Eckener was altered for a meeting between the Graf Zeppelin and the large Russian icebreaker Malyguin which would be conducting scientific research near Franz Josef Land. On 24 July 1931, Eckener flew the Graf Zeppelin from Friedrichshafen to Berlin, and then onto Leningrad. On 26 July, the fully loaded airship took off on her journey to the Arctic.

Thirty-six hours after departing from Leningrad, the Graf Zeppelin sighted the Russian icebreaker. Using inflated rubber pontoons, the airship gently set down on the surface of the water about 450 m from the Russian icebreaker. A small boat pushed off from Malyguin carrying visiting passengers and sacks of mail to exchange with mail from the airship.
The German Postal Service overprinted a previous Zeppelin issue with “Polar-Fahrt 1931”

The Russian Postal Service issued four denominations showing the Graf Zeppelin and the ice breaker Malyguin effecting a transfer of mail.
Russian Flyers Trans Polar Flight 1937

On June 18th 1937 three Russian flyers, Valeri Chekalov, pilot, George Baydukov, co-pilot, and Alexander Belyakov, radio operator, flew a single engine ANT-25 plane from Moscow. The next day they flew non stop over the North Pole and landed at a U.S. Military Base at Vancouver, Washington on June 20 1937. The flight lasted 56 hours, 20 minutes and covered approximately 9,000 km.

The age of the airplane had arrived.

During the 1930s, the Russians dominated polar aviation and set numerous world records.
After the Hindenburg disaster in 1937, public faith in the safety of airships was shattered, and flying passengers in hydrogen-filled vessels became untenable. The Graf Zeppelin was retired one month after the disaster and turned into a museum.

Airships were no longer used in polar exploration after this date. However, after such a long absence it is no means improbable that airships may one day return to the Arctic.

In 2009, the fifth “Airships to the Arctic” business conference was held to focus on effective use of airships in the northern latitudes. The conference examined the demand for transportation in northern Canada and provided an update on the supply of airship technology worldwide and potential deployment opportunities to respond to the northern challenges.

One hundred years of technological change has created the opportunity to build large, robust airships that could deliver cargo to the most inhospitable corners of the earth. At the present time, over 16 teams are working in 8 different countries with actual airships and aerostats. The development of a cargo airship is inevitable, and the race is on to find the dominant design. The commercial tipping point is in sight, it just needs a final push to make it become a reality.