

SIR GEORGE HUBERT WILKINS



Fig 1
Sir George Hubert Wilkins

This abbreviated history of the life of Sir George Hubert Wilkins is based on the autobiography of Wilkins as told to and written by Lowell Thomas. However, later research on Wilkins by Jeff Maynard has suggested that many of the dramatic situations included by Thomas have little foundation in fact.

Whatever we choose to believe about Wilkins, this version of his life has attempted to emphasise its aviation aspects: where he went and what he did; and also to try to discuss his life in an unbiased way.

On the 29th of November 1966 Mr Ian Auhl gave an address at the Hallett Institute on the unveiling of a memorial plaque to the memory of Sir George Hubert Wilkins. In this address he imagined a very young Wilkins standing on the 3,000 foot summit of Mount Bryan:

“... most probably, looking over the horizons of Mount Bryan East. Mount Bryan East could not have contained for very long the sort of spirit that young Wilkins possessed. The world itself, to its uttermost ends, was to seem in the end, a small place for his restless spirit”.¹

George Hubert Wilkins was born on October 31st 1888 in an outback cottage called Netfield, just north of the township of Hallett, South Australia. He was the youngest of 13 children, born to Henry and Louisa Wilkins.

For the Wilkins family in the 1890s endurance was the key word. Living without running water and electricity, and often faced with devastating droughts, life for any farming family including young George's, was hard. It could well have been an awareness of his family's struggles that shaped the very spirit Auhl refers to, which drove the older Hubert Wilkins to do the things he did. Knowing that a drought had

¹ Auhl, I. Memorial Address given to the Hallett Institute, South Australia. 29th November 1966

cut short his formal education and was almost the ruin of his father, Hubert (as he came to be generally known) moved with his parents to Adelaide in 1905.

If hardship moulded the character of Hubert Wilkins, so also did his passion for nature, music and a desire for knowledge. Enrolled in both the South Australian School of Mines and the Elder Conservatorium School of Music simultaneously, he studied electrical engineering and singing, playing the organ, flute and cello at the Conservatorium. It was in a number of part time jobs he learnt the art of blacksmithing, and gained a sound knowledge of the workings of both steam and internal combustion engines. On a trip to Sydney he became interested in photography, with a particular interest in moving pictures. Returning to Adelaide he found employment with a travelling cinema and travelled in both South Australia and the Eastern States showing films.

When he was 20 years old (1908) he decided to leave Adelaide and see something of the world. At this time in his life a number of thoughts were forming in his mind, thoughts based upon his past experiences and that were to lead him to follow fixed courses of action. One of the most important of his ideas was to attempt to discover how and why the weather could so dramatically affect people's lives, as it had done his own. Two forces now took over his life: the need to discover things concerning the world about him, and the need to travel to places that would provide him with the answers to the many questions forming in his mind.

His travels began by stowing away on a ship at Port Adelaide. The ship deposited him in Sydney and he soon found employment as a projectionist, then later as a cinematographer.



Fig 2
Hubert Wilkins at his brother
Arthur's wedding (1905)

On reaching London he obtained work with the Gaumont Company as a cinematographic cameraman and with the Daily Chronicle as a reporter. It was then (1910) that he learnt to fly at Hendon. He did not sit for any of the flying exams, which would have made him a qualified pilot, through lack of money. But his interest in flying was to remain with him for the rest of his life. So too was his passion for photography. Photographs of the time (1911) show him performing photographic stunts. One popular photograph shows him astride the fuselage of a Deperdussin monoplane hand cranking his camera. Despite these promotional stunts Hubert Wilkins was perfecting the art of taking aerial motion pictures. In his autobiography he believed he was the first person to take a movie camera into the air and film the scenes around him.²

² Thomas, Lowell. 1962 *Sir Hubert Wilkins. His world of adventure as told to Lowell Thomas*. Readers Book Club, Companion Book Club, London

In autumn 1912 Wilkins was instructed by his employers to cover the war in the Balkans. His brief was to cover the Turkish side of the war in its struggle with the Bulgarians, and he was one of 27 war correspondents covering the fighting. He possibly witnessed one of the last cavalry charges by the Turks, and barely escaped being captured by the Bulgarian advance. Filming much of the action he may well have been the first person to have ever made a real-life action film of a battle. During his time in the Balkans he was imprisoned by the Turks, contracted a bad case of cholera, and was reported as being killed behind the Bulgarian lines.



Fig 3
Hubert Wilkins (right) setting out for the front line. Balkan War 1912

On his return to London his employer, Gaumont, sent him to film a hot air balloon ascent at Brixton.

Travel and adventure continued with a commission from Cadbury Chocolate to film and write about the cocoa industry in Trinidad. It was when he was about to return to London that he received a telegram inviting him to be part of an expedition to

the Arctic. Reaching London he was informed an expedition was being arranged by Vilhjalmur Stefansson to explore the Beaufort Sea and the Coronation Gulf area. Gaumont wanted him in the expedition as a photographer. The expedition left Victoria, British Columbia, in the ships *Karluk* and *Mary Sachs*, in June 1913.

It was on this first trip to the Arctic that Hubert Wilkins came to terms with the requirements needed to survive in the polar ice cap regions. Above all, the trip taught him much of what he needed to know about polar exploration: the right clothing and equipment and the right quantity and quality of the food, knowledge of most of which for this expedition was lacking. In the coming weeks it was Stefansson who taught Wilkins how to survive.

Stefansson's party including Wilkins were separated from the *Karluk* when it became trapped in the ice, and they set out for the shore. With little food for themselves and even less for the dog team, Stefansson instructed Wilkins how to find food and shelter. The problem of survival became acute when the sea ice fractured in a violent storm and carried the party away from the *Karluk*. It took them a week to reach land. Starving, they lived off the scraps of meat they found on a long dead whale carcass until they could get help from the Eskimos living in the region. Finally, they reached their destination of Cape Halkett. Without any news of their ship, Wilkins set out with a group of Eskimos to Collision Point, some 300 miles away. During that trip he met with the worst storm they had experienced. It was a storm which nearly cost Wilkins his life. Through unbelievable luck they found a small group of Eskimos

sheltering in an igloo who took Wilkins in, and no doubt saved his life. It took a year before the scabs and scar of frostbite damage finally disappeared from his face.

They never saw the *Karluk* again. She was crushed in the sea ice and sank near Wrangel Island in January 1914. Of those left behind on the *Karluk*, eleven died. The remaining thirteen survived on Wrangel Island, eventually reaching Alaska and safety in September 1914 after their Captain, Robert Bartlett, made a heroic trek across the ice from Wrangel Island to the Siberian mainland and on to Alaska to arrange the rescue mission.



Fig 4
The last voyage of the *Karluk*, June 1913 - January 1914. Showing Captain Bartlett's journey to seek rescue

In the history of Antarctic exploration it was always a puzzle why Australia's two greatest explorers, Hubert Wilkins and Douglas Mawson, so strongly disliked each other. According to Jeff Maynard this animosity stemmed from the *Karluk* disaster. Mawson had a close friend amongst those who had died named Alister Forbes Mackay. Mawson believed that Stefansson left the *Karluk* on a self-aggrandising mission to find a non-existent tribe of Eskimos, taking with him only those who would be able to record his discoveries. Wilkins was the photographer. Mawson's dislike of Wilkins stemmed from his belief that Stefansson thought more about himself than the fate of Mackay and the others. Mawson evidently considered Wilkins tainted by association. Another factor that made both men antagonistic was their reasons to conduct polar exploration. Mawson considered science and discovery his driving force, but after the *Karluk* tragedy he saw the achievements of Wilkins as nothing more than a means to further his ambitions.

Later on he was given the task by Stefansson of conducting further exploratory expeditions to the nearer Arctic Islands. He returned to Cape Kellett and discussed with Stefansson the possible use of aircraft in future exploration. Stefansson favoured the use of submarines: Wilkins, with his characteristic logic, considered that aircraft should be used in a reconnaissance role because they were cheaper to operate, while submarines had value in travelling under the ice to conduct oceanographic research. The topic of these discussions, which took place during the later months of 1915, was to remain in Wilkins' mind, as did his passion for meteorology and weather forecasting

Preliminary plans had been made by Stefansson and Wilkins for future expeditions, but these plans were cut short by two letters. One was from Wilkins' brothers to tell him of the death of his father, and the other was from his employers ordering him to return to London to cover the Great War in Europe. It took him two months to reach his family in Australia and to be reminded that it was eight years since he had stowed away on the ship at Port Adelaide.

His strong desire to join the armed services and his ability to fly culminated in his being awarded a commission in the Royal Australian Flying Corps. His detachment arrived in England in July 1917. His wish to become a pilot was not fulfilled because he failed the medical examination. His feet had never recovered from his near death experience from frostbite, and he found he was colour blind. Neither of these ailments affected either his every day activity or his flying capability in any way.

Reporting to General Griffiths at the Australian military headquarters he was offered the post of Captain Frank Hurley's photographic assistant. Captain Hurley had been appointed as official war photographer for the Royal Australian Flying Corps and Captain Charles E. W. Bean as the official war historian. Their roles were for the photographers to capture such scenes as were suitable for public release (obviously for propaganda purposes) and Bean to record the actual wartime conditions with all their horrors.

Their first day at the front saw Wilkins and Hurley nearly killed when German aircraft bombed their encampment. Both men, not knowing what to do, were left standing in the open while those around them took cover. It did not take Wilkins long to learn the art of survival. As a wartime photographer he covered every major battle the Australians fought, suffered wounds and was awarded the Military Cross and bar. The Australian Commander in Chief, Sir John Monash, described Wilkins as the bravest man he had ever met.

From an aviation viewpoint it was interesting that he witnessed the death of Manfred von Richthofen. (21, April 1918). He states:

....travelling toward the front in a car when we stopped to watch an aerial dog-fight. There were some thirty or forty planes in that whirling battle, split roughly into three groups, and they were fighting at such an altitude it was difficult to distinguish the Allied planes from the Germans, except by the character of their attacks. One plane seemed to be lagging, then went into a nose dive and came down. As it approached we saw it was an allied plane. A German swooped in pursuit, and as it came down on our plane's tail we saw that it was all red, the distinctive colouring of Richthofen's plane, of which we had all heard. Our man plainly was in difficulty diving straight for



Fig 5
Captain Hubert Wilkins
Photograph probably taken in 1919

the ground. The machine in the lead came out of its dive just as it neared the ground, zoomed steeply, banked, and went straight out of site behind a hill. Richthofen followed the manoeuvre exactly in pursuit. There was sound of just one machine gun firing. Over the very top of the bank we could see Richthofen's red plane apparently go out of control, sideslip, and then it also disappeared. I didn't see the actual crash, but it was evident that the red plane had been hit when we lost sight of it. From a colonel's headquarters nearby, I called up the flying corps headquarters and was told that von Richthofen had just been killed. I drove to the scene as soon as I could and by that time the body of the German ace had been

carried to the British RAF headquarters. I did not go to view the body, but photographed his red wrecked plane and then went back to develop my pictures.³

Wilkins was still keen in 1919 to become involved in plans to establish a series of meteorological stations in both the Arctic and Antarctic. His experiences in the war and, most particularly his aerial photography, had reinforced his earlier desire to be able accurately to predict the weather. The biggest problem he faced in establishing weather stations at the poles was that the polar caps were relatively unexplored. Approaching The Royal Meteorological Society with this idea he was told that such plans were totally impractical. However, he thought if he could acquire a means of air transport for an aerial survey over the poles, it might strengthen his case. One idea he tried was to borrow from the Royal Navy one of the captured Graf Zeppelins. This was refused. His next approach was to ask a company in Germany to build one for him. This, too, was rejected because Wilkins had insisted he was to be the pilot and the German company feared that this 'mad Australian' would crash it and give them adverse publicity. They were also worried that the storms in the polar regions would rip their airships to pieces.

³ Thomas, Lowell. 1962 *Sir Hubert Wilkins. His world of adventure as told to Lowell Thomas*. Readers Book Club, Companion Book Club, London

In March 1919 the Australian Government was offering a prize of £10,000 for the first flight from England to Australia. The race rules required that no plane start before September 8th 1919 and the winner would complete the distance (11,000 miles) within thirty days. The planes and their parts had to be of British manufacture and every man aboard had to be an Australian citizen. Wilkins felt this to be a great opportunity to gain experience in long distance flying and to acquire both publicity and the prize money. He was to be commander and navigator and his crew Valdemar Rendle, pilot; Reginald Williams, second pilot; and Garnsey Potts in reserve. The aircraft they chose for the flight was a Blackburn *Kangaroo*, a twin engine WW1 bomber built by the Blackburn Aeroplane and Motor Company with Rolls Royce Falcon engines.

Their start was delayed by engine difficulties. Wilkins noted that another team, which left when they were to have done, was making really good progress, and he thought it would be difficult to catch them. This other competitor who worried Wilkins was a Vickers Vimy aircraft piloted by Ross and Keith Smith.

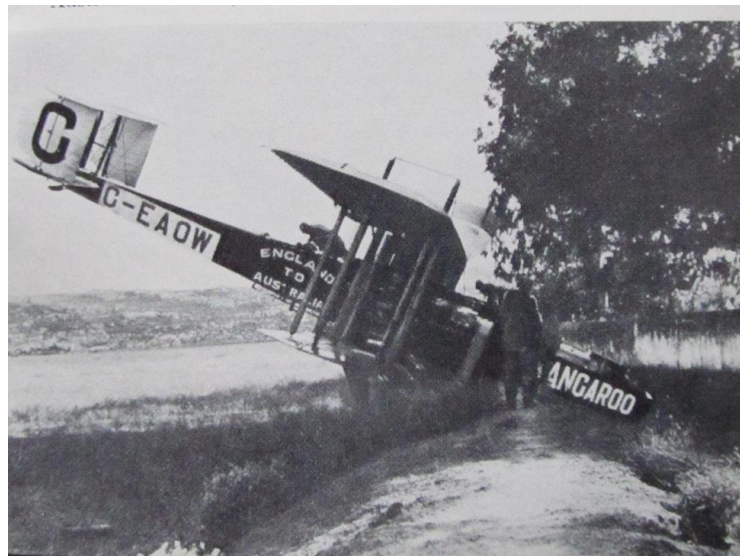


Fig 6
The end of Wilkins' attempt to win the England to Australia air race
Crete. 1919

Wilkins' attempt to win the race ended when the port engine crankcase broke and all the oil was lost. Being eighty miles from the nearest land (Crete) it was doubtful, even with one good engine, that they would be able to reach land. A number of incredible things occurred and somehow they managed to reach the island without having to ditch in the sea. Needing to manoeuvre the aircraft over terrain suitable for a landing they had to turn on the faulty engine, which exploded. Many hot fragments penetrated the fuselage, causing the pilot to struggle for control and land as fast as possible. Missing a village, but grazing the roof of the last house, they crashed into a field and ended with a badly wrecked aircraft, but without a scratch on any of the crew.

A short time before the England - Australia air race, Wilkins met John Lachlan Cope, an Englishman with a strong desire to organise an Antarctic expedition. What really interested Wilkins was that Cope was planning to use aircraft on his expedition. As Cope wanted more time for the planning and Wilkins wanted to participate in the air

race, nothing was done until Wilkins returned from Crete. The expedition, or 'misadventure' as Wilkins called it⁴ began in the latter half of 1920.

Wilkins' view of Cope was that he was 'the poorest executive in the world'. With all the arrangements having been made and Wilkins in Australia finishing off his war diary, he received a cable from Cope ordering him to Canada to purchase sled dogs. In his cable Cope said that because of limited finance he had given up the idea of using aircraft. Wilkins, having been offered a lucrative engineering job in Australia, told Cope he was not interested. After much pleading by Cope, Wilkins finally agreed to go.

Arriving in Montevideo, he found Cope deeply in debt and the whalers (the only vessels to go into the Antarctic) refusing to carry their supplies unless they received payment. The whalers made a deal with Wilkins that if he took over the expedition and filmed them at work (for publicity purposes) they would transport their supplies to Graham Land. Wilkins realised that the best the team could achieve with Cope and expedition members M.C. Lester and T.W. Bagshawe, was a topographical survey of Graham Land. This had to be done before the whalers left the Antarctic and before the winter set in.

Exploring inland from their base Wilkins and Cope were faced with a climb over a perpendicular cliff. Roping themselves together because a storm had arisen and reduced visibility, Wilkins had just reached the summit when he misjudged his footing and fell with Cope down the other side of the cliff. Their fall ended when Wilkins managed to get his ice axe to grip and he was left holding onto the axe with one hand and the rope with the other. Cope had shot past Wilkins and was hanging upside-down in a crevasse. After much effort Wilkins managed to help Cope to right himself and to cut steps in the ice and return to the surface.

Wilkins spent four months on the Antarctic plateau with the expedition and with every trip they made inland from their base, they were faced with a vertical cliff formation, which they were unable to climb. Wilkins was convinced that if they had an aircraft available for reconnaissance purposes, they could have found a way through.

Wilkins was to have two more life threatening experiences before he left Antarctica and both were in small boats travelling back toward the whaling stations. The first was when a pod of killer whales surfaced near their boat and one of them smashed its tail near the boat, half filling it with icy water. The whales circled the boat for twenty minutes before they made off. The second occurred when they decided to hug the shoreline in a storm and, misjudging the strength of the current, they were swept over submerged rocks. The boat was badly holed and they had to cut their sail loose in an attempt to slow the boat through the water. It was incredible luck that a whaling boat anchored in a bay nearby saw their plight and sent a boat to rescue them.

⁴ Thomas, Lowell. 1962 *Sir Hubert Wilkins. His world of adventure as told to Lowell Thomas*. Readers Book Club, Companion Book Club, London

In May 1921 Wilkins was in New York negotiating with a representative from Junkers the loan of two aircraft he could use in the Antarctic. Before any deal could be made, however, Wilkins received a cable from Sir Ernest Shackleton advising him not to have any dealings with a German company so soon after the war. He thought it would be bad for Wilkins' reputation. A deal was done instead between Wilkins and Shackleton for Wilkins to be part of the Shackleton - Rowett expedition in September 1921. Joining Shackleton in London and with time on his hands, Wilkins embarked on an air navigator's course. Much of the flying in the course was in airships R-32, R-33 and R-34. There were very few qualified air navigators then as it was a branch of navigational science gradually separating from maritime navigation.



Fig 7
Sir Ernest Shackleton shortly before his death
in 1921

The expedition left England in the *Quest*, a Norwegian-built sealing vessel. Wilkins noted that Shackleton had not devoted as much effort to this expedition as he had to his previous expeditions. Problems became apparent with the *Quest's* engine almost as soon as they set out. After many delays caused by engine trouble they finally reached Rio de Janeiro. With another member of the science team, George Douglas, Wilkins left the ship and the two men made their way to South Georgia. Wilkins' role was to collect specimens of birds and fish and to be the official expedition photographer. They were there for six weeks before the *Quest* arrived to pick them up and continue the expedition. Unfortunately, on

the night of the *Quest's* arrival at South Georgia, Sir Ernest Shackleton died of a heart attack.

It had been Shackleton's objective on this expedition to circumnavigate the earth at its highest latitudes. The intention was to skirt the ice and follow it all the way around the continent of Antarctica. The death of Shackleton, however, changed everything. With costs blowing out and winter setting in, and the ice in the Weddell Sea proving too much for their inadequate vessel, the expedition covered only a fraction of Shackleton's objective before it was abandoned.

The aftermath of this expedition showed another side of Wilkins' ability. Completing his scientific log as the expedition's naturalist, he wrote a detailed article on the birds of South Georgia, which was published in the *Ibis*, the leading ornithological magazine of the day. Wilkins also commented that because the British Museum received the bird specimens he collected in South Georgia, the authorities there started to look at him more as a naturalist than as an adventurous photographer.⁵

⁵ Thomas, Lowell. 1962 *Sir Hubert Wilkins. His world of adventure as told to Lowell Thomas*. Readers Book Club, Companion Book Club, London

While he was cooling his heels in London, an opportunity arose for him to travel to Russia, via France, Austria, Germany, Czechoslovakia and Poland. His employers wanted him to photograph and write reports on the work of the Society of Friends' Emergency and War Victims Relief Committee. This Committee was run by the Quakers, whose purpose was to alleviate as much human suffering as possible. They thought that Wilkins could provide the pictures and the text, which would be the means to raise money to help those in need, especially the children. Travelling with Lucita Squier who covered the feminine aspects of their mission, they were to spend about six months travelling in some pretty inhospitable places.

It was in the final stages of their Russian commission that Wilkins received a cable from the British Museum asking him to organise an expedition on the Museum's behalf to Northern Australia. His prestige as a naturalist by then carried a lot of weight with those directing the Museum's activities - so much so that the Museum had approached the British Parliament for the funds necessary to finance what they called the 'Wilkins Island and Australian Expedition'.

The purpose of this expedition was to make a biological survey of both sides of the Great Dividing Range, and to cover the country from Sydney to Cape York including the Great Barrier Reef. Wilkins, being the leader of the expedition, also assumed the role of specimen collector and photographer. During his travels he took a great interest in a small Aboriginal tribe he discovered in the Katherine River region. He found them while travelling alone, and true to form, quickly realised that he had to be very careful in his dealings with them as they appeared not to be particularly friendly. It took him many weeks to gain their trust and for them to allow him near their encampments. He spent two months collecting specimens and studying their culture. Wilkins had discovered an interest in anthropology.

At the end of this expedition he had spent nearly two and a half years in the bush. (1923-1925) travelling with scientists J.E. Young, Vladimir Kotoff and Oscar G. Cornwell. Between them they had collected hundreds of specimens and many boxes of fossils and minerals.

After their return to London with their collection, it was reported by the Museum specialists that at least nine mammal specimens were new to science, and one of them was to be called *Petrogale Wilkinsi* in Wilkins's honour. His report on the expedition was also tabled, and his not having time to publish it, the Museum had it published for him entitled *Undiscovered Australia*.

If there was one thing Wilkins was really good at, it was raising money for further exploration. His sojourn in Australia had not blunted his desire for further polar exploration. Nor had it reduced in his mind the need for aircraft on any possible future expeditions. By contacting Loring Pickering of the North American Newspaper Alliance, Wilkins was able to secure finance not only from NANA but also from the Detroit Aviation Society. The carrot was exclusive rights to both news reports and photographs. His idea was to go back to the Arctic and attempt to establish the true

shoreline in an area north of the Alaskan coast. Wilkins' dream of being able to fly the Arctic was about to be realised.



Fig 8
Carl Ben Eielson

Two major problems now confronted Wilkins. One was to find a suitable aircraft that would be able to withstand the difficulties of polar flight. The other was to find a pilot who had the courage and skill to accompany him. The aircraft he took with him on this trip had been purchased from Anthony Fokker, who was a personal friend of his. He purchased two aircraft: a tri-motored FV11/3m they christened *Detroit*, and a single Liberty engine monoplane they called the *Alaskan*.

Knowing Wilkins' need for a skilled pilot, his old mentor Vilhajmur Stefansson recommended an ex US army pilot who had pioneered the first Alaskan airmail service in 1923. His name was Carl Ben

Eielson. Known to the Eskimos as 'Brother to the Eagle', Eielson was to share many life threatening experiences with Wilkins both in the air and on the ground in sub zero temperatures.

His 1926 expedition was to prove both good and bad for Wilkins and his dreams of polar exploration and discovery. A bad point was that the aircraft left much to be desired with engine problems causing the crashes of both aircraft twenty four hours after being unpacked. This meant no significant exploration could be accomplished in the air that year as the good weather window was too short. Another bad point was their choice of Fairbanks as their supply base. Although excellent for communication and supply, it was subject to flooding and until it could be drained, flying was impossible as the strip was a sea of mud. The good point was that once repaired the aircraft were able to transfer much valuable supplies to their forward base at Point Barrow. It was on March 31st 1926, during a fuel transfer (750 gallons) trip that Wilkins and Eielson flying in the *Alaskan* established a number of remarkable achievements. Having embarked on the 700 mile trip they encountered a blizzard, and without any visual means of knowing where they were, had to fly blind, Eielson on instruments and Wilkins navigating more from experience than anything else. With a certain degree of luck and a great deal of judgement, they landed safely at Point Barrow.

This flight was a first in many ways. They had flown further North than anyone else at that longitude. They had proved the value of aircraft in both reconnaissance and transportation roles. They had covered more than 600 miles beyond the limits of the known maps of the area, even proving that one reported island did not exist.

Having taken a wind-driven short-wave radio transmitter with them they transmitted the first wireless message from Point Barrow, a feat that was contrary to the accepted belief that Point Barrow was in a wireless blind spot.

By February 1927 they had acquired two new aircraft, Stinson SB1 Detroit four seat biplanes, and a second pilot well experienced flying Stinson built aircraft. His name was Alger Graham.

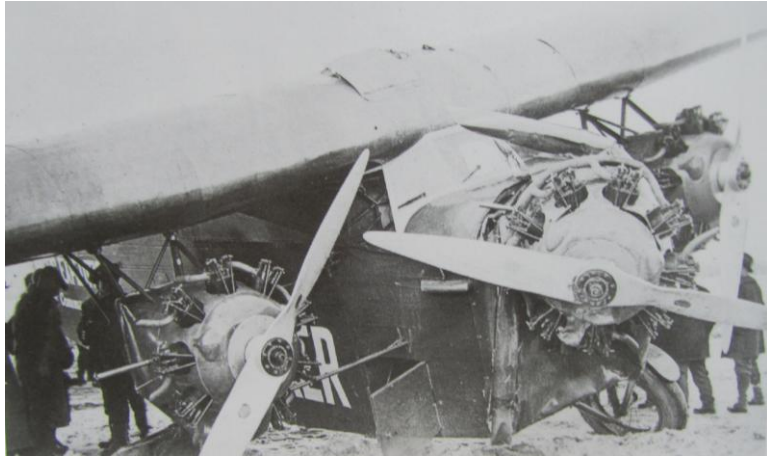


Fig 9

The crash of the Fokker FV11/3m Trimotor (Detroit) 1926

As during the previous year things did not go well with their aerial exploration. Their main

intention was still to explore the north of Alaska and, if it were possible, to fly all the way over the Arctic Sea to Spitsbergen.



Fig 10

Carl Ben Eielson (left) and Hubert Wilkins illustrate the clothing they wore on their polar flights. The instrument Wilkins is holding is a chronometer. Because of the close proximity of the North Pole, magnetic compasses were ineffective. Wilkins had to navigate with a sextant and a chronometer to obtain a positional fix

Almost a year to the day since their previous flight (March 29th 1927), Wilkins and Eielson set out again to explore well beyond where they had been before. Starting out in a furious blizzard they hoped the storm would provide a tail wind to carry them well north of Alaska. Having just passed Point Barrow, however, their engine started to fail and it became obvious they would have to land. The terrain below them was rough, jagged ice floating on the sea. The engine spluttered back into life and Eielson urged Wilkins to continue. Wilkins suggested they land while the terrain looked a little better for a landing. Eielson took Wilkins advice and, just before the engine died completely, pulled off a smooth ski landing. This was the first aircraft landing ever made on the Arctic ice. While Eielson was attending to the engine Wilkins cut a hole in the ice and detonated a small

dynamite charge to obtain an echo from which he could make a depth calculation. The result was a sea depth of 18,000 feet.

With the temperature dropping to 20 degrees below zero they managed to take-off and attempted to continue their flight. The problem they faced was that while they were making repairs the wind had changed direction. Instead of being a tail wind, it had become a head wind. Running out of fuel they had to force land again on the sea ice. According to Wilkins they were 70 miles from the coast with no hope of continuing their flight. It took them thirteen days to walk to Beechey Point and rescue. Their lives were threatened many times, yet despite these threats two factors were paramount in their survival, Wilkins's skill as a navigator, and the incredible luck that never seemed to desert him when times were bad.

Wilkins' dream of travelling by air from Point Barrow in Alaska, to Spitsbergen in Norway, involved a flight of some two thousand miles. His critics argued that it was impossible to navigate over the Arctic Ocean because there would not be any checkpoints to verify their position. Even the great Roald Amundsen said such a flight was impossible. Wilkins too, makes the point that compass course adjustments would need to be made:



Fig 11
Stinson SB1 Detroit aircraft similar to the one they abandoned on the sea ice



Fig 12
Sir Charles Kingsford Smith and Sir Hubert Wilkins standing in front of the Southern Cross

... at least twenty times during the flight so that in effect our route, if drawn on a chart, would resemble twenty short lines bending in a great curve.⁶

Such criticisms from great men made financing future expeditions much more difficult. Besides convincing influential backers to fund his expeditions, Wilkins was faced with having to cover some of the costs himself. He still had the two Fokkers, which he could sell, and it was lucky that he met Charles

Kingsford Smith and Charles Ulm who were looking for an aircraft to fly across the

⁶ Thomas, Lowell. 1962 *Sir Hubert Wilkins. His world of adventure as told to Lowell Thomas*. Readers Book Club, Companion Book Club, London

Pacific from America to Australia. After much negotiation he sold the three-engined FV11/3m to the Kingsford Smith team. This aircraft became the famous *Southern Cross*.

During the negotiations with the Kingsford Smith team, Wilkins discovered an aircraft he felt would be right for his Arctic Ocean flight. It was a Lockheed Vega. The sale of the Fokker enabled him to purchase the third Vega built.

While Eielson was learning to fly the Vega, Wilkins was working on a flight plan that included the important calculations he knew he would need to make during the flight. Once all was well they made their way back to their base at Fairbanks. On their way Wilkins practised



Fig 13
Hubert Wilkins (left) and Carl Ben Eielson with their Vega X3903 fitted with skis. Fairbanks, Alaska 1928

his International Morse Code. They arrived at Fairbanks on February 26th 1928 and from then to the time their epic flight began from Point Barrow on April 15th, all effort was spent in preparation of the aircraft. One of the most important aspects of their preparation was their fuel and weight ratios. The aircraft weighed 2,000lbs and a full fuel load was 2,500lbs. The combined weight meant they could not take off. The aircraft was lightened by removing all unnecessary gear and fixtures, including the brakes. A light tail skid was fitted to enable the skid to stick into the ice if they had to make a forced landing.

Once in the air Wilkins had an incredible amount of work to do. In his own words he explains what a navigator and explorer has to do on a flight of discovery:

*Navigating alone means plotting on the charts and working out mathematically the swiftly changing position of the plane; taking sights of the sun with a sextant - six observations each accurately timed, then working out calculations based on them; checking the drift of the plane by means of the instruments and calculating it mathematically; studying weather conditions ahead, and of course recording velocity and altitude of the plane, while constantly keeping in mind possible changes of course to avoid storms, and scanning the surface below for safe landing places in case of sudden trouble. I was also taking moving and still pictures sending and receiving wireless messages, observing and recording the character of the ice fields below, and in the unknown area, searching intently for any indications of land anywhere within the circle of the horizon.*⁷

⁷ Thomas, Lowell. 1962 *Sir Hubert Wilkins. His world of adventure as told to Lowell Thomas*. Readers Book Club, Companion Book Club, London

For twenty hours they flew over desolate wastes, Wilkins frequently sending wireless messages to their base at Point Barrow. The most talked about message he sent was to Dr Isaiah Bowman, President of the American Geographical Society. It read: *No foxes seen*, which was a coded message to say that no land had been sighted along their route. Three hundred miles north west of Spitsbergen they ran into a storm. With their fuel reaching critical levels they had to descend. Diving through the clouds they emerged so close to the sea that the spray coated their windscreen and froze, which reduced visibility. With fortune again on their side they saw a little area of smooth ice and landed immediately. They had landed on an ice covered island (Dead Man's Island) and remained there for five days until the storm had passed. Restarting their engine they took off and landed on the sea ice at Green Harbour Fjord in Spitsbergen. They were marooned on the ice for a month until they were rescued by a Norwegian freighter who took them and their aircraft to Tromsø, in Norway. The trip from Fairbanks had taken twenty hours, they had crossed 171 degrees of longitude, travelled 2,500 miles and lost half a day of their lives because of the differing time zones.

Both Wilkins and Eielson were feted by the Norwegians, and were overwhelmed by the reception they received from Roald Amundsen. They were feted wherever they went by many of the dignitaries of Europe, and Wilkins won a knighthood in England and a warm welcome back by his friends and backers in New York.

This success enabled him to raise sufficient funds for his next expedition to the Antarctic. One of his main backers was the publisher William Randolph Hearst. The idea to return to the Antarctic was a combination of fate, Wilkins' stubborn nature and his desire to return to his old haunts. This time it was to be with aircraft. With the Lockheed Vega (*Los Angeles*), the aircraft he flew in the Arctic, and a second Vega they named *San Francisco*, they sailed to Montevideo, and with the help of his old whaling friends reached their base at Deception Island.

Wilkins was keen to make the first flight in the Antarctic. He was fully aware that another famous Australian had thought of using aircraft for Antarctic exploration, but the plane crashed before the expedition left for the continent in 1912. The person he had in mind was Sir Douglas Mawson.

The only real problem Wilkins had on this expedition was the preparation of a runway to enable the aircraft to take off. There was not enough snow around to warrant using skis. The reason why snow was in short supply was that it was unusually warm for the time of year (late September) and Deception Island was volcanic, with just enough residual heat to limit widespread snow coverage. Much of the runway had to be constructed by levelling ice mounds to form a smooth, even surface. The thinness of the ice caused more problems, particularly at the end of the runway where it was so thin they nearly lost an aircraft when the ice broke and the engine and undercarriage were submerged.

Wilkins and Eielson were the first to fly over parts of the Antarctic. On one of their flights they covered over 1,300 miles with much of the land beneath them totally unknown. With each flight they probed deeper into the continent with little success at finding suitable landing grounds. Using the same equipment they had used in the Arctic, Wilkins was able to keep in radio contact almost continuously and even continuously when he kept his morse key clamped down. This enabled their base to keep a constant track of their progress. Wilkins could not help but think of how far technology had come since his first visit to the Arctic in 1913.

In the summer of 1929 William Randolph Hearst asked Wilkins if he would like to take a round the world trip in the German dirigible *Graf Zeppelin*. Hearst, being both a sponsor and the chief financial backer for the project, wanted Wilkins to write about the flight from a technical viewpoint.



Fig 14
The Graf Zeppelin

From its base at Friedrichschafen the *Graf* travelled to Lakehurst, New Jersey, to begin its round the world trip. All went to plan until it was over Southern France when two of the three engines failed. Landing at Cuers, fifty miles east of Marseille, at an airship hangar built for the *Dixmund* dirigible, temporary repairs were made. The *Graf* returned to Friedrichschafen for a

major overhaul and when complete left for its second attempt at travelling around the world. On this attempt all went well and travelling eastwards over Northern Europe, Russia, Siberia and Japan it finally reached the point where it all began at Lakehurst, New Jersey. The trip took twenty days, thirteen of which were spent in the air.

Wilkins was impressed with the *Graf's* performance and was convinced that airships had a place in polar exploration. The Flight of the *Norge* airship over the polar regions in 1926 supported this view. Above all else, Wilkins was convinced the trip had reinforced his long held belief in the need for accurate weather forecasting.

Almost immediately after this trip ended, he travelled to Cleveland, Ohio, and on August 30th 1929 married Suzanne Bennett. She was an Australian by



Fig 15
Sir Hubert and Lady Wilkins on their honeymoon in Switzerland. 1929

birth, whom Wilkins had met a year earlier at a function given in his honour in New York. She must have accepted the fact that Wilkins would be away from home for much of their married life, and this acceptance may have been offset by the fact that she had her own career as an accomplished actress. Soon after their honeymoon Wilkins made arrangements for the second season's exploration in the Antarctic.

Returning to their Antarctic base at Deception Island, Wilkins was shocked to see how much the ice had receded from where it had been the previous year. He thought it could be as much as 600 miles. Bringing with him two new pilots, Parker Kramer and Al Cheesman, they quickly brought the two Vegas they had stored there back into flying condition. It was soon after they commenced flights that they heard over the radio of the death of Carl Ben Eielson. He had crashed in the Arctic and his body was discovered two months later. Between Wilkins and Eielson they had, at both North and South poles, covered more than 500,000 square miles of the earth's surface that no one had seen before. They had mapped coastlines and added hundreds of terrain features to the charts and maps of the time.

Wilkins was aware that it would be difficult to find landing sites close to Deception Island, so he arranged for the *William Scoresby*, a steamer, to explore the surrounding areas. With one aircraft strapped to the deck, which could be fitted with either skis or pontoons, they pushed south to Port Lockroy on the west side of Graham Island. After their arrival the temperature started to rise rapidly, and the equipment they had placed on the ice surface had to be loaded back aboard to prevent it sinking as the ice melted. Wilkins took the temperature and found it to be fifty one degrees Fahrenheit, the hottest (at that time) ever recorded in the Antarctic.

Wilkins had more than one narrow escape from death when flying exploratory flights with Al Cheesman. They were often caught in snow storms and, trying to avoid the worst of the storms, had to use more petrol than they could afford. It was only by the phenomenon that never deserted him, unbelievable luck, that they consistently found the *Scoresby* and could land beside the ship.

After his return from the Antarctic, Wilkins thought seriously about the unusual warmth and weather conditions they had experienced. His thoughts were well ahead of his time, when he put those peculiar conditions down to a global climatic warming effect. He made the assumption that the warm conditions they experienced in the Antarctic summer (1929-1930) were connected in an unclear way to the same weather system that caused a major drought affecting most of the United States during the summer of 1930. The concept of global warming was a reality to Hubert Wilkins.

Wilkins had never forgotten the discussion he had with Vilhjalmur Stefansson about the use of aircraft and submarines in polar exploration. Aircraft had been a success in his previous expeditions in both reconnaissance and transportation roles. Now, he felt it was time to use a submarine to explore and navigate beneath the Arctic ice. With the financial backing of another wealthy Wilkins fan, Lincoln Ellsworth, he had

the funds to mount an expedition. The problem of acquiring a submarine was settled when the US Navy let Wilkins have for the token sum of \$1 a WW1 submarine it was going to scrap. There were, of course, many critics of Wilkins' idea of travelling under the ice. However, it was the fitting out of the submarine which caused him most trouble and expense. The modifications included a superstructure with an in-built pneumatic shock absorber, which allowed the vessel to slide under the ice and, supposedly, to reduce damage from overhead projections. Another innovation was a huge drill installed in the bow of the vessel to cut holes in the ice should they get caught under the ice pack. There were also twin 5,000 watt headlights, a flexible radio antennae and an escape trunk through which they could lower instruments to the sea floor and recover them. On March 24th 1931 in front of a crowd of 800 spectators, the submarine was christened *Nautilus*.



Fig 16
The Nautilus at Bergen, Norway. 1931

The trials for the *Nautilus* were conducted on the Hudson River just off Yonkers in New York. Minor modifications were made and the boat left New York for New London in Connecticut, then to the tip of Cape Cod, and finally out into the Atlantic. Trouble began about 1,000 miles out to sea when water started to penetrate an oil tank, so much so that they had to send out an SOS call. Their call was answered by two US Navy

battleships, the *Arkansas* and the *Wyoming*. It was the *Wyoming* that towed them to the coast of Ireland, where minor repairs were attempted. Final repairs were made in the Royal Naval dockyard at Devonport. The North Sea was crossed with no mechanical problems and the final topping up of fuel tanks was done at Bergen in Norway.

On August 19th 1931, they set out for the Arctic ice to be the first submarine ever to submerge beneath the ice pack. At a point 600 miles from the North Pole and 6,000 miles from where they had started it became apparent they could not safely submerge because they had lost their diving rudders. However, by taking some calculated risks, they did submerge beneath the ice and made history. They reached 37 feet before returning to the surface. On the 27th September they reluctantly returned to Norway. Wilkins, with his forward thinking saw this expedition as the beginning of a highway under the pole. He envisioned fleets of submarines travelling beneath the Arctic ice cap on the shortest routes between the American and Asian land masses.

During the 1930s Wilkins travelled to the Antarctic four times with his friend and financial backer Lincoln Ellsworth. Much was accomplished, particularly in mapping large areas of the continent. The well-proven research combination of ship and aircraft proved even more effective because of the improvements in technology.

Wilkins, observing all that was happening around him, and no doubt remembering his first expedition with Steffanson and the ill fated *Karluk* remarked:

*I saw telling evidence of the progress polar science had made in my own lifetime.*⁸

During this decade his unhappy relationship with Sir Douglas Mawson came to a head. The Australian Government was interested in setting up Antarctic bases and Wilkins thought he should be in charge of the program. He was aware that Mawson had the ear of the Government but he was not aware how strong that standing was. Offering to buy the American research ship the *Wyatt Earp* for the Australian government after it had spent time in the Antarctic claiming territory for America, he was confronted by Mawson who said the government would buy the *Wyatt Earp* but he (Mawson) would control any future Australian Antarctic operations. Maynard noted:

*Mawson had shut the door in Wilkins' face permanently. Wilkins left Australia in 1939 and vowed never to returnhe never did.*⁹

A memory that always stayed with Wilkins was his inclusion in the maiden voyage of the *Hindenburg* in 1936. He had a passion for airship travel and was not unappreciative of all the luxury that went with it. This memory was made even more poignant when a year later the *Hindenburg* was destroyed in a hydrogen explosion at Lakehurst, New Jersey.

Wilkins was to have one more flying adventure in the Arctic when he was approached by Soviet officials in Washington to see if he could help in the search for Sigismund Levanevsky, the Russian equivalent of Charles Lindberg (1938). Flying in a Consolidated PBY flying boat, Wilkins, Al Cheesman and three others covered vast areas of the Arctic but failed to find any trace of Levanevsky and his crew. In the months taken up in this search Wilkins was heartened by the international response he got from weather reports of both American and Russian forecasters, and rarely did they set out without knowing well in advance what the weather conditions over their prospective routes would be.

Between 1942 -1952 Wilkins was appointed as a consultant to the US Army in its planning division. During this time he was involved in a Secret Service mission to Singapore, Burma and into China. Later, returning to the USA, he was appointed as the Arctic consultant to the US Army Quartermaster Research and Development Command. He remained with that unit until his death.

Sir George Hubert Wilkins died on the 30th November 1958 at Framingham, Massachusetts, from a heart attack, and was cremated. Four months later on March

⁸ Thomas, Lowell. 1962 *Sir Hubert Wilkins. His world of adventure as told to Lowell Thomas*. Readers Book Club, Companion Book Club, London

⁹ Maynard, J. 2010. *The Mystery of the Polar Air Race Wings of Ice*, Vintage Books, Random House, North Sydney

17th 1959, as a mark of respect The US Navy submarine *Skate* under the command of Commander James Calvert scattered his ashes at the North Pole. Wilkins never sought this honour for himself, although it is what he would have wished. His words on this subject were recalled by his wife:

*...that an explorer is happy to be buried where he had his life.*¹⁰

As a postscript, Wilkins never forgot the flying experiences he shared with Carl Ben Eielson. In paying his last respects to Eielson he donated the remains of the single engine Fokker aircraft they called the *Alaskan* to the Eielson Memorial Committee at Bismarck, North Dakota. He had kept the aircraft as a memory to both Eielson and the historic flights they made together.

Jim Rogers.
History Group Member
South Australian Aviation Museum
February 2015

¹⁰ Thomas, Lowell. 1962 *Sir Hubert Wilkins. His world of adventure as told to Lowell Thomas*. Readers Book Club, Companion Book Club, London

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