

**RICHARD E. BYRD AND THE NORTH POLE FLIGHT OF 1926:
FACT, FICTION AS FACT, AND INTERPRETATION**

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ABSTRACT: On May 9, 1926, Richard E. Byrd announced that he and co-pilot Floyd Bennett were the first to fly an airplane over the North Pole. That claim made Byrd an international hero, established him as a pivotal figure in polar exploration and in aerial navigation, and set the stage for Byrd's flight over the South Pole in 1929 and his leadership and participation in five expeditions to Antarctica before his death in 1957.

Byrd's claim to the North Pole in 1926 has aroused controversy. Some critics scoffed that his plane did not have the speed to have reached the Pole in the time he reported. One book even charged that Byrd had merely circled in the horizon out of sight of reporters and then announced his achievement. Three days after Byrd's claim, Roald Amundsen, Lincoln Ellsworth, Umberto Nobile and an international crew aboard the airship *Norge* flew over the Pole in a trans-Arctic crossing.

In 1996, the announcement and discovery of Byrd's diary of the flight in 1926 renewed the debate about Byrd's claim to the North Pole. This presentation reviews the controversy, the diary, which was recently published (*To the Pole: The Diary and Notebook of Richard E. Byrd 1925-1927* (Columbus, Ohio: the Ohio State University Press, 1998), interpretations of the diary, and the records of Byrd's first expedition in the Papers of Admiral Richard E. Byrd at The Ohio State University.

The North Pole, one of the coldest places on earth, has been the site of some of the most hotly debated events in history. Beginning in 1909 Dr. Frederick Cook became the first to claim to have reached the North Pole; a few weeks later Commander Robert Peary asserted his own claim and commenced to vilify Cook. That dispute has continued to spawn numerous books and articles about the rival claims. The latest one advertised that it had resolved the controversy (in 978 pages) and concluded that neither Peary nor Cook reached the Pole (Bryce 1997). Another historical controversy happened on May 9, 1926 when Lieutenant Richard E. Byrd proclaimed that he and co-pilot Floyd Bennett were the first to fly an airplane, the *Josephine Ford*, over the North Pole. That claim, in turn, has been

disputed and defended by many. Recently, a televised docudrama about Byrd speculated that self doubts about his accomplishment of the North Pole may have haunted the explorer for the remainder of his life (Cafe Productions 1997).

Actually, there is no evidence that Byrd himself was troubled by his claim to the North Pole. This docudrama, a work of fiction based on fact, accepted as fact an interpretation of a diary discovered in the papers of Admiral Richard Byrd at The Ohio State University. The purposes of this presentation are to provide a brief overview of Byrd and the controversy, to discuss contradicting interpretations of the diary, and to identify other important documents in Byrd's papers about the North Pole flight. Although Byrd died in 1957, his papers were not fully available for scholarship until late in 1994. Until 1997, no one had carefully examined the more than 5,000 items pertaining to Byrd's flight to the North Pole in 1926.

When Richard Byrd flew to the North Pole in 1926, he was already a man of some but limited distinction. His parents traced their lineage to 1671 when Colonel William Byrd established the family in Virginia and developed Westover Plantation along the James River, near Jamestown. Byrd's father achieved distinction as an attorney in private practice and pursued a modest career in politics. He served as a prosecuting attorney for twenty years and as speaker of the house in the Virginia State Assembly. Richard Evelyn Byrd, the polar explorer and pioneer aviator, was born in 1888, the second of three boys. One of his brothers would become governor of the State of Virginia and a United States Senator and the other a successful business man. Richard Byrd himself had an interest in travel to foreign places and decided to seek a career as an officer in the United States Navy. Byrd gained admission to the United States Naval Academy, graduated in 1912 and began a career in the Navy.

Byrd's active duty in the Navy proved very brief. After four years of service, an accident at sea damaged permanently a foot that had already been weakened by two injuries from athletic contests. Unable to stand lengthy watches at sea, Byrd felt himself passed over in promotions and retired from active duty in 1916. A few months later, Byrd returned to duty as a retired officer and took charge of the Naval Militia of the State of Rhode Island, as the United States readied itself for World War I. So effective an organizer was Byrd, that he was called to Washington. Byrd served as the secretary to the chairman of the U.S. Navy Commission on Training, who was Raymond B. Fosdick, a prominent attorney and an associate of John D. Rockefeller. Fosdick would eventually become Byrd's own attorney and his connection to wealthy donors needed for his expeditions. Soon, Byrd tired of administrative duty and took an interest in naval aviation. Here was an arena of accomplishment that did not require long hours of standing. With Fosdick's support and influence Byrd won appointment as a naval aviation cadet in 1917 and stayed as an instructor and as superintendent of the U.S. Naval Base at Pensacola, Florida. In addition to investigating accidents, Byrd also taught aerial navigation and had a special interest in the challenges posed by navigating out of sight of land or natural landmarks. (Byrd Papers,

4128, 4129) In fact, Byrd developed a bubble sextant and a wind-drift indicator for navigational purposes. His interest and accomplishments enabled Byrd to win a place on the Transatlantic Flight Section of the Navy's Bureau of Aeronautics and to be part of the team that achieved the first transatlantic crossing of seaplanes from Long Island, New York to Lisbon, Portugal in 1919 (Byrd Papers, 4126).

From 1919 through 1925, Byrd busied himself with naval aviation and with politics. In 1919 he led the effort to create a Department of Aeronautics in the U.S. Navy and assisted the Navy in opposing an effort to create an air force separate from the U.S. Army and U.S. Navy. In 1922 Byrd had responsibility for creating air stations for the training and organization of pilots in the naval reserves. Two years later Byrd was in the forefront of the campaign to dissuade a frugal U.S. Congress from reducing military salaries (Byrd Papers, 4132). As a reward for these efforts, Byrd received the command of three seaplanes assigned to Donald MacMillan during his privately funded expedition to Greenland in 1925. Although the weather in Greenland limited opportunities for flying in the Arctic, he remained confident in the use of fixed wing aircraft in polar exploration and published two articles on the subject. Byrd also applied unsuccessfully to be a member of the aerial expedition of Roald Amundsen and Lincoln Ellsworth who attempted to fly to the North Pole in 1925 but was invited to be second-in-command of the Wilkins Arctic expedition for 1926. Thus, through interest in airplanes, ambition, talent, and connections to the wealthy and to the politically powerful Byrd had succeeded in establishing himself as a player in the drama of polar exploration.

Byrd declined the invitation from Wilkins, who claimed to have little interest in flying over the North Pole (Wilkins 1928). Instead, Byrd organized his own effort to fly an airplane over the North Pole. He persuaded American millionaires John D. Rockefeller and Edsel Ford, who gave \$25,000 each and other people of wealth to donate to his expedition. Volunteers, especially from the naval reserves, joined him at no charge. Shrewdly, Byrd negotiated with the news media for payments in exchange for stories. One document found in Byrd's papers was a contract with Current News Features This guaranteed Byrd at least \$18,000, even if Byrd failed to reach the North Pole (Byrd Papers, 4251). Another with the Pond agency promised Byrd a lecture tour after the expedition. From this money Byrd leased a ship and purchased an airplane.

The selection of an airplane was the most critical aspect of Byrd's expedition. In January of 1926, three months before his departure, Byrd was still uncertain and considered using a dirigible. However, a three engine Fokker did become available for purchase. Still in an experimental stage, the tri-motor Fokker had demonstrated its superior dependability by winning a contest for reliability in a sixteen hundred mile schedule of inter-city flight, a contest sponsored by Ford but won by Fokker. Three engine aircraft appeared to be more reliable than one or two engine aircraft because they alone could continue to fly after the loss of an engine (Bowers 1974). In fact, Ford was developing its own three engine

airplanes but a fire delayed production. A second single-engine plane, the *Oriole* would serve to provide some photographic support and could be used for rescue.

So convinced was Byrd that the three engine airplane was reliable that Byrd's final statement to the press before leaving New York City, as documented in Byrd's papers, promised that "Conquering the Arctic with multi-motored planes will give an impetus to commercial aviation....Confidence is all that is needed to lift the curtain on an era of rapid development in air commerce." (Byrd Papers, 4298).

On April 5, 1926 the expedition left New York for Spitzbergen in Norway, a site closer to the North Pole than Greenland and a harbor warm enough to unload airplanes and supplies in the spring. It was also the place where Norwegian explorer Roald Amundsen was awaiting the delivery of an airship, the *Norge*, that would take him, Commander Lincoln Ellsworth, and Umberto Nobile and an international crew across the North Pole.

Shortly after midnight on May 9, 1926, Byrd's airplane left the icy runway at Spitzbergen and returned fifteen and a half hours later to claim the polar prize. Three days later the *Norge* flew over the North Pole. Byrd's accomplishment made him an international hero. A committee of the National Geographic Society reviewed his records, as they had done for Robert Peary, and rewarded his accomplishment with the Hubbard Medal. Congress presented him the Congressional Medal of Honor. A promotion in rank followed. So, too, did numerous opportunities for lectures. In fact, Byrd was so prominent that he quickly raised money for another effort, a transatlantic flight, and became the third after Charles Lindberg to fly across the Atlantic in 1927. This accomplishment, along with the North Pole claim, set the stage for Byrd to raise money for an expedition to Antarctica. In 1929 Byrd became the first to fly an airplane--a three engine Ford— across the South Pole. From then until his death in 1957 Byrd led or participated in another four expeditions to Antarctica. These succeeded in establishing a permanent , scientific presence of the United States in Antarctica.

Byrd's claim to the North Pole set the stage for his undisputed accomplishments in Antarctica but that claim to the North Pole has drawn critics. Even in 1926 some reporters speculated that Byrd's airplane had been in flight too briefly to have reached the North Pole (Hoyt, p. 125). After Byrd's death in 1957, more skepticism developed. In 1958 appeared the book *Come North with Me*, by Bernt Balchen who had been at Spitzbergen with Amundsen, had helped Byrd, and had been Byrd's pilot during the South pole flight. Balchen questioned Byrd's ability as a navigator and expressed doubts about the speed of the North Pole plane (Balchen, p. 66). In 1960 Gosta H. Liljquist, a professor of meterology at the University of Uppsala, examined meteorological records and concluded that there was no wind strong enough to enable the Josephine Ford to make the polar flight so quickly (Liljequist, pp. 589-591). Finally, in 1971 appeared the book, *Oceans, Poles, and Airmen* by Richard Montague. Montague had interviewed Balchen and published a story

that Floyd Bennett, Byrd's pilot, who had died of pneumonia in 1928, had confessed a year earlier to Balchen that the plane had developed an oil leak early in the flight and had circled out of sight of land without making an effort to reach the Pole (Montague, pp. 47-48).

Byrd also had his defenders. The National Geographic Society continued to maintain the claim. Peter Demas, a member of Byrd's expedition, maintained that the flight had been long enough to reach the Pole. And Joe Portney, an expert in navigation, published an article in the *Journal of the Institute of Navigation* that questioned Liljequist's evidence of winds, reviewed Byrd's navigational instruments, and concluded that Byrd was likely to have come within at least fifty nautical miles of the North Pole.

Byrd's diary for the North Pole expedition is a significant element in the controversy. In appearance, the work itself is unimpressive, even shabby. The cover bears the title "1925." Actually, Byrd purchased the volume in 1925 and recorded his thoughts and observations during the expedition with Donald MacMillan in 1925. Then, Byrd used blank pages to record the North Pole expedition of 1926 and even the transatlantic expedition of 1927--without bothering to change the years. To the unprepared, the diary seems confusing at best.

In the diary Byrd recorded his activities and his observations of people and events during the expedition to the North Pole. Byrd also used this diary as a message pad to communicate with his pilot Floyd Bennett. The noise from the three engines made verbal communication difficult. These messages are critically important. One warns pilot Bennett that there is a strong wind and that he must steer carefully. Another scolds Bennett that "You are steering too far to the right. Set compass few degrees to left." and then warns "you must not persist in keeping too far to the right" (Goerler 1998, p.81). Elsewhere Byrd announces that the starboard motor has an oil leak and asks "Can you get all the way back on two motors?" And then notes "20 miles to go to pole" (Goerler1998, p. 96). At another point, Byrd tells Bennett "We should be at the Pole now. Make a circle. I will take a picture....Radio that we have reached the pole and are now returning with one motor with bad oil leak but expect to be able to make Spitzbergen" (Goerler1998, p.86).

From these messages, two facts have been established that had been questioned previously. First, both Byrd and Bennett did experience a strong wind at times on the flight. Second, it is clear that the Josephine Ford made a legitimate effort to reach the pole. The account published in *Oceans, Poles and Airmen* of a faked flight into the horizon is completely wrong.

In addition, the messages also raise questions about Floyd Bennett's confession to Bernt Balchen that the Josephine Ford had not reached the pole. The diary records Byrd telling Bennett that they are at various distances from the pole, from 240 to 20 miles to go to the Pole and then "We should be at the pole now...." When does Bennett conclude that they did not reach the Pole? Certainly Bennett must have thought so at the time of the flight. There is

no apparent evidence that Byrd did not think they were at the Pole. If Bennett believed that they did not reach the Pole, how did he reach this position and did he communicate or confess this to Bernt Balchen later? The answer is that the account in Montague's book, *Oceans, Poles, and Airmen* is a gross distortion. Balchen's own account in the National Archives, is that Balchen questioned Bennett about the speed of the airplane and noted that its speed in the national tour that followed the Polar flight seemed less than what Byrd and Bennett had reported on May 9. According to this account, Bennett simply replied that he could not understand the figures and that he would ask Byrd about this sometime (Balchen, "The Strange Enigma of Admiral Byrd," p. 8).

The newly discovered diary has also been a resource for one of Byrd's critics. Near the bottom of the same page as Byrd's message to pilot Floyd Bennett about the oil leak is a question that is largely erased but still legible, "How long were we gone before we turned around?" The penciled response was "8 1/2" (Goerler 1998). Above it is a calculation that concluded that 20 miles remained to the Pole. During the flight, Byrd also used the diary as a scratch pad upon which he did calculations for some sextant observations to establish to establish his position. Two of the calculations are erased, although they are still legible. These erasures prompted the archives to photograph the entire diary by means of ultra-violet light to detect other erasures that were not eye legible. None appeared.

The first to study the diary and the calculations and messages it contains was Dennis Rawlins, the editor of the journal *DIO* and an historical astronomer who has studied the evidence submitted by explorers to support their claims. In 1973, Mr. Rawlins wrote *Peary at the Pole: Fact or Fiction*, which concluded that Peary could not have reached the North Pole. In that book, Rawlins expressed his doubts about Byrd as a navigator and his claim to the North Pole. (Of the South Pole flight, Mr. Rawlins charged that Byrd's chief navigational instrument was a bottle of cognac.) Rawlins charged that in recognizing Byrd's accomplishment of the North Pole that the National Geographic Society had been overly hasty to award Byrd its medal. In addition, Rawlins noted that Byrd had failed to drop the hundreds of U.S. flags from the Josephine Ford to the North Pole, where they could have been seen by Roald Amundsen and the passengers of the *Norge* a few days later. Finally, Rawlins reiterated the concerns of others that the Josephine Ford was not capable of the flight in the time that Byrd claimed (Rawlins 1972, pp. 257-274).

For Rawlins, the diary provided new evidence of fraud that confirmed his previous skepticism of Byrd. Rawlins studied the sextant calculations, including the erasures, in the diary and compared them against Byrd's official report of the flight. Much of Rawlins's focus is on Byrd's calculation of position at 7:07 GCT (Rawlins 1996, pp. 8-10). According to Rawlins, the erasure is the true position of the Josephine Ford and the one more likely to be achieved by the plane at that time. That point would have been a full 136 nautical miles south of where he needed to be to reach the North Pole two hours later. Rawlins argues that Byrd changed the sextant observations to put himself closer to the North Pole than he

actually was. In the end, according to Rawlins, Byrd succeeded in reaching no closer than 135 nautical miles from the Pole, a spot from which they may have been able to see the North Pole on a very clear day (Rawlins 1996, pp. 10-12).

From the point of view of Dennis Rawlins, the messages from Byrd to pilot Floyd Bennett seemed less certain than they should have been. The statement from Byrd that they "should" be at the pole seemed less than authoritative than if Byrd had written "We are at the Pole." Similarly, Rawlins points out that Byrd's question about getting back to Spitzbergen with only two engines does not say "Can we get back from the Pole." In the same vein, the question from Byrd "How long were we gone before we turned around?" did not refer to actually having attained the Pole (Rawlins 1996, pp. 4,7). Other historians, however, could-- and will-- argue that Mr. Rawlins had interpreted too severely and critically the wording of messages that were hastily written during a dangerous and unprecedented flight..

Parts of Rawlins's evaluation of the diary did praise Byrd while the conclusion did not. Rawlins noted that Byrd demonstrated remarkable bravery in going so far over the ice and exhibited much more knowledge and ability to navigate than Rawlins had previously credited him. In the end, however, Rawlins concluded that Byrd deliberately turned back knowing that he had not reached the Pole. The compelling reason, according to Rawlins, was the oil leak in the one engine, which Rawlins believes happened much further from the Pole than Byrd admitted. To continue would have been foolish. Thus, Byrd saved the himself, Floyd Bennett, and the *Josephine Ford* from harm. To save himself from financial bankruptcy, the likely cost of turning back early, Byrd claimed the accomplishment anyway (Rawlins 1996, p.2). In the process Byrd also denied this "first" to Roald Amundsen who followed three days later.

Dennis Rawlins was the first to examine the navigational calculations but was not the last. A few months after Rawlins's evaluation, Colonel William Molett reviewed Byrd's diary. An experienced polar navigator who also taught navigation for the U.S. Air Force, Molett has been a critic of Rawlins and a defender of Robert Peary's claim to the North Pole (Molett 1996, pp.i-iv.). Molett concluded that the differences between the diary and Byrd's final report were inconsequential. Of the erased sextant calculation for 07:07, Molett concluded that the erased position does not fit any previous calculation but the one not erased did (Molett 1998, p.62). According to Molett, Byrd erased the calculation because he knew it was an error.

Molett also had a different interpretation than Rawlins about Byrd's failure to drop the flags. The *Josephine Ford* had difficulty in taking off from Spitzbergen because of the weight of the plane and the fragile nature of the skis that served as landing gear. The flags may have not been on the flight in order to reduce unnecessary weight. Moreover, there was no certainty that all of the flags could be precisely dropped at the pole or that the crew of the *Norge* would see them, given the uncertainty of lift-off for the *Norge* and the perils of wind

and drift. (Molett 1998, pp.62-63) (Byrd's papers do show that Byrd used the flags later to reward prominent supporters. In all likelihood, Byrd would not want to admit that the flags had not been excess baggage and had remained on the ground.)

A third expert has also questioned the value of the sextant calculations in the diary. Dr. Gerry Newsom, a professor in the Department of Astronomy at The Ohio State University, had no previous opinion about Byrd's flight, and agreed to review the data. Newsom concluded that the erased sextant calculations were inconclusive. They said more about the exhausted state of the navigator, who had been without sleep and exposed to much noise and tension than the latitude achieved by the Josephine Ford (Newsom 1997, pp.8-9). At a minimum, according to Newsom, Byrd appears to have gone much further North than Rawlins gave credit (Newsom 1997, p. 10).

Interpretations of experts in navigation and astronomy aside, several questions about the diary remain unanswered. First, why were the erasures so incompletely accomplished if the intent had been to deceive? They can be read by the naked eye. Second, why did Byrd refer to this diary in two of his publications if the diary contained evidence of fraud? Following Byrd's flight across the Atlantic Ocean in 1927, he wrote an article in the *National Geographic Magazine* and referred to the diary: "I made notes in my log and remarks in my diary, the same diary carried over the North Pole with me" (Byrd, *National Geographic* 1927, p. 352). Again in 1928, in *Skyward*, Byrd also referred to the diary using the same words. These are hardly the actions of someone who believes he has something to hide. In fact, they evidence the fact that Byrd believed he had reached the North Pole, as was credited to him by the National Geographical Society.

Certain it is that an oil leak from an airplane in flight is nearly as worrisome now as it was in 1926. Byrd acknowledged that he and Bennett did worry, but that they were close to the Pole when it happened. To conclude that they panicked and turned back short of the Pole is to ignore evidence in Byrd's papers about the reliability of the three engine aircraft and its ability to fly with only two engines. In 1926 Edsel Ford himself praised Byrd for the choice of engines. The letter in Byrd's Papers states, "Your selection of Wright air-cooled motors is a good one, and I believe this motor is by far the best worked out one of its type at the present time. The multi-motored plane is a great boon to safe transportation, and I believe eliminates 90% of the hazard, although I doubt that you will be able to find a plane that will stay aloft with one motor running only, under any consideration" (Byrd Papers, 4269). Another factor to inspire confidence was that Byrd's plane had won the Ford Reliability Tour the previous year. The totality of this evidence makes it unlikely that Byrd would panic about an oil leak in one of the three engines when all continued to function. In fact, the leaking motor never did stop, because the leak had been caused by a faulty rivet. When the oil level fell to below the loose rivet, the leak stopped completely (Byrd 1928).

The speed of Byrd's airplane in traveling the more than 1400 miles is still a question. Factors of altitude and weight as well as wind impact speed. As Byrd acknowledged in *Skyward*, some reporters at Spitzbergen did question that Byrd could accomplish the flight in fifteen and a half hours. However, one of the reporters there was William Bird of the New York Times. In Byrd's papers is a cable from Bird to the Times reporting that the Josephine Ford had just left Spitzbergen and would return in sixteen hours to twenty-four hours (Byrd Papers, 2536). Clearly, Byrd's return was close to the earliest time expected.

In a debate contested so hotly and for so many years, one hesitates to suggest any conclusion. Likely it is that arguments for and against Byrd's accomplishment of the North Pole will continue, even as they have for Peary and for Cook. Byrd's diary is a particularly insightful but not necessarily conclusive document. It records his observations about other explorers, his concerns for the success of the expedition and the well-being of its members. If Byrd knowingly committed a fraud, then a particularly ironic and even comic passage in his diary is Byrd's complaint that the Norwegians were not playing fairly when they refused to make way for Byrd to unload his ship at Spitzbergen! (Goerler 1998). Byrd's accomplishment of the North Pole is likely to remain an enigma. The full record of Byrd's documentation submitted to the U.S. Navy and to the National Geographic Society appears to have been lost many years ago. The diary alone seems too inconclusive to overturn the decision of three experts who reviewed Byrd's claim in 1926. What cannot be denied, however, is that regardless of the controversy surrounding the North Pole, Byrd's real legacy was in Antarctica where Byrd's work resulted in a permanent and scientific presence there.

REFERENCES

- Balchen, Bernt 1958. *Come North With Me*. E.P. Dutton, New York.
- Balchen, Bernt. undated manuscript. *The Strange Enigma of Admiral Byrd*. National Archives, Washington, D.C.
- Bowers, Peter M. 1974. *Yesterday's Wings*. Aircraft Owners and Pilots Association, Washington, D.C.
- Bryce, Robert M. 1997. *Cook and Peary: The Polar Controversy Resolved*. Stackpole Books, Mechanicsburg, Pennsylvania.
- Byrd Papers. The Ohio State University Archives, Columbus, Ohio.
- Byrd, Richard E. 1926. The First Flight to the North Pole. *National Geographic Magazine* 50 (3): 357-376.
- Byrd, Richard E. 1927. Our Transatlantic Flight. *National Geographic Magazine* 52 (3): 347-368.
- Byrd, Richard E. 1928. *Skyward*. G.P. Putnam's Sons, New York.
- Cafe Productions 1997. *Alone: Richard Byrd in Antarctica* [Broadcast on PBS in the United States in 1997]. London.
- Demas. E.J. 1976. Byrd's North Pole Flight, 9 May 1926. *Polar Record* 18 (114):307-308.
- Goerler, Raimund E., ed. 1998. *To The Pole: The Diary and Notebook of Richard E. Byrd, 1925-1927*. The Ohio State University Press, Columbus, Ohio.
- Hoyt, Edwin P. 1968. *The Last Explorer: The Adventures of Admiral Byrd*. John Day, New York.
- Liljequist, G.H. 1960. Did the *Josephine Ford* Reach the North Pole? *Interavia* 5: 589-591.
- Molett, William E. 1996. *Robert Peary & Matthew Henson at the North Pole*. Elkhorn Press, Frankfort, Kentucky.
- Molett, William E. 1998. Due North? Byrd's Disputed Flight to the Pole. *Mercator's World* (March/April): 58-63.

- Montague, Richard 1971. *Oceans, Poles, and Airmen: The First Flights Over Wide Waters and Desolate Ice*. Random House, New York.
- Newsom Gerry 1997. Report to Raimund Goerler. The Ohio State University Archives, Columbus Ohio.
- Portney, Joe N. 1973. The Polar Flap--Byrd's Flight Confirmed. *Navigation: Journal of the Institute of Navigation* 20 (3): 208-218.
- Rawlins, Dennis 1973. *Peary At the Pole: Fact or Fiction*. Robert Luce, Inc. Washington - New York.
- Rawlins, Dennis 1996. Preliminary (Unedited) Report on Byrd 1925-1926 Data. The Ohio State University Archives, Columbus, Ohio.
- Smith, Richard K. 1973. *First Across! The U.S. Navy's Transatlantic Flight of 1919*. Naval Institute Press, Annapolis, Maryland.
- Wilkins, George H. 1928. *Flying the Arctic*. G.P. Putnam's Sons, New York.

14
Jan. 14

WEDNESDAY, JANUARY 14, 1925

We moved to at the pole
now. make a circle so
will take a picture
then I want the sun

Radio that we have reached
the pole and are now
returning with one motor
which had air leak. But expect
to be able to make Spitzbergen.

SUNDAY, JANUARY 11, 1925

Jan. 11

water. 7-07-30
20

80 = 17-10-

airt 7-07-10
Egt 3-37

C.A.C.T 7-10-47

50
36
45
16
34

CASH ACCOUNT

DECEMBER

DATE	RECEIVED	PAID
The 5th motor has an air leak	8 1/2	
Can you get all the way back on two motor	85 85 85 17.40 -35	
What has been on average in street		
$\begin{array}{r} 85 \\ 82 \\ \hline 68.0 \\ 42 \\ \hline 72 \end{array}$	$\begin{array}{r} 8.65 \\ 2.40 \\ \hline 3.25 \end{array}$	
90 miles + 90 + paid		
8 1/2		
Had to plan night at the farm		