Mail in the Air

Writings About Aerophilately



Published in conjunction with Aerophilately 2022 by the American Air Mail Society

An Official Publication of the

AMERICAN AIR MAIL SOCIETY

American Air Mail Society, P.O. Box 110 Mineola, NY 11501-0110 © 2022 — All Rights Reserved

Copyright Notice

No part of this publication may be reproduced, stored in a retrieval system, transmitted in any form or by any means, electronic, mechanical or photocopies, recorded or otherwise without the written permission of the publishers at the copyright address.

Publisher's Notice

Every effort has been made to insure the accuracy of the information in this volume, however, typographical errors may exist.

Special Notice

Permission is hereby granted for the use of the information in this volume and covered by the publisher's copyright by writers, editors, or reviewers in newspapers, magazines, and periodicals and by philatelic dealers in advertising matters, circulars, or price lists prepared and issued for free distribution provided proper acknowledgment of the source of the information so used is given in each newspaper, magazine, periodical, advertising matter, circular or price list. Except for the exclusivity of the copyright permission noted below, permission is granted to collectors, dealers, and auction firms to refer to the information in this book in philatelic publications, price lists or auction catalogs, provided an acknowledgment of the source of this information is given.

Copyright Permission

The listing numbers for many stamps of the United States and other countries are herewith used with the permission of the Scott Publishing Co. "SCOTT" and "SCOTT'S" are registered in the U.S. Patent and Trademark Office and are the trademarks of Amos Philatelics, Inc., Scott Publishing Co., Sidney, Ohio.

No use may be made of these marks (or listing numbers) or of any material in this publication which has been reprinted from copyrighted publications of Amos Publications, Inc., without the express permission of Amos Philatelics, Inc., Scott Publishing Co., Sidney, Ohio.

Production

Design, layout, and editorial guidance by Matthew Heller.

Contents

Enjoy Aerophilately and Our Show, Stephen Reinhard, Show Chairmaniv
Greetings from the American Air Mail Society, David S. Ball, AAMS Presidentiv
Pushing the Envelope: Pioneer Rocket Mail, 1928–1959, David S. Ball
The Veil is Lifted: PAA Builds a Seaport in the Jungle: Fisherman's Lake, David Crotty
Restarting Pan Am's Commercial Transpacific Airmail Service After WWII, William Fort
SCADTA and the 1934 Von Krohn Air Crash, Alfredo Frohlich and Santiago Cruz
Canadian Airmail Services in 1932: A Look Back to 90 Years Before Aerophilately 2022, Chris Hargreaves
Collect Zeppelins and Join the Fun, **Jim Hill44**
Romance of the Flying Boats, **Jon Krupnick**



Sponsored by the American Air Mail Society, American Philatelic Society, and Daniel F. Kelleher Auctions

Published in conjunction with Aerophilately 2022, held November 4–6, 2022, at the American Philatelic Center (Match Factory), Bellefonte, PA.

Enjoy Aerophilately and Our Show

Welcome to the American Philatelic Center and an amazing all-airmail and astro show. The American Air Mail Society, in conjunction with the American Philatelic Society, produced wonderful shows in 2007 and 2014. We hope that you enjoy this show as much as previous shows were enjoyed by attendees.

This publication contains articles written by distinguished aerophilatelists. It has been written with the purpose of enlightening current AAMS members and also to introduce non-members to a range of topics enjoyed by our members. It is offered to all attendees of AEROPHILATELY 2022 as a complimentary remembrance of this great show.

My thanks go to all of our authors and to our production editor Matt Heller, whose incredible skills made this publication possible. To all of our attendees, thank you for participating in this event.

Research is the key to the future health of aerophilately. There is much research still to be done. We need to publish the results of our research in the *American Air Mail Catalogue* and in the *Airpost Journal*. You can do what these fine authors have done. All it takes is a love of our hobby.

So, have fun and carefully read the articles in this publication and the exhibits on the floor of the show. You will be glad that you did.

Stephen Reinhard Show Chairman

Greetings from the American Air Mail Society

In a scant few months, the American Air Mail Society turns 100. Since then, the Post Office Department created transcontinental Airmail service, privatized the movement of mail, experimented with innovative ways to move mail faster, and became the United States Postal Service.

Over that same period AAMS has responded to the needs of aerophilatelists. Beginning in 1935, the Society has published the *Catalogue*, currently in the 7th Edition, numerous reference volumes, and the award-winning monthly *Airpost Journal*. As the world's second oldest organization of its kind, we continue to meet the varied needs of our members all over the globe. If you are an active member, thank you. If not, let me invite you to join. Doing so introduces you to several hundred like-minded collectors who enjoy the fellowship and benefits membership brings.

On behalf of the Officers and Board enjoy this World Series of Philately show dedicated to Aerophilately. Aviation connects the globe and brings us all closer.

David S. Ball President American Air Mail Society

Pushing the Envelope: Pioneer Rocket Mail, 1928–1959

David S. Ball

Methods of moving mail have evolved over time to address an interest in reaching inaccessible places and doing so quicker. Stagecoach, ships, trucks, trains, and even dog sled have advanced access, economics, and convenience for customers. For a time, experimenters evaluated whether the rocket could become the newest mail delivery system.

Heinrich von Kleist first suggested using projectiles to carry mail. In his position as editor of the Berlin Evening News, von Kleist wrote an article 1810 suggested firing artillery shells filled with letters. By repeatedly forwarding rocket mail dozens of times a letter could travel the 75 miles from Berlin to Stettin, or even the 180 miles from Berlin to Breslau, in a single day.

Frenchman J.D. Schneiter applied for what's believed to be the first rocket mail patent in December, 1870. Thought as a communications channel to help end the Prussian Siege of Paris, it was never used. The Siege, however, introduced Balloon Mail, the world's first example of Airmail.

The First Rocket Mail

With volcanic reefs and choppy waters surrounding the island of Niuafo'ou in the South Pacific, an alternative to mooring a ship to deliver mail was required. In 1882, the Tongan postal service began using tin cans to deliver mail swam between ship and shore by islanders. With strong currents requiring swims of up to 6 hours and shark infested waters, test of Congreve-type rockets at the turn of the century were used to fire letters toward the island as an alternative.

During the 19th century, the Congreve had evolved from a war missile adapted from an Indian weapon into a potential mail delivery vehicle. Figure 1 illustrates a Boxer Life-Saving Rocket. The nose cone is made of cork that floats and it trails a length of rope to aid in retrieval. Designed to create a lifeline to ships in distress, the nosecone was probably replaced in order to make room for letters.

In 1902 William Edgar Geil wrote in his book Ocean and Isle he had watched the captain send letters to the island by rocket. On this occasion the attempt was successful, but often the rocket overshot the island altogether, landed in the lake in the island center, or just got lost in the jungle. On a previous occasion the package of letters burst into flames en route.

As dangerous as swimming to ships to exchange mail was, the practice continued until the island was abandoned in 1947. To reduce the danger from shark attack the trip was later done by canoe. The novelty mail service became known as Tin Can Mail and remains popular with philatelists.

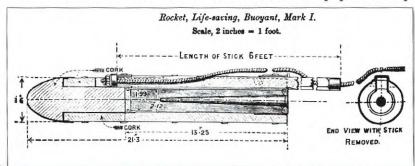


Figure 1. Boxer Life-Saving Rocket.

The Father of Rocket Mail

Friedrich Schmiedl (1902–1994) was a chemist and inventor. His first flight, on May 28, 1928, was a combination stratospheric balloon which reached 18,800 meters and a rocket with a solid propellant motor which carried 200 envelopes (see Figure 2). Because there was no guidance or tracking possible the covers were not recovered for four months. Three years later, in 1931, his were the first letters delivered by government post after flight. Schmiedl was a genuine pioneer of high-altitude research who, without military support, succeeded in building sophisticated rockets to send mail to isolated villages. Such was the demand for his rocket covers that he soon realized they could finance further experiments.

He set the standard for philatelic documentation as well. Schmiedl produced Cinderellas which he had cancelled alongside postage stamps on the day of launch and from the nearest post office. The number of envelopes or cards were limited and he signed all the covers that flew. Usually, after flight on his rocket the mail would be posted to the addressee.



Figure 2: Schmiedl Balloon-Rocket Cover, June 10, 1928. One of 200 envelopes to reach the stratosphere by balloon when the attached rocket fired.

Astrophilately Down Under

Alan Young was a Brisbane architect, entrepreneurial publisher, and President of the Queensland Air Mail Society. After reading aerophilatelic journals about earlier efforts, he corresponded with Friedrich Schmiedl, Gerhard Zucker, and Stephen Smith. Standard ship rockets used on the first three flights were used to fund the society's experimental *Zodiac* and *Orion* rockets.

Young viewed himself as a genuine rocketry pioneer. He obtained technical details on Austrian and German rockets but had a plumber with some knowledge of explosives construct the rockets. *Zodiac* would explode on the launch ramp while *Orion* took off perfectly, quickly nose-dived, clipped a tree and was deflected into the river where it was destroyed. While subsequent smaller rockets would travel a few hundred meters in altitude or downrange, after three years the efforts came to an end with criticism that they were but stunts to raise money from philatelic sales.

During the first attempt, on December 5, 1934, things went awry. Almost immediately after leaving the ship, the metal container attached to the rocket, containing 897 letters got detached

and fell into the Brisbane River where it was later fished out. In most fields of endeavor, significant anomalies spell trouble. Not so in documenting experimental flight. For Astrophilatelists, a crash only makes the story more interesting.

The second Australian flight occurred 8 months later, on August 11, 1935, with a rocket launched from Fraser Island towards a wrecked Japanese ship being towed to Japan. Not surprisingly, the missile failed to reach the ship. An example is shown in Figure 3. Clearly, the flights represented a novelty that collectors from all over were hungry for.



Figure 3: Second Young Australian Rocket Flight, August 11, 1935. The envelope is signed by both the experimenter and the ship captain.

Meanwhile in Germany

Of any nation, Germany is perhaps most responsible for the creation and progress of early rocketry. While Tsiolkovsky was Russian and Goddard an American, it was the groundbreaking work of Oberth and von Braun that ignited modern rocket technology. Had he not lost his life a mere two years after starting experiments with rockets, **Reinhold Tiling** might well have become a household name as well.

Tiling (1893–1933) studied mechanical engineering before volunteering as a fighter pilot for Germany in WWI. In 1926 he became an airport flight controller and started his first experiments in 1928. He developed reusable rocket planes which started as a rocket and landed with swinging-out wings. On March 13, 1931, Tiling and his co-worker succeeded in launching a solid-propellant rocket that flew for 11 seconds and reached a height of 1,800 meters. The breakthrough experiment occurred on April 15, 1931, when Tiling demonstrated a post office rocket which carried 188 postcards reliably. This attracted the attention of the of the military. On October 10, 1933, overheating of the powder needed to power the rocket created an explosion in his workshop leading to the death of Tiling, his assistant, and his mechanic.

Anyone who seeks to tell the complete rocket mail saga must include an example flown by Tiling. Since he only documented one flight, there are a mere 188 cards from which to relay this portion of the story. Figure 4 shows an example. Cards exist for another flight but they were not carried aloft. Unlike Zucker and Roberti, Tiling's efforts were serious business. His work with

solid rocket motors between 1928 and his death in 1933 as well as his innovative ideas on swing wing and stabilizing fins acting like propellers, earned him both national and international patents. His brother would pick up him work for the next several years. The German military considered the technology in 1939 but opted to focus on liquid fueled rockets instead.

A Zucker Born Every Minute

Not all Germans were quite as studious (or honest). **Gerhard Zucker** (1900–1985) was a rocket enthusiast and fraudster. A butter and cheese maker, he first came to public notice flying fireworks-type powder "rocket post" flights. Two years later he was touring Germany with a 15-foot-long recoverable cruise missile. It could presumably cruise 400 km at an altitude of 1,000 m and a speed of 1,000 m/s. Reportedly able to deliver a bomb load or take reconnaissance photographs, Zucker demonstrated his rocket for the Nazi government in 1933. In reality the

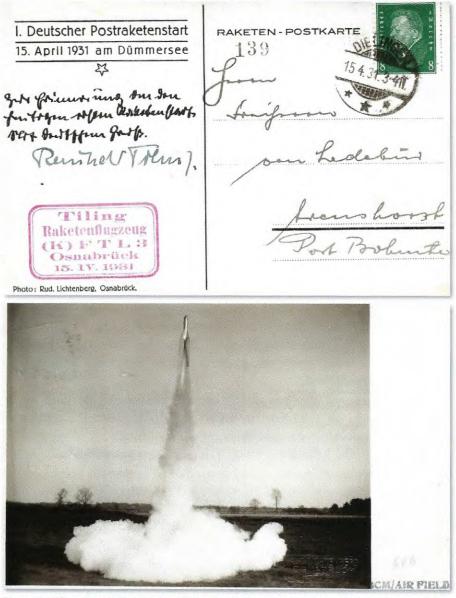


Figure 4: Tiling Post Office Rocket Flight, April 15, 1931. The first German postal rocket, loaded with 188 cards with an image of a previous flight on the face, rose over a mile up before swinging out wings and gliding to the ground near the launch site.

missile was just a hull with eight powder rockets. His excuse for regular failures was his inability to get the secret rocket fuel and lubricants needed for success. Figure 5 shows a cover from the second of his demonstration flights.

Following disappointing flights in Germany, Zucker traveled to Great Britain to the International Airpost Exhibition. The flights resulted in explosions and sub-par performance. Wherever he went, the rockets were decidedly earthbound and the documentation stellar. An array of covers from those flights is shown in Figure 6.



Figure 5: Second Zucker Flight, November 4, 1933. A cover from the second of 9 flights. Zucker reportedly conducted flights from Scotland, Italy, England, Netherlands, Belgium, Germany and Switzerland. He also planned a flight from Abyssinia.



He came to the attention of the authorities of the Third Reich and was briefly detained. It is believed that this resulted in his failure to attend the 1936 TIPEX international stamp show in New York. Thousands of covers with corresponding Cinderella stamps exist giving many the impression that rocket mail was carried during the show. It was not. A friend manned a show both and sold envelopes but that was a far as things went.

After the war he became a furniture dealer and resumed firing missiles and selling both flown and unflown rocket mail. A launch in 1964 resulted in fatalities and he continued to pedal fraudulent covers into the 1970s. What Zucker lacked in aeronautical know how was made up in philatelic flair. To be considered flown, the envelope must have government stamps and postmark. The Cinderella labels, commemorative postmarks and autograph which Zucker excelled at made for an attractive envelope.

The Flying Dutchman

If Zucker had a twin it would Karel Roberti, a Dutchman, with no scientific or technical training. His projectiles were just sky rockets purchased from well-known firework producers, A J Kat in Leiden. His first rocket experiment on the shores of Katwijk-aan-Zee in The Netherlands during December 1934 resulted in an explosion on ignition. Numerous failures followed. He had a launch later that year in Belgium before firing a rocket in Luxembourg in 1936. The leading Dutch stamp magazine in 1935, Maandblad voor de Philatelie concluded in the article "Rocket Post Swindle" that Roberti was just a con-man.

Roberti was closely associated with Nederlandsche Raketten Bouw (NRB), translated as Dutch Rocket Construction Inc. Actually, NRB did no experiments or rocket construction. It was owned by stamp dealer Gerard Thoolen, who was able to peddle the covers at high prices.



Figure 7: Roberti NRB Flight Cover, April 23, 1935. After travelling 165 meters, the steel-winged. rocket-powered aircraft fell to the ground, breaking the wings.

Clearly, the documentation of the flights, and not progress in rocketry, was at the core of his efforts. The shape of the Cinderella, the red "flown" rubber stamps, the signature, in addition to the postage stamp and cancel, make for a beautiful keepsake from the flight, as seen in Figure 7. No experimentation leading to either the advancement in rocketry or the movement of mail was occurring. The missile was just a novel vehicle to sell philatelic souvenirs. With launches routinely ending in explosions, it became important to begin with enough covers to end up with sufficient inventory for rocket mail collectors.

Real Experimenter and True Philatelist

Of the dozen or so who documented rocket flights with mail, none combined a curiosity of what reaction motors could do, with an extensive philatelic trail left for postal historians, like **Stephen Smith** of India.

Smith (1891–1951) had careers as a policeman, dentist, and customs official. He was also described as an aerospace engineer although no evidence of formal training as yet been uncovered. Beginning with a series of rockets provided by the Oriental Fireworks Company, Smith began a decade-long, incremental string of successful flights. As part of more than 270 flights, 80 of which included rocket mail, Smith was the first to successfully deliver a parcel intact, fly foodstuffs, transport a live cock and hen (Adam and Eva), and move medical supplies by rocket. Prior to the formation of the modern state of India, His Highness the Maharajah encouraged Smith to fire rockets in Sikkim (see Figure 8). He refused to permit his rocketry knowledge to be used in WWII and chose instead to destroy his notes.

As a leader in the Indian Air Mail Society, he served as a mentor for fellow rocket enthusiasts. His documentation in Aerophilately was equally extensive with considerable pioneer envelopes carried on the earliest flights of the British Empire in South Asia and beyond.



Figure 8: Smith Sikkim Flight Cover, October 11, 1935. A cover carried on one of the experimental flights encouraged by His Highness the Maharajah of Sikkim.

Americans Were Decidedly Underpowered

William Sykora (1913–1994) is credited with the first rocket mail flight in the United States. Kronstein says Sykora undertook many months of research and numerous test firings before the first mail flight. This is highly unlikely. The first mail flight traveled a few feet before exploding sending steel shrapnel which destroyed 90 percent of the envelopes. The second (and final) rocket the same day flew a flew a more feet before disintegrating. A salvaged cover is shown in Figure 9. Sykora was an early science fiction fan who knew great authors including Frederik Pohl, Isaac Asimov, and Robert Heinlein.



Figure 9: Second Sykora Rocket Flight, September 22, 1935. One of 198 salvaged covers from the second explosion of the day.

Albert Roessler (1883–1952) sold miniature envelopes that traveled by rocket and then by parachute. It was presumably the work of Professor Lo Russo but Hopferwieser surmises that

Russo was merely a pseudonym used by Roessler. This would not have been out of character for him as he frequently skirted the edge of truth and legality in pursuit of marketable aerophilately. He had no training or passion to advance missile technology or intent to make movement of government mail by rocket possible. Like Zucker in Germany, the intent was simply to create a philatelic collectable.

On the last day of January 1936, a rocket loaded with 980 miniature covers launched near Newark Airport flew about the length of a football field at a height of about 45 meters before exploding and releasing the contents via parachute.

Postal authorities, objecting to the stamp-like label and fantasy postmark, impounded all covers until May 12. Postage stamps on the reverse are sometimes found uncanceled. See Figure 10.



Figure 10: Roessler Mini Cover, January 31, 1936. A carried cover, with the back flap lifted up to show the uncanceled stamp.

A vertical rocket requires an engine with 2-1/2 times its weight to fly. For the 30-degree incline used with *Gloria*, only a thrust to lift 65 percent of the weight was required. Designed to give aircraft greater stability Dr. Willy Ley added a liquid rocket engine.

Over 6,000 letters and cards took off with much roaring and sputtering as smoke and flames spurted from the tail. It took an immediate left veering straight for 200 spectators before plunging onto the frozen lake. After skimming the ice for 115 meters it soared to a height of 10 meters before crashing 15 meters over the New Jersey line. A second rocket was launched with similar results. A cover, photograph, and ribbon from the demonstration flight are show in Figures 13–15.

Our Man in Havana

Antonio Funes, a pyrotechnics expert with DuPont, was hired by Dr. Tomas Terry of the Republic of Cuba Philatelic Club to provide rockets for the nation's first rocket mail. The first test, conducted on October 1, 1939, exploded after traveling just 8 meters at the Army's Fifth Avenue firing range on the seacoast in Mirimar. A cover from that flight is shown in Figure 16. For the second of four flights, Funes overcame stability problems by arranging six rocket motors in pairs around the middle of the rocket. This resulted in a successful flight of over 600 meters.

Unlike the purely philatelic efforts of Young, Zucker, Roberti, and Roessler, the goal in Cuba was to make commercial rocket mail a reality. Unfortunately, rocket technology was a nascent science and even the much more advanced and better funded efforts by the United States two decades later would prove inadequate to the task.

In addition to 80 mint provincial overprinted stamps, 70 copies were applied to the first of three trial flight covers. With the destruction of the rocket, 10 of the envelopes were lost. The remaining 60 were posted. A second trial on October 3 and a third on October 8 were also undertaken, using white imprinted labels instead of stamps.

The remaining two flights, on October 15, were responsible for the vast majority of Cuban rocket mail. Over 2,500 envelopes franked, and only 4 were carried on the second flight. Unfortunately, there is no reliable way to ascertain which of the 2,500 were one of the mere 200 actually carried aloft. It is suspected that if any can reasonably be considered flown it would at least be the 50 Registered envelopes forwarded from the Havana post office the previous day.

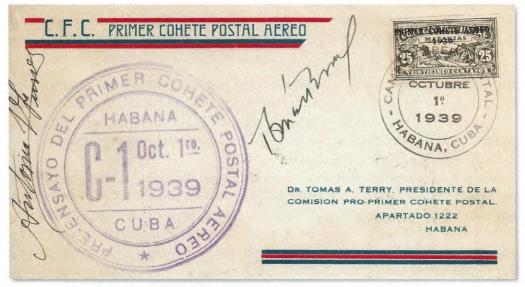


Figure 16: Funes Flight Cover, October 1, 1939. One of 60 Cuban first rocket mail covers. Autographed by the President of the postal society and the DuPont chemist who created the rockets.



Figure 13: Ley Rocket Flight Cover, February 23, 1936. Leysigned postcard carried on *Gloria*.

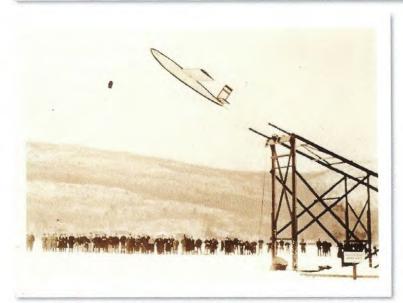


Figure 14: Ley Rocket Flight, February 23, 1936. Photograph of *Gloria* during the few moments of intended flight before it started chasing spectators.

Willy Ley (1906–1969) became interested in spaceflight as a teenager after reading Hermann Oberth's book, *The Rocket into Interplanetary Space*. At the age of 20 he became a science writer and a founding member of Verein fur Raumschiffahrt (VfR), the Society for Space Travel. VfR alums included; Johannes Winkler (first liquid rocket in Europe), Walter Hohmann (orbital mechanics), Herman Oberth (Father of Spaceflight with Tsiolkovsky and Goddard), Wernher von Braun (V-2, Saturn 5), Klaus Riedel (V-2 mobile launcher), and Eugen Sänger (suborbital bomber). Ley's popular science



Figure 15: Ley Rocket Flight Ribbon, February 23, 1936. A ribbon created to note the flight's status as the First Official American Rocket Airplane Flight.

classics included Conquest of Space (1949) with Chesley Bonestell, Conquest of the Moon (1953) with Werner von Braun, and Rockets, Missiles and Space Travel (1957), a non-technical book used by U.S. policy makers.

Keith Rumbel (1920-2008) was listed as a rocket experimenter. In point of fact, his qualification consisted of his role as Post Historian of the Loyal Post No. 37, American Legion, McAllen, Texas. He was 16 years old. The event, following a few tests launched in June, consisted of 5 rockets fired into Mexico and 5 launched into Texas in return. It was amazing no one got killed.

Rumbel's experimental rockets were constructed from cardboard, paper, cloth and glue. This was fortunate since it missed striking a woman driver by a hair's breadth. After three test launches with various configurations in June, the first rocket from the United States to Mexico occurred July 2nd. The first missile started across the Rio Grand for about 30 meters before it exploded drowning more envelopes than it burned. 51 envelopes were fished out of the river. A second



Figure 11: Rumbel Rocket Flight, McAllen to Reynosa, July 2, 1936. This cover traveled on either flight 3, flight 4, or flight 5, from McAllen, TX, to Reynosa, Mexico. A little over 1,000 covers were carried.



Figure 12: Rumbel Rocket Return Flight, Reynosa to McAllen, July 2, 1936. A return envelope fired from south off the border. The stamps were applied upon landing and taken to the local post office.

rocket fuse was lit, crossed the river, made for the roof of a parked car, and hit the American Bar in the Mexican city of Reynosa. The missile and contents were confiscated by Mexican authorities and detained for several months. The fourth shot landed on a herd of goats while the fifth hit the only roof in a village not made of straw. An cover originating in McAllen is shown in Figure 11.

Five flights were also made from Mexico to Texas. After two successful flights, the third burst over the river but most of the contents made it the Texas riverbank. The last flight, after traveling nearly a mile, landed in a dry cornfield and set it on fire. Rumbel and another teenager extinguished the fire using both sand and their feet. A cover from one of the return flights is shown in Figure 12.

Rumbel would actually go on to a distinguished aeronautical career. He attended Rice University and the Massachusetts Institute of Technology. In World War II, he worked on scientific projects and later developed solid propellants for the Polaris missile.

Back in the USA

Envelopes have been carried in U.S. Government rockets since the late 1940s, when a few were placed in captured V-2 missiles launched by Werner von Braun in White Sands, New Mexico. A decade later, the cover shown in Figure 17 was flown in an operational Regulus I missile. Organized by Otto Oleson, Postmaster of Los Angeles, Postmaster Arthur Haycox of Port Hueneme, and Postal Inspector Myron Storment. Cancelling device was unofficial and flight of 137 covers was not coordinated with the Post Office.

The following month another cruise missile fired from the deck of the submarine USS *Barbero* carried greetings to military officers, government officials and VIPs as part of a Post Office Department test demonstration. The missile flew 200 miles at near supersonic speeds before crash-landing on a foamed runway at Mayport NAS in Florida. Although 3,000 envelopes were carried on the flight, only 99 were sent internationally, with one sent to each member of the Universal Postal Union. See Figure 18 for examples.



Figure 17: Unofficial Postmasters Rocket Flight, May 1, 1959. A cover carried on a missile sent between Postmasters but not blessed by the Post Office Department.

End of an Era

Before man reaches the moon, mail will be delivered within hours from New York to California, to England, to India or to Australia by guided missiles.

— Postmaster General Arthur E. Summerfield

Like the airplane, some of the early rocket pioneers had more passion and determination than academic training or industrial support. In its infancy, commercial aviation in America was, in part, underwritten by mail contracts with the Post Office Department and the enthusiastic support of aerophilatelists. Similarly, many of the nascent rocket men partially funded their work selling rocket mail souvenirs.

Schmiedl, Tiling, and Smith were remarkably impressive. Schmiedl's first flight successfully air launched from a stratospheric balloon and over the years he experimented in several technologies including torpedoes and catapult flight. Over a short career prior to his tragic death, Tiling demonstrated flight spin stabilization and developed a rocket with folding wings that extended to permit landing like a glider. Smith showed, over more than 70 successful flights, that practical work including sending disaster supplies and food could be sent by missile. Other's contributions were less than stellar. Young, Ley and Funes made real efforts and met with some limited success. Lastly, Roberti and Zucker were the "Cancel to Order" shysters peddling covers to eager collectors.



In summary, pioneer rocket mail was a dead end for both the advancement of rocket science and the routine movement of mail. Unlike Tsiolkovsky, Goddard, Oberth and von Braun, rocket mail "experimenters" mostly focused on the creation of philatelic collectables with attractive Cinderella's, beautiful cancels, cachets, and autographs. The fact that many envelopes were singed, waterlogged, or mangled by bursting projectiles, instead of reducing value, instead tended to have the opposite effect. They told a postal history tale of a bygone era when starryeyed amateurs dreamed of being steely-eyed missile men.

Bibliography

Ball, David S. American Astrophilately: The First Fifty Years. A & A Publishing, 2010. Hopferwieser, Walter. Pioneer Rocket Mail & Space Mail. Media Solutions GmbH, 2019. Kronstein, Max. Rocket Mail Flights of the World to 1986. American Air Mail Society 1986. Smith, Stephen H. Rocket Mail Catalogue. Billing's Specialized Catalogues, 1955.

About the Author

David S. Ball is President of the American Air Mail Society and former Executive Director of the Spellman Museum of Stamps and Postal History. His book, *American Astrophilately: The First Fifty Years*, was nominated for the American Astronautical Society prize in 2010 and received a Gold medal in APS literature competition. He is U.S. Delegate to the Astrophilatelic Section of the International Federation of Philately (FIP), a national philatelic judge, and serves on the Expertizing Committee for the American Philatelic Society.

The Veil is Lifted

PAA Builds a Seaport in the Jungle: Fisherman's Lake

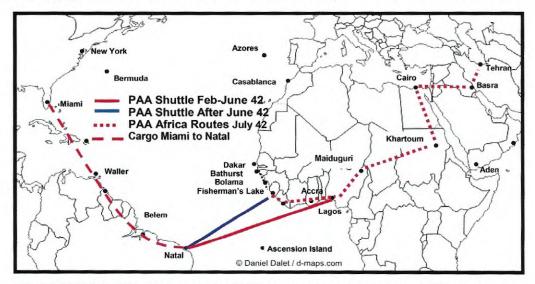
David E. Crotty, Ph.D.

Introduction

In a 1947 Airpost Journal article, Richard Singley wrote of a June 25, 1946, ceremony held at LaGuardia Airport. At this event Pan American Airways (PAA) was commended for a job well done during the war. Information, unknown up to that time, was revealed at that ceremony concerning some of the work done. Singley wrote that the "Veil is lifted" in anticipation of more information about the war effort. He wrote in part:

To the collector and the world, it was Foreign Air Mail Route No. 22, but to our Army Air Forces, it was the "Cannonball Run" linking four continents. To the Army Transport Command, it was the Africa-Orient Division of Pan American World Airways with "around-the-clock operation which rushed key personnel and material halfway around the world between Miami and India, a distance of 11,500 miles, in three and a half days, including time for maintenance, loading, fueling, servicing and repairs. The route spanned two oceans and touched on four continents, linking India and the United States by way of the Caribbean, South America, the South Atlantic, Africa, and the Middle East.

Despite the anticipation, much of that information was not released until PAA went out of business in 1991. Some of its files were cataloged and stored at the University of Miami Richter Library. Since these materials became available, a many great research pieces have been published, but there seemed to be some gaps. In the spring of 2012, I found a considerable amount of information about these wartime operations. This included unpublished books about the operations as well as hidden operations timetables and the very special trip summaries—enough to fill a 423-page book with just some of it. There are many stories to tell from that experience.



Map 1: PAA African Routes, 1942. Early South Atlantic crossings and Early Cannonball Routes to Africa.



Figure 1. Lake Piso, Liberia, aka Fisherman's Lake. Satellite photos of Fisherman's Lake (aka Lake Piso) shows Seaport and Land Airport.



Figure 2. Earthen Piers. Remains of piers used by B314 seaplanes.

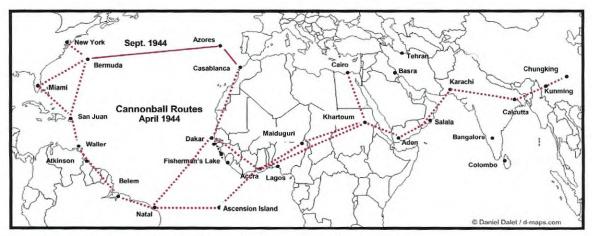
The Boeing 314 shuttle from Natal to Fisherman's Lake was not enough to handle the wartime traffic. Despite the militarization of the PAA-Africa operation in October 1942, PAA was given another big mission. On November 10, 1942, PAA civilian pilots flew the first mission of five planes from Miami to Africa. Some of the planes were the new Douglas Skymaster C54s, and some were modified B24s. The PAA Africa-Orient Division of PAA was set up to operate the new routes using four-engine aircraft. The route quickly extended to Calcutta and Chungking, China. By early 1943 there were seven scheduled trips leaving in each direction from both Miami and Calcutta each day. In February the Army insisted that the trips took too long to reach the destinations. By the end of February, the C54s were arriving at Calcutta in 3½ days with all required maintenance properly performed along the way. The flying boats needed 15 days to make that trip. The route using C54s became known as the Cannonball. See Map 1.



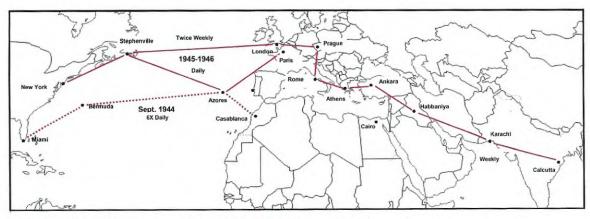
Figure 3. BOAC-PAA Transfer at Leopoldville, 1942. A cover carried by BOAC from Rhodesia to Leopoldville, where it was transferred to PAA for transit to New York, with a Leopoldville backstamp dated 24/5/1942.

There is some belief that the U.S. forbade civilian aircraft to carry mail during the war in Africa. In addition, it was believed by many that only the British airline BOAC was allowed to carry civilian mail in Africa at those times. Quite the contrary, the military was essentially ordered to give civilian and military mail equal treatment during the war, There was little evidence for this point of view until microfilms of military records were found at the Air Force military libraries in Washington, D.C., and Birmingham, Alabama. A portion of these records presented the amounts of mail that were carried by the military and civilian contractors in the month of July 1943, shown in the Table on page 18. This table shows clearly that mail was picked up and delivered to numerous countries across Africa, the Middle East, and Asia. The records show that considerable amounts of mail were also transferred between the allied and U.S. services.

In January 1944, plans were made to move all PAA Africa-Orient operations to the North Atlantic from Miami through the Azores to Casablanca, Morocco. The lack of equipment in the Azores delayed that change to September 1944. Map 2 shows the operations as they were in April 1944 and then as they were changed in September 1944.



Map 2: Cannonball Routes, 1944. Early South Atlantic Cannonball Routes to Africa.



Map 3: PAA Africa-Orient Routes, 1944 and 1945-1946. This was PAA's last wartime government contract.



Figure 4. Africa-Orient Route Cover, 1945. This cover flew the PAA Africa Orient Route in 1945, originating in Chungking, China, going through India, and finally arriving in New York.

Map 3 also shows that the new PAA Orient routes extended into Europe and all the way to India. These routes were ordered by the military, who gave PAA 10 new B52s in 1946 to prepare to build up aviation capacity as the expected end of the war materialized. This would be the last wartime contract between the Army and PAA. Figure 4 shows a cover carried on the Africa-Orient route in 1945, from China to New York; Figure 5 shows an example that traveled from Paris to Washington.

During the war the movement of mail through Africa allowed transports to avoid the war zones in Europe and the Pacific. The table on the next page lists just a few of the many African and Middle East cities that were served by the Cannonball operations, along with data on the amount of mail loaded and unloaded (in pounds), for both U.S. and Allied mail, just for the month of July, 1943.

Station	Mail Loaded (lbs)		Mail Unloaded (lbs)	
	U.S.	Allied	U.S.	Allied
Accra	155,158	2,575	171,268	800
Aden	1,501	1	1,218	50
Basra	16,121	_	13,316	_
Cairo	50,461	1,802	50,731	-
Devensoir	167	-		_
el Fasher	456	5	110	32
el Geneina	1,146	-	697	_
Elizabethville	236	1 -	159	26
Gura	6,749	-	7,126	-
Habeaniya	14	12	24	_
Kano	3,177	18	2,406	505
Karachi	20,551	_	16,754	_
Khartoum	27,208	153	29,913	5
Lagos	848	868	963	1,081
Leopoldville	733	26	444	_
Maiduguri	2,863	753	2,655	293
Masira	703	66	732	_
Nairobi	26	_	58	-
Point Noire	19	119	5	
Riyan	19	119	_	_
Salala	172	15	20	15
Shasta	_	<u> </u>	_	-
Tehran	6,051	<u>-</u>	3,068	12
Totals	294,379	6,532	301,667	2,819

Summary

The history of the wartime efforts of the Army ATC and its contractors, including PAA, centers around an unexpected seaplane port built in the jungle that became known as Fisherman's Lake. At times the port was the center of all the activity. At times it was primarily a refueling stop and the aviation radio center for that part of West Africa. Today it appears to be a resort area.

The story was largely unknown until documents were found in U.S. Army records and the PAA special collection at the University of Miami. Considerably more information about the air transport and airmail operations has been found in recent months. These will be the source of upcoming articles.

A few air mail covers that were carried on these routes during World War II are shown here (see Figures 3–6). The maps show some of the routes that carried the mail, personnel, and materials. A more detailed discussion of these topics can be found in *British Air Mail News*, Vol. 62, No. 250.

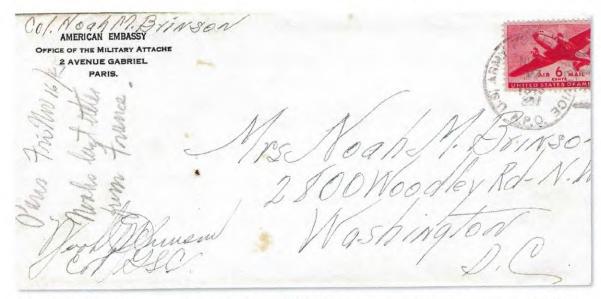


Figure 6. PAA Africa-Orient cover, Paris to Washington, 1945. This cover was carried on new routes developed by PAA. The 6-cent rate was the military concession rate. Col. Noah Brinson was an attaché to General Eisenhower during World War II.

Acknowledgments

The author would like to acknowledge Ken Lawrence, whose research helped locate a considerable amount of lost history. His searches have located more than 27,000 pages of ATC documents, some through a Freedom of Information Act request, never before explored by the aerophilatelic community. Some of these pages are mentioned in this paper. In addition, Eduardo Rabel of Miami, Florida, worked as a proxy researcher for the author. His work unearthed numerous documents that made the author's book and this paper possible.

About the Author

David Crotty was born at an Army-Air Force hospital in Dayton, Ohio, where his father was stationed during WWII. After the war, his parents moved back to their home town, Cincinnati, Ohio. David attended Xavier University, earning a B.S. in Chemistry. While he was teaching high school chemistry he worked toward an M.S. in Chemistry, and later moved to Detroit, Michigan, with his wife Joan, where he earned a Ph.D. in Chemistry. David worked in the chemical industry, mostly in the electroplating area, until his retirement, at which time he and his wife moved back to Cincinnati.

David has been a stamp collector since early grade school. Airmail covers, especially early transoceanic covers, became one of his interests. Eventually he began to exhibit at stamp shows. David is currently the editor for two philatelic society journals: The Meter Stamp Society's *Quarterly Bulletin* and *The Philatelic Communicator* for the APS Writer's Unit #30.

Restarting Pan Am's Commercial Transpacific Airmail Service After WWII

William Fort

Pan American Airways was the only transpacific airmail carrier prior to the start of World War II. Their network, developed from 1935–1941, stretched from the U.S. West Coast to Hawaii and across the Pacific. The FAM-14 Central Pacific Route reached to Manila and Hong Kong via Honolulu, Midway Island, Wake Island, and Guam. The FAM-19 South Pacific Route reached Auckland via Honolulu, Canton Island, Fiji, and New Caledonia. The Pan Am network connected to several European airlines' routes in the Far East, allowing the possibility of around the world service. All of this changed with the Japanese attacks on Pearl Harbor, Hong Kong, and Manila in early December 1941.

Transoceanic Airmail Service During the War

The U.S. government effectively nationalized domestic airlines and equipment and took many airline pilots and other personnel into the military services. The Army's Air Transport Command (ATC) and the Naval Air Transport Service (NATS) assumed direction of all transoceanic air transport. Between 1942–1945, both services developed extensive transpacific transport routes, and flew them on regular schedules. The ATC also developed routes across Africa and the Near East to Central China. Both military services contracted U.S. airlines to service portions of their networks. In addition to key personnel and freight, they carried large amounts of airmail to/ from servicemen. As the war progressed, they carried increasingly large amounts of commercial airmail on a space-available basis. In short, the ATC and NATS became some of the world's largest airmail carriers.

Throughout the war, Pan Am continued commercial airmail service in both the Atlantic and the Pacific, all under control of the U.S. Navy. However, their transpacific service was limited to the west coast–Hawaii route. Pan Am's Hawaii service was dwarfed by the ATC and NATS. For example, in February 1945, Pan Am made 35 round trips per week including contract service, while NATS alone completed 66, mostly with R4D (Navy version of Douglas DC-4) transports¹.

Pan Am's Changed Situation

As the Pacific War drew to its conclusion in August 1945, Pan Am management looking to the future would be taking stock of their assets. Their signature Boeing 314 flying boats were obsolete; the Army and Navy had developed airfields on islands across the Pacific which had previously only been accessible by flying boats. Four-engine landplanes had proved completely suitable for long-range operations over water, but their availability was still under tight control of the military.

More importantly, Pan Am had lost its "Chosen Instrument" status in the halls of government. In the Atlantic, American Export Airlines (AEA) had been allowed to operate a flying boat route between New York and Foynes, Ireland, since 1942, but without a mail contract.² British Overseas Airlines still competed feebly with Pan Am on the Bermuda–England route. In the Pacific, the Royal Air Force Transport Command had operated a transpacific Sydney–Montreal route from November 1944. Also, the Australian owned British Commonwealth Pacific Airline began service on a similar route in June 1946.

The new Truman administration was intent on increasing competition among U.S. airlines³. Other domestic carriers were eager to displace Pan Am or at least compete directly on overseas routes. In June 1945, the U.S. Civil Aviation Board (CAB) divided transatlantic routes and airmail service between AEA (name changed to American Overseas Airline (AOA) in November), Trans World Airlines (TWA), and Pan Am. AEA and TWA operated landplanes initially, but Pan Am only switched out its flying boats starting in January 1946. Further, starting in May 1946, the CAB awarded several airlines competitive routes between the U.S. and Latin America, previously the sole province of Pan Am.

The Army and Navy were busy cleaning up the mess left over from the war and preparing for new challenges. The occupation of Japan drew heavily on transportation resources. Servicemen spread out across the Pacific were eager to get back home. The dawning of the Cold War meant that the military was not eager to withdraw from its strategic bases and positions. The government on the other hand was looking to shrink military budgets. The Air Transport Command seemed also to have pretensions to becoming a full-service airline and might not have welcomed Pan Am's re-establishment as the sole transpacific carrier. The result of all this was that re-establishment of Pan Am's transpacific routes took a long time.

Resumption of Pan Am's Transpacific Airmail Services

Pan Am still maintained its West Coast–Hawaii route with flying boats at war's end but was unprepared to restart its routes westwards from Hawaii. The Army began releasing long-range transport aircraft in late 1945 and Pan Am was able to acquire ten C-54 (Douglas DC-4) transports and six Lockheed Constellations by early 1946⁴.

Initially, Pan Am contracted with the United Nations Refugee Relief Agency (UNRRA) to fly the route between Seattle and Shanghai via Adak Island (Aleutians) and Tokyo, weekly service starting in March 1946. Figure 1 shows the UNRRA route and the other two Pan Am routes restarted in 1946–1947. This great circle route had been scouted for Pan Am by Charles and Anne Lindbergh in 1931, but never exploited commercially due in part to its cold weather challenges. Figure 2 shows a cover mailed from Shanghai on October 17, 1946, and carried to the U.S.A. on this route. Pan Am used Douglas DC-4 aircraft on the UNRRA Route. At the same time, the CAB awarded the same route to Northwest Airlines, but their competing service did not begin along the entire route until July 1947.

Pan Am next began South Pacific Route service. Survey flights to Auckland and Sydney were carried out between January-May 1946. Commercial flights to Auckland resumed

on June 1. The revised route from San Francisco to Auckland had stops at Honolulu, Canton Island, Fiji, and New Caledonia. Figure 3 shows a cover flown on the route from Auckland to Honolulu in November 1946. Sydney was added as a second terminal from February 21, 1947. Figure 4 is a first flight cover on the leg from Fiji to Sydney. Return airmail service from Sydney only began in November. Again, Pan Am used DC-4s on the route.

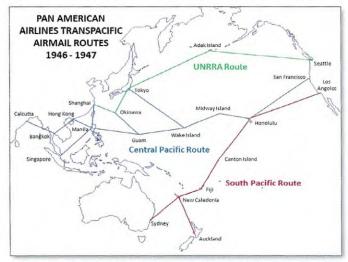


Figure 1. PAA Transpacific routes in 1946 and 1947.



Figure 2. Great Circle Route cover from Shanghai, China, to New York, postmarked October 17, 1946.



Figure 3. South Pacific Route cover from Auckland, New Zealand, to Honolulu, postmarked November 18, 1946.

Pan Am's Central Pacific route was slower to restart. Weekly flights to Manila began in September 1946. However, there was a pause from October 23 to January 10, 1947. A cover mailed from Manila to the U.S.A. on February 13, 1947 is shown in Figure 5. It was not until June 3, 1947, that Central Pacific service was completed with the addition of Shanghai as the eastern terminus. The revised San Francisco–Shanghai route included stops at Honolulu, Wake Island, Guam, and Okinawa. Figure 6 is a first flight cover on the return flight from Shanghai to San Francisco. The route was quickly extended to Calcutta via Hong Kong and Bangkok, allowing Pan Am to start commercial round-the-world air service by month's end. Tokyo service was added on an alternate route via Honolulu and Wake Island from September 25. DC-4 aircraft were used throughout.



Figure 4. South Pacific Route first flight cover from Lautoka, Fiji, to Sydney, Australia, postmarked February 28, 1947.



Figure 5. Central Pacific Route cover from Manila, Philippines, to San Francisco, CA, postmarked February 13, 1947.

Why the Delays in Restarting Service?

The question arises: why did it take so long for Pan Am to restart service its pre-war transpacific routes, especially the Central Pacific Route? One obvious factor is lack of four-engine transport aircraft, which only began to be available in late 1945. Second would be re-establishment of air crews; many Pan Am personnel joined the military services and had to be demobilized, rehired, and retrained. This while the Army was still servicing much of their peak-war transpacific route network. Third may have been the Army's desire to create a commercial transpacific transport

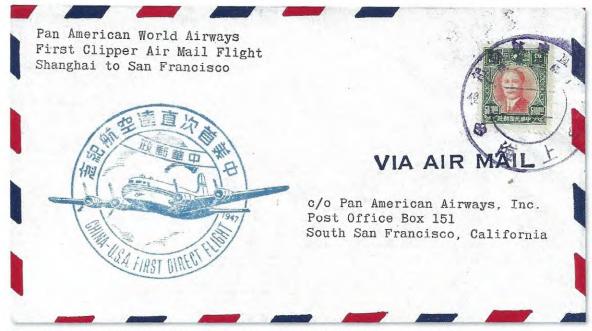


Figure 6. Central Pacific Route first flight cover from Shanghai, China, to San Francisco, CA.

service; they had been carrying increasing volumes of commercial transpacific airmail during the previous two years. Why not continue and carry non-military passengers?

Ignoring speculation about the Army's commercial intentions, the timing of restarting Pan Am's commercial services on the South Pacific Route in June 1946 seems about right. However, the delay in restarting the Central Pacific Route service until September is puzzling. Could the start of nuclear bomb testing during July–August 1946 be the reason? The first test was carried out at Bikini Atoll located 700 miles south of Wake Island. Did reopening of the Central Pacific Route to Pan Am commercial service have to wait until these tests were completed? Further research may provide the answer.

Notes

- 1. Fort, William. Development of U.S. Navy Transport Routes Used to Carry Transpacific Airmail During World War II. Smithsonian Institution Press, Washington D.C., 2021.
- 2. Davies, R.E.G. Airlines of the United States. Smithsonian Institution Press, Washington, D.C., pp. 358-362.
- 3. Ibid., pp. 366-377.
- Davies, R.E.G. Pan Am, An Airline and its Aircraft. Paladwr Press, Rockville, MD, 1987, pp. 52–56.

About the Author

Bill Fort is a life-long stamp collector specializing in stamps of the Americas before 1950. He exhibits U.S. postal history and trans-oceanic airmail. He has published articles on airmail topics. Bill is active in organizing the annual NAPEX and SPRINGPEX stamp shows. He is currently Secretary of the American Airmail Society.

SCADTA and the 1934 Von Krohn Air Crash

Alfredo Frohlich and Santiago Cruz

SCADTA: An Overview

SCADTA, the second-oldest airline in the world and the oldest in the Americas, was founded in Colombia on December 5, 1920. Colombia, located on the Andean mountains chain, is bordered on the north by the Caribbean Sea, the northwest by Panama, the south by Ecuador and Peru, the east by Venezuela, the southeast by Brazil, and the west by the Pacific Ocean.

Bogota, the capital, as well as other major cities, is located inland far from the sea. Naturally there was a need for communication with the various ports on both oceans, as trade with other nations is of paramount importance.

The Magdalena River cuts the country in twain; it flows for nearly a thousand miles from the high mountains of the interior to the vast blueness of the sunny Caribbean Sea. Like the Mississippi of the United States, it is wide and shallow. Goods went from the ocean to the inland river port of Girardot, a trip that took a full six days and nights under even the most favorable conditions during the rainy season, and as much as four times longer during the dry season. Service continued via a railroad line that ascends to the capital, Bogota, at nine thousand feet above sea level.

It must be remembered that there was no road or railway between the Capital City and the Atlantic Ocean, so that when the airline came it became the great deliverer.

It was back in 1919 that the citizens of Colombia decided to take the air. To be precise, the 18th of June, on which date a pioneer flight was made under the auspices of the Government, from Barranquilla to Puerto Colombia, and piloted by the American ace, Knox Martin.

The instantaneous success of this trial flight was instrumental in bringing about the formation of a new airmail service, the "Compañia Colombiana de Navegacion Aerea". This company then commenced plane service between the cities of Barranquilla and Cartagena, both situated at sea level and only a few hundred miles apart. A first set of semiofficial overprinted stamps on publicity labels was issued in February 1920. A second series of regular stamps printed by Valiente of Barranquilla was issued in March. Thus, began aerophilately in Colombia.

Apparently, this company failed to provide the real postal service needed because five months later, in July, the concession passed into the capable hands of a German–Colombian company which was given the title "Sociedad Colombo Alemana De Transportes Aéreos", or SCADTA.

The company, which had been organized the previous year, had a strong financial backing, sufficient to develop airlines throughout the country and provide Colombia with service the equal of any to be found anywhere in the world.

Over the next 14 years, SCADTA grew tremendously. In 1933 alone, they covered a total of 5.4 million air miles, carrying 6,650 passengers and 740 tons of air freight, with only four air accidents—the fourth being the famous crash of the *Von Krohn* aircraft on March 10, 1934.

The Von Krohn Crash

On March 10, 1934, the *Von Krohn*, a Sikorsky S-38B amphibian aircraft, on a regular weekly flight following the route Buenaventura – Andagoya – Quibdo – Cartago – Medellin – Palanquero and finally Bogota, crashed between Quibdo and Cartago deep in the Colombian jungle due to bad weather. In addition to the pilot, Captain Hans Walter Geck, and the flight engineer, Ernst

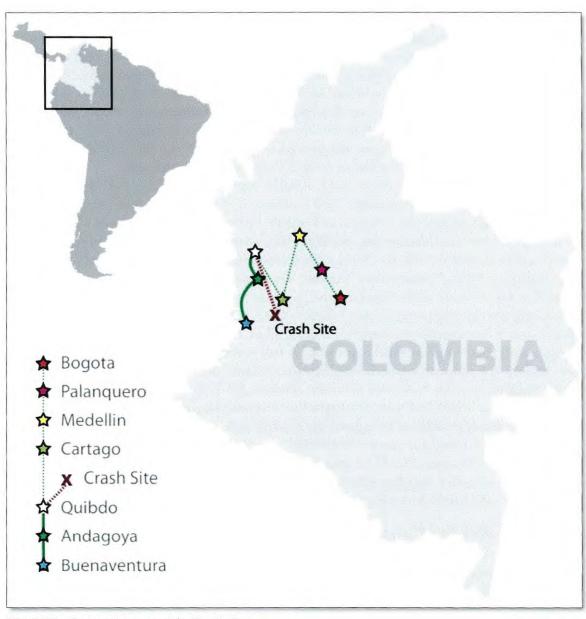
Jahnke, three passengers were on board: Newton C. Marshall, Julio Zuniga, and Alexander Nokes, as well as approximately 500 letters and cargo, including a gold and platinum shipment.

Once recovered, the mail was taken to SCADTA's headquarters in Barranquilla, where a crash cachet was applied to each cover, some were sealed, and they were then sent on to their destination.

Demorada la entrega por haberse transportado con el avion "Von Krohn" el 10 de Marzo 1934.

Figure 1: Crash Cachet.

Translation: Delivery delayed because was transported on aircraft "Von Krohn" the 10 of March 1934.



Map 1. Map showing the route of the Von Krohn.

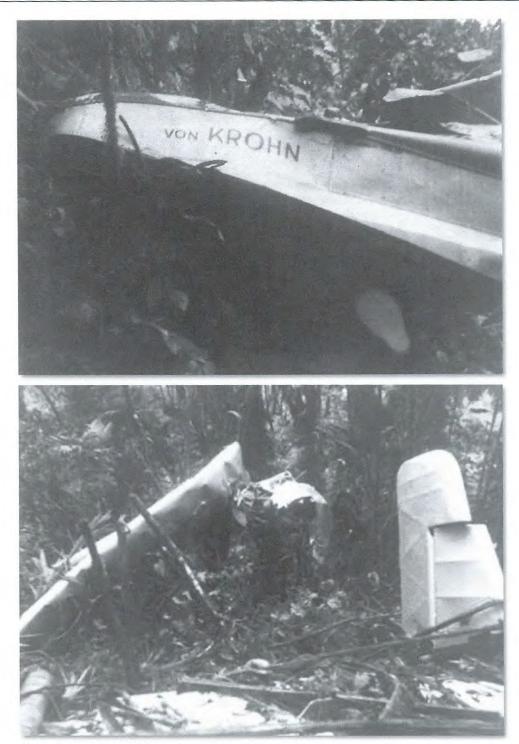


Figure 2. Photographs taken at the crash site.

Crash Mail

Recovered covers represent differing originations and intended destinations, since Buenaventura, Colombia's main port on the Pacific Ocean, was a mail consolidation station for incoming mail from South America on Panagra's FAM-9 routes, as well as from Panama via maritime mail. Mail and cargo were also embarked in Andagoya and in Quibdo.

An example of a cover with a maritime origination is shown in Figure 3. Addressed to Bogota, it entered the mailstream via maritime mail in Cristobal, Canal Zone, postmarked March 3, heading to Buenaventura for transfer to SCADTA's flight to Bogota. The reverse shows a handstamp of the Royal Northern Steamship Company, Cristobal, C.Z., a Buenaventura arrival postmark of March 8, 1934, and a Bogota arrival postmark of April 26, 1934.







Figure 3: Maritime Mail Origination. Cristobal, Canal Zone, to Buenaventura to Bogota, March 3, 1934.

Figure 4 shows a cover from Panagra's FAM-9 route destined for Bogota. Postmarked March 3 in Santiago, Chile, it arrived in Buenaventura on March 7 and was transferred to SCADTA, as indicated by the reverse postmarks.



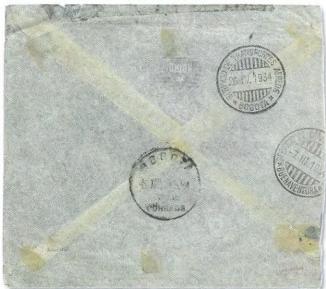






Figure 4: Panagra/FAM-9 Origination. Santiago, Chile, to Buenaventura to Bogota, March 3, 1934.

An example of the official seal some covers received at Barranquilla is shown in the Figure 5 cover. Postmarked March 5 at Lima, Peru, it was carried on the same Panagra FAM-9 flight as the Figure 4 cover, and was likewise transferred to SCADTA's *Von Krohn* flight to Bogota.

Like all recovered mail, after recovery it was sent to SCADTA's main office in Barranquilla. It was sealed by SCADTA personnel with a red label on April 25, 1934, and then forwarded to Bogota, arriving later that same day.





Figure 5: Panagra/FAM-9 Origination, with SCADTA Seal. Lima, Peru, to Buenaventura to Bogota, March 5, 1934.

The first stop on the SCADTA route after departing Buenaventura was Andagoya, where mail was accepted. An example postmarked there on March 8, addressed to Cartagena, is shown in Figure 6. A small town with a population of only 500. it was the home of the Compañia Minera Choco Pacifico, S.A., whose General Manager, Newton C. Marshall, was the only survivor of the crash. Marshall boarded the *Von Krohn* for Bogota with a valuable shipment of gold.

The inland city Istmina, with a population of 3,000, was the embarkation point of the Figure 7 cover. Postmarked March 8, this mourning cover travelled to Andagoya, to be carried by the *Von Krohn* to Cali on its return trip south.

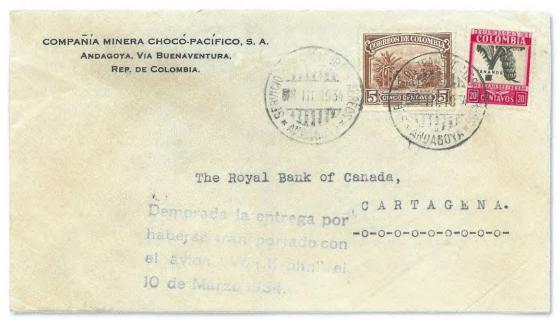
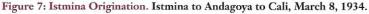


Figure 6: Andagoya Origination. Andagoya to Cartagena, March 8, 1934.









The *Von Krohn* also carried internal SCADTA company correspondence. These blue, preprinted covers were classified as official company mail, and thus had no postage stamp affixed to the cover. An example postmarked March 8 that originated in Quibdo, a city of 7,000 and the last stop before the crash, is shown in Figure 8.





Figure 8: Internal SCADTA Correspondence Cover. Quibdo to Bogota, March 8, 1934.

Epilogue

Because of the crash, the pilot and flight engineer suffered minor injuries, the passenger Mr. Zuniga died on impact, passenger Nokes suffered serious internal injuries, and died four days later. Mr. Newton C. Marshall, the General Manager of the Choco Pacific Mining Company also suffered serious injuries.

Two days after the crash, the pilot and flight engineer left the plane into the jungle in search of help, never to return. After twelve days, Mr. Marshall was able to muster enough energy to leave the plane for help as well. Three days later he encountered a party of Indians searching for gold. After receiving some food, he was carried on a litter for seven days, arriving on April 4 at a small settlement called "Betania", 25 days after the crash. There he received medical attention and then traveled on horseback to Bolivar, continuing to Cali.

The gold shipment on the *Von Krohn* thought to be worth hundreds of thousands, was only worth \$28,000 1934 pesos, (approximately US \$18,600 dollars of that time), and for guarding it, the Indians received a reward of \$4,300 dollars.

Afterward, Marshall, the sole survivor of the crash, sued SCADTA, won the case in the first instance, but lost it on appeal. Additionally, Marshall wrote a 58-page book titled *Unplanned Adventure—An Autobiographical Account of the 1934 Airplane Crash and 29-day Colombian Jungle Survival of Newton C. Marshall, Mining Engineer*. The authors were fortunate enough to have obtained a copy from Marshall's son.

According to SCADTA records, approximately 500 letters were carried by the *Von Krohn*. After they were recovered from the crash, the letters were taken to SCADTA's headquarters in Barranquilla, where they received a crash cachet, some were resealed with a red SCADTA seal, and then forwarded to their ultimate destinations on April 25, 1934. A recent census established 23 recorded covers, 16 of which are the hands of the authors.

The covers in this article remain as testimony of Colombian air mail history.

About the Authors

Alfredo Frohlich is a native of Colombia who came to the U.S. in 1954, and after graduate school went back to Colombia.

He has been collecting stamps since he was around 10 years old, taking a sabbatical for a good 30 years and then returning to the hobby about 40 years ago. His primary collecting interests are Colombia's philately. His Classic Colombia exhibit won the Champion of Champions in 2007, and his other Colombian exhibits have won numerous Grand awards.

Accredited as both a U.S. and International Judge, he is a member of the Collector's Club of New York, the American Philatelic Society, and the American Air Mail Society, among other affiliations.

Santiago Cruz was born in, and currently resides in, Bogota, Columbia. He has collected coins and paper money since the age of 12, especially Colombian classic and aerophilatelic material.

He began exhibiting in 2003 with the presentation "SCADTA: The Pioneer Years—1920–1922 (recipient of several Gold medals and twice in the Champions of Champions), along with four other medal-receiving exhibits. Additionally, he is an accredited Aerophilately and Traditional class Judge.

A member of the Club Filatelico de Bogota, Copaphil (Colombian Representative), APS, AAPE, American Philatelic Congress, Collector's Club of New York, Club de Monte Carlo, and a Fellow of the Royal Philatelic Society London, he has also published several books and articles on both SCADTA and classic Colombian philately.

Canadian Airmail Services in 1932

A Look Back to 90 Years before AEROPHILATELY 2022

Chris Hargreaves



Figure 1. Map produced by the Edmonton, Alberta Post Office in September 1931

The Canadian airmail routes shown in Figure 1 were of two different types:

- "Air Mail" routes, for which customers paid an additional fee for faster mail delivery than was provided by surface routes
- "Air Stage" routes, on which mail was flown to remote and difficult-to-access locations without an additional charge.

The longest "Air Mail" route in January 1932 was the Prairie Air Mail Service, from Edmonton via Calgary to Winnipeg. The route was developed by Western Canada Airways, which became part of Canadian Airways Limited in November 1929. When it was inaugurated in March 1930 the service operated from Winnipeg to Calgary, with a spur from Regina to Edmonton. The route was changed in August 1931 to operate from Winnipeg via Calgary to Edmonton.

The Prairie Air Mail Service was operated by Boeing B40 and Fokker F.14 aircraft. See Figures 2 and 3.

The map also shows the Air Mail route from Vancouver to Victoria, which had been inaugurated in August 1931, but was not operating during the winter.

All the other routes shown on the map were Air Stage services In 1932 the fee for "Air Mail" within Canada or to the U.S.A. was 6 cents for the first ounce, 10 cents per additional oz. It had been increased from 5 cents for the first ounce, 10 cents per extra ounce, on July 1, 1931, in order to raise more revenue for the government during the Depression.

On February 22, 1932, the Post Office issued a new stamp to pay for the 6 cents rate. This stamp, now known as Scott C3, was produced by overprinting 2,000,000 copies of Canada's first Air Mail stamp, C1, that the Post Office still had in stock. A first day cover is shown in Figure 4.

During 1932 the Government took more economy measures, that included cancelling the Prairie Air Mail service on March 30, 1932. See Figure 5 for an example.

Prime Minister R.B. Bennett commented with regard to the cancellation that:

"With 300,000 of the population receiving some form of relief, there was very little gratification in seeing an aeroplane passing by day after day when the unfortunate owner of the soil could hardly see the aeroplane because his own crop had gone up in dust."

A month later the Toronto-Detroit Air Mail service was also cut; see Figure 6 for a "last flight" cover.

However, while the "Air Mail" routes were cut, the "Air Stage" routes continued and new ones were inaugurated. On June 8 the Post Office started flying mail from Prince Albert to Montreal Lake and Lac la Ronge in Northern Saskatchewan, as shown in Figure 7.

During the 1930s the Post Office capitalized on the public interest in both aviation and philately, by offering souvenir cachets for mail carried on the First Flight of new airmail services.

However: while mail was flown on the Air Stage services at normal, surface mail rates, the First Flight cachet was only applied to mail franked at the Air Mail rate.

To get a First Flight Cover, a collector was instructed to address an envelope to themselves; indicate the part of the route it was to be flown on; frank it with Canadian postage at the airmail



Figure 4. FDC for Scott C3 mailed from Vancouver to Winnipeg. It would have traveled by train from Vancouver to Calgary, and then been flown from Calgary to Winnipeg on the Prairie Air Mail service.



Figure 2. Boeing B40 of Canadian Airways Limited in Lethbridge. The aircraft carried 4 passengers in an enclosed cabin. The pilot can be seen in an open cockpit behind the cabin. This was accepted practice at the time, as it was thought that the pilot should be in an open cockpit to get a better feel for aircraft movement during night flying.¹



Figure 3. Fokker F.14. The Fokker F.14 was larger than the Boeing B40 and carried 8 passengers, but was also slower, and averaged route speeds of 90 mph compared to the 110 mph of the B40. It also had a toilet compartment, but this was used for mail storage, as the Post Office insisted on a separate mail compartment so that passengers could not get access to the mail during the flight. The pilot sat in an open cockpit behind the cabin. To give the pilot better visibility, the wing was raised above the fuselage and the pilot looked underneath it.¹

When it began operating the Prairie Air Mail Service, the airline had to decide whether to use small aircraft that only carried mail, or larger aircraft that could carry mail and passengers.

Although small aircraft were much cheaper, the company chose larger aircraft, as it was considered important to try and develop a passenger service over the route as well as a mail service. The other "Air Mail" routes shown on the map in Figure 1 are:

- Winnipeg to Pembina, U.S.A., where mail was transferred to U.S. Contract Air Mail Route No. 9. This took mail to Minneapolis and Chicago, where it connected with the rest of the U.S. air mail network
- Toronto to Windsor, Ontario, and Detroit where mail was also transferred to the U.S. air mail network
- Montreal to Albany. From Albany the mail initially continued by train to New York where it could enter the U.S. air mail system. Flights from Montreal via Albany to New York were inaugurated until April 11, 1932.



Figure 7. First Flight Cachet Prince Albert-Lac La Ronge (enlarged) and First Flight Cover Lac La Ronge-Prince Albert, June 8, 1932.

During 1932 the Canadian Government's big hope to end the Depression was the Imperial Economic Conference to be held in Ottawa in July 1932. The aim of the Conference was to increase trade within the Empire, by raising tariff walls against trade from outside the Imperial bloc. "Canadians were encouraged to believe that out of the conference would come the long-promised recovery, and Sunday, July 17, was declared a 'National Day of Prayer' for the success of the negotiations."³



As part of the arrangements for the Imperial Conference, the Post Office organized a series of flights to carry mail to and from Trans-Atlantic steamships as they passed through the Strait of Belle Isle, and provide a very fast mail service from London, England, to Ottawa. See Figure 8.

- Mail from England was flown in a Westland Wessex from Croydon, just south of London, to Cherbourg, France, and transferred to a Trans-Atlantic liner after it had left Southampton, England;
- the liner carried the mail across the Atlantic, and transferred it to a Royal Canadian Navy minesweeper in the Strait of Belle Isle;
- the minesweeper took the mail to the sheltered waters of Red Bay, and transferred it to a Bellanca floatplane;
- the mail was then carried to Ottawa in a series of aircraft flown by R.C.A.F. pilots. The Bellanca flew it to Havre St. Pierre; a Vancouver flying boat flew it from Havre St. Pierre to Rimouski; and a Fairchild 71 landplane flew it from Rimouski to Ottawa.

The Post Office also issued four stamps to commemorate the Imperial Conference, including an overprinted version of C2 which is now known as C4. See Figure 9.

On the same day as the stamps were issued, the Post Office arranged a demonstration flight from Ottawa to the Strait of Belle Isle, and offered a souvenir cachet on mail carried on the flight. 40,000 covers were carried on the demonstration flight; see Figure 10 for an example.

rate (or enclose a money order for the amount of postage); and send it in a separate envelope to a designated Post Office where the First Flight Covers would be held until the flight.

These First Flight Covers were a popular collectible. When the service to Lac La Ronge was inaugurated, a total of 40,921 letters, together with 1,140 pounds of parcel post, were carried on the flight from Prince Albert. This was the heaviest load of mail carried on a single plane within Canada up until that time.



Figure 5. The air mail stamp used was Scott C2. This was issued on December 4, 1930, but is rarely found on mail. It was issued after the five year contract for printing Canadian stamps was awarded to the British American Bank Note Company instead of The Canadian Bank Note Company.



Figure 6. Last Flight Toronto to Detroit, April 30, 1932.



Figure 10. July 12 Demonstration Flight. Postmarked OTTAWA 1 AM Jul 12 1932, backstamped BRADORE BAY P.Q. 12 JUL 13 32. Signed by three of the pilots.

Although the transfer of mail from the liners took place in Red Bay, Red Bay is in Labrador, which is part of Newfoundland. Newfoundland was a separate country in 1932: it did not join Canada until in 1949. The Canadian mail was therefore processed in Bradore Bay which is in Quebec, and was the closest Canadian post office to Red Bay.



Figure 11. London to Ottawa Transit. Postmarked LONDON 1.45 PM 13 JY 32, backstamped OTTAWA JUL 18 2 AM 1932.

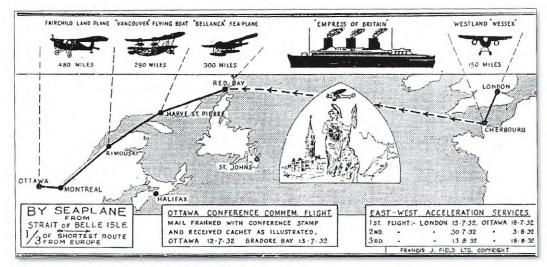


Figure 8. Map produced by Francis J. Field Ltd.

When the circumstances were right, mail could be sent from London to Ottawa in just 4 or 5 days! A cover making that trip is shown in Figure 11.

This service impressed the delegates. For example Stanley Baldwin, a past and future British Prime Minister, "congratulated the minister of National Defence for a feat that had brought mail from Britain in 98 hours."

This 4 or 5 days air-sea service accelerated the mail by 48 hours compared to the sea trip from Montreal, and gave the combined air-sea service from Montreal a one-day advantage over the rail-sea route from Montreal via New York that was usually used for Trans-Atlantic mail. However,



Figure 9. Ottawa Conference stamps issued July 12, 1932.

fog and other problems made the service erratic, and it was not repeated after 1932.

Unfortunately the Conference itself was a failure.

Meanwhile the U.S. government was also grappling with the social and economic challenges of the Depression, and increased postage rates like the Canadian Government had done.

On July 6, 1932, the U.S. Domestic Air Mail rate had been increased to 8 cents for the first ounce, 13 cents for each additional ounce.

On August 1, 1932, the Canadian Air Mail rate to the U.S. was increased so that it was the same as the U.S. Domestic Air Mail rate.

As a result, when a new Air Stage service from Siscoe to Pascalis was inaugurated September 15, 1932, First Flight Covers to Canadian addresses are normally franked at 6 cents, while those to American addresses, as shown in Figure 12, are normally franked at 8 cents.

First Flight Covers to "overseas" destinations were normally franked at a higher rate. However, air mail could be sent to Great Britain at the same rate as mail within Canada. See Tables 1 and 2.

As well as the "Air Mail" and "Air Stage" services, there was a third type of airmail service in Canada: the "Semi-official" airmail services.

	T 1, 1932
Any Place In:	Postage, including Fees for all air mail services available
 Canada, Great Britain and Northern Ireland, Irish Free State, Newfoundland, or any place in North America not mentioned in Group 2 and 4 	6 c. the first ounce; 5 c. each additional ounce
2. United States and Bermuda (from August 1, 1932)	10 c. each ounce
Europe (except places mentioned in Group 1)	15 c. each half ounce
 West Indies and British Guiana, Mexico, Cuba, Central America, Asia, Africa, and Australasia 	45 c. each half ounce
5. South America (except British Guiana)	45 c. each half ounce

The rates in Table 2 remained in effect until July 1, 1934.6

However, in December 1932 Canadian Airways was given permission to inaugurate a new Semi-official service between Edmonton and Fort McMurray. A First Flight cover is shown in Figure 13.



Figure 13. Semi-official First Flight Cover: Edmonton to Fort McMurray, December 30, 1932. The Post Office required the Semi-official "stamp" to be placed on the back so that it was not confused with regular postage, but this requirement was often ignored and the mail still carried.

CANADA AIR MAIL POSTE AÉRIENNE, CANADA

FIRST OFFICIAL FLIGHT PREMIER PARCOURS OFFICIEL

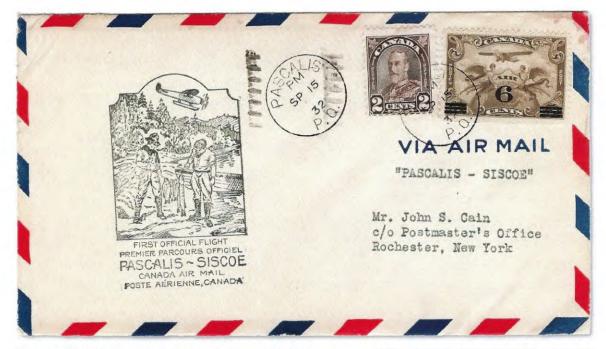


Figure 12. First Flight cachet and cover, September 15, 1932. Siscoe and Pascalis were in the Val-d'Or gold mining region of Quebec. The existing Air Stage service from Amos to Siscoe is shown in Figure 1.

The first Semi-official service had been introduced in 1924. The Post Office allowed companies flying into remote areas to charge for mail they carried, and to issue a sticker type stamp to indicate that the fee had been paid. The services were known as "Semiofficial"

as although the Post Office authorized the service, and sometimes sold the sticker stamps from Post Offices,

the Post Office did not accept responsibility for delivery of mail to the person it was addressed to, after the mail had been handed to the airline.⁵

The sale of these Semi-official "stamps" and covers was an important source of revenue for several of the companies that developed Canadian aviation during the 1920s.

The Semi-official services preceded the Post Office's airmail services which began in 1927, but by 1932 most of the services had been replaced Post Office routes.

Any Place In:	Postage, including Fees for all air mail services available
 Canada, Great Britain and Northern Ireland, Irish Free State, Newfoundland, and the United States or any other place in North America not mentioned in Group 3 	6 c. the first ounce; 10 c. each additional ounce
Europe (except places mentioned in Group 1)	10 c. each ounce
 West Indies, Mexico, Cuba, Central America, Asia, Africa, and Australasia 	15 c. each half ounce
4. South America	45 c. each half ounce

Collect Zeppelins and Join the Fun Jim Hill

On July 1, 1900, Count Ferdinand von Zeppelin's first rigid airship, the LZ 1, ascended into the skies over Lake Constance, near Friedrichshafen in southern Germany. (Figure 1) When the modest 18-minute-long flight was over, Count Zeppelin could hardly imagine that his airships would one day traverse oceans and continents, become the premier means of luxury travel, and carry vast quantities of mail in the process. Equally unimaginable was that more than 120 years later, zeppelin mail would be the robust air mail collecting area that it remains today.

Initial Developments

The early history of the zeppelins did not portend such successes. The LZ 1 was dismantled after three flights when its airframe proved unequal to the demands of sustained flight. The next ship, the LZ 2, met a premature end in 1905 when it was destroyed by a storm. LZ 3 managed an eight hour flight in 1907, but was soon retired. It was the twelve hour flight of the LZ 4 over Switzerland in early 1908 that first hinted at the zeppelin's commercial promise. Yet that ship, too, was fated to fail, crashing at Echterdingen, Germany, in August of 1908. Rather than sealing the demise of the zeppelins, however, the crash steeled the Count's resolve, and his countrymen rallied behind him. Through six million marks in donations, the German people financed the formation of the Zeppelin Construction Company, and with it, the means to produce more airships.

Zeppelin collectors refer to this as the "pioneer period," when airships sporadically flew both mail and passengers to various locations in Germany. Surprisingly, examples of pioneer zeppelin mail can be acquired today at relatively modest cost. An example is the card shown in Figure 2, which was flown between Frankfurt and Wiesbaden by the LZ 11, Viktoria Luise, as part of a national aviation donation campaign. Also plentiful is LZ 17 (Sachsen) mail flown between Frankfurt, Mainz, Darmstadt, Offenbach and Worms in June 1912. Examples can often be found in the \$50–\$75 range.

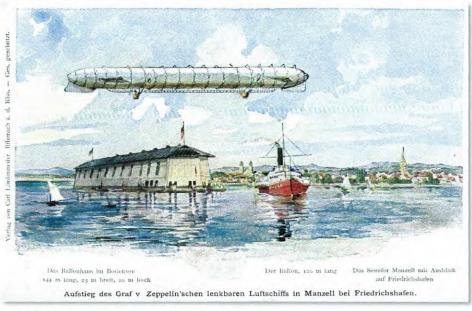


Figure 1. A postcard showing the LZ 1 above Lake Constance.

The Edmonton–Fort McMurray route was previously flown by Canadian Airways under a Post Office contract that had been cancelled earlier in 1932. The new service continued until 1934 when all the Semi-official services ceased.

For more information on all aspects of Canadian aerophilately, see *The Air Mails of Canada and Newfoundland*, published by the AAMS. The first edition (1997) has been posted on the AAMS website and is open for all: go to www.americanairmailsociety.org then "Resources" then "Publications". A revised edition of *AMCN* will be published in 2022.

Notes

- Molson, K.M. Pioneering in Canadian Air Transport. James Richardson & Sons Limited, 1974.
- 2. Smith, Philip. It Seems Like Only Yesterday—Air Canada: The First 50 Years, p. 23.
- 3. Thompson, J.H. Canada 1922-1939.
- 4. Quoted in Halliday, Hugh, "Up With Mail: Air Force, Part 12," *Legion* magazine, November 2005. Online at https://legionmagazine.com/en/2005/11/up-with-mail/
- Hargreaves, Chris. "Pioneering Airmail in the Canadian North," The American Philatelist, November 2021
- 6. Crotty, David. Canada Air Mails Rates from 1925 to 2020. Posted in the Resources/Publications section of the AAMS website: www.americanairmailsociety.org

About the Author

Chris Hargreaves has been editor of *The Canadian Aerophilatelist*, the quarterly journal of the Canadian Aerophilatelic Society, since 1994, and thoroughly enjoys the correspondence that involves with researchers in Canada, across the USA, and around the world.

Chris also writes a column of "Canadian Air Mail Notes" for the American Air Mail Society's *Airpost Journal*; has given presentations at many stamp exhibitions including Aerophilately 2007 and New York 2016; and is Editor-in-chief for the revised edition of *The Air Mails of Canada and Newfoundland*. He was inducted into the Aerophilatelic Hall of Fame in 2015.

September 19, 1928. Just a few weeks later, the LZ 127 would embark on its first transatlantic flight, carrying passengers and mail from its home base in Friedrichshafen to Lakehurst. The flight would be the first of many demonstration flights that would generate worldwide publicity for the zeppelin enterprise.

Figure 3 is an advertising postcard for the annual Leipzig Trade Fair that was flown aboard the LZ 127 on its maiden transatlantic voyage in October 1928. It is among the first examples of *Graf Zeppelin* "commercial mail"—mail that had a primarily commercial, rather than philatelic, purpose. The volume of commercial mail carried by the *Graf Zeppelin* would increase markedly in the coming years. Such mail continues to be of keen interest to many zeppelin collectors.

For 1929, Eckener planned a series of demonstration flights that he hoped would attract greater interest from the German government and private financiers. After the mail-carrying transatlantic flight in 1928, stamp collectors on both sides of the Atlantic clamored to have a piece of mail flown aboard the *Graf Zeppelin*. Eckener wisely saw this as another funding opportunity for the Zeppelin Company, and through arrangements with the Reichspost and other nations' postal authorities, the *Graf Zeppelin* began flying collector mail. By sending properly franked letters and cards under separate cover to Friedrichshafen, one could secure highly prized mail flown on the *Graf Zeppelin*. While it might be tempting to dismiss such mail as purely "philatelic," that view overlooks the fact that collector mail did serve a business purpose, for without it, the *Graf Zeppelin*'s operations would not have been financially sustainable. Instead, and happily, air mail collectors would become a key source of funds for the *Graf Zeppelin*'s groundbreaking role in the development of international air mail.

The major demonstration flights of 1929 included the March "Orient Flight" to the Holy Land, the August "America Flight," and most notably, the September "Around the World

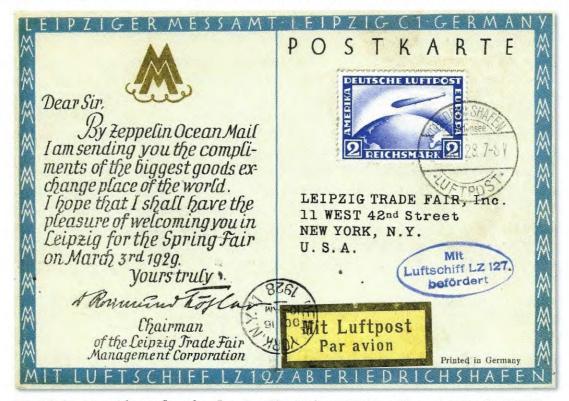


Figure 3. A commercial cover flown from Leipzig to New York on LZ 127's maiden voyage, October 7, 1929.



Figure 2. An airship-flown postcard, carried by LZ 11 from Frankfurt to Wiesbaden on October 15, 1912.

The outbreak of World War 1 radically altered the dynamic of the Zeppelin Company, as its airships were converted to military use and future production was allocated to the German Army and Navy. Military zeppelin mail was limited, but again, some of it is quite affordable. Typical markings on this mail are a circular date stamp with the airship number, an eagle, and the legend "Kommando," or a similar date stamp inscribed "Kaiserliche Marine," "Kommando," and the airship number. Many zeppelin airships were destroyed in combat, and along with them, Count Zeppelin passed away in March 1917. Sadly, he was not to witness the coming golden age of zeppelin passenger airships.

After the war, zeppelin passenger service resumed with the newly constructed LZ 120 (Bodensee), which made regular flights between Friedrichshafen and Berlin, including some mail carrying flights. Unfortunately, it too became a casualty of war, but in a different way. Under the Treaty of Versailles, the German government was forced to surrender the LZ 120 to Italy, and further zeppelin construction for military purposes was prohibited. It appeared that the zeppelin enterprise could very well be doomed.

Yet the zeppelin company, under the leadership of Dr. Hugo Eckener, was soon at work on a new airship, the LZ 126, which would be built for the U.S. Navy as war reparations. In October 1924, Eckener flew the LZ 126 across the Atlantic to its new base at Lakehurst, New Jersey. Substantial quantities of mail were flown on the delivery flight, and today examples of this mail are both plentiful and affordable.

Eckener's Grand Vision

The next development would propel the collecting of zeppelin mail to the forefront of aerophilately. Eckener had a grand vision—to build an airship that could safely transport both mail and passengers over vast distances and become the world's preferred means of luxury transportation. The initial vehicle for this ambitious plan would be the LZ 127—the *Graf Zeppelin*.

The new airship carried mail from its inception. Its first flight was across Lake Constance to Count Zeppelin's lifelong home of Konstanz, Germany, where the ship made a mail drop on

Toward the end of the 1931 flight season, the *Graf Zeppelin* made three more round-trip flights to South America. These mail-carrying flights laid the groundwork for the regular South Atlantic zeppelin passenger and mail service that began in 1932 and continued into 1937. The *Graf Zeppelin* would go on to make dozens of South American flights from Germany during that time frame. The most prominent of these was the ninth flight in 1933, when the LZ 127 continued on from South America to visit the Century of Progress World's Fair in Chicago. In addition to German, treaty state, and South American mail, the flight included American mail with unique flight cachets, dispatched from Friedrichshafen, Miami, Akron, and Chicago. Most was franked with one or more of the 50 cent U.S. "Baby Zeppelin" stamps.

While they became fewer in number, *Graf Zeppelin* demonstration flights, with unique flight cachets, continued throughout the 1932–1936 period. Likewise, the 1932 and 1933 South American Flights of the *Graf Zeppelin* all featured unique flight cachets. Unfortunately, once the *Graf Zeppelin* began alternating with Deutsche Lufthansa in 1934 to provide South American air mail service, the unique South American flight cachets were mostly discontinued. Exceptions include the 3rd South American Flight of 1934 ("Argentinian Flight") and the 12th South American Flight that same year ("Christmas Flight"). With the exception of these two flights, the unique South America flight cachets were replaced by a generic red circular cachet bearing the legend "★ Deutsche Luftpost ★ Europa-Südamerika." Because the same cachet was applied to Lufthansa mail to South America during this time period, departure and arrival date stamps must be closely scrutinized to ensure that the item was flown by zeppelin and not airplane.

In all, the *Graf Zeppelin* completed some 589 flights during its storied career. While its successes were considerable, Dr. Eckener had greater achievements in mind. Enter LZ 129, the *Hindenburg*—a much larger airship that could transport even greater quantities of passengers and mail in a style theretofore unknown in air travel. *Hindenburg* would bring passengers and mail from Europe to the Americas in just two and a half days, in comfortable and silent luxury.

Construction of the *Hindenburg* began in the early 1930s under the auspices of the original Zeppelin Company, but the ship was rolled out and operated by the newly formed Deutsche Zeppelin Reederei (DZR), which was effectively controlled by the new National Socialist government. *Hindenburg*'s initial operations reflected the priorities of its owners. After a short mail carrying flight on March 23, 1936, *Hindenburg* and its sister ship *Graf Zeppelin* jointly undertook a 74-hour propaganda flight on March 29, dropping thousands of leaflets across Germany to support annexation of the Rheinland. Today, collectors actively seek out both the mail and the eight varieties of leaflets from this flight. This would not be the only propaganda outing for the *Hindenburg*, as it also made trips to the Berlin Olympics and Nuremberg Party Rally later that year.

Fortunately, the ship's commercial operations were normalized in early April 1936 as it returned to its primary function—the transport of passengers and mail across the Atlantic. In early April, *Hindenburg* made its first South American flight, and in May, inaugurated the first regular zeppelin service between Europe and North America. *Hindenburg* made six South American trips during 1936, alternating passenger service on that route with the *Graf Zeppelin*. Its 1936 schedule also included 10 flights to North America. The flight cachets on all of *Hindenburg*'s South American flights, as well as its first five North American flights, were identical to the generic red cachet discussed previously. However, beginning with the 6th North American Flight of 1936, unique flight cachets once again came into use. Figure 5 shows a Liechtenstein dispatch featuring the special flight cachet for the *Hindenburg*'s 7th North American Flight of 1936.

Hindenburg's 1937 flight season began on March 11 with a special mail-carrying flight where Ernst Udet, a World War I German Ace, successfully linked his Focke-Wulf airplane in-flight

Flight" that saw the *Graf Zeppelin*, in a feat of aviation history, circumnavigate the globe in a mere 21 days. The latter flight was financed in large part by the Hearst newspaper chain, which received exclusive U.S. reporting rights in return. Mail from each of these demonstration flights featured unique hand-stamped flight cachets. These special flight cachets would be a feature of major zeppelin flights from that point forward, and helped fuel the interest that continues to surround zeppelin mail today.

The 1930 flight season featured a number of major excursions, but none more prominent than the Pan-American Flight in June of that year. Dr. Eckener, recognizing that zeppelins held the potential for regularly scheduled South American passenger and air mail service, conceived the flight as a major step toward that goal. The flight saw the *Graf Zeppelin* travel from Friedrichshafen to Seville, Spain, across the Atlantic to Recife, Brazil, south to Rio de Janeiro, back to Recife, on to Lakehurst, and finally back to Seville and Friedrichshafen. The Pan-American Flight is a popular area for zeppelin collectors, as mail from Germany, Spain, various South American countries, the United States, and several European nations was flown. This was also the flight for which the three famous U.S. *Graf Zeppelin* stamps were issued.

The following year featured more demonstration flights, including journeys to Hungary, Egypt, Iceland, and England. The highlight of the season, however, was the *Graf Zeppelin*'s Polar Flight, which saw it travel from Friedrichshafen, via Berlin and Leningrad, to a rendezvous with a Russian icebreaker, where the LZ 127 made a water landing and exchanged mail with the ship. Mail from the flight included German dispatches, Russian mail, and pieces from so-called "treaty countries" that had contractual agreements with the Reichspost to have their mail flown on the LZ 127. An example of Polar Flight treaty mail from the Saar is shown in Figure 4.



Figure 4. Polar flight treaty mail from Saar, carried on LZ 127's flight leading to a rendezvous with a Russian icebreaker, initially postmarked July 20, 1931.



Figure 6. A postcard carried on the Graf Zeppelin II's flight to Kassel, July 30, 1939.

and destroyed. Grotesquely, scrap metal from these peaceful behemoths would now be used to construct weapons of war.

Happily, the zeppelin story did not die with these two airships. Although postwar fixed-wing aircraft eclipsed the zeppelins, the 1990s saw a rebirth of the zeppelin dream with the construction and launch of the Zeppelin NT (New Technology). Today, NT airships grace the skies over several continents, providing sightseeing adventures for those seeking to recapture the magic of the zeppelin era. From their inception, these new airships have carried mail, with a portion of the proceeds benefiting a German children's charity. Zeppelin NT mail is yet another affordable way to enjoy zeppelin mail collecting. An example of a flown cover is shown in Figure 7.



Figure 7. A Zeppelin NT flight cover from Friedrichshafen on July 2, 2000, celebrating the 100th anniversary of the naming of LZ 7 as the *Friedrichshafen*.



Figure 5. Hindenburg 7th North American Flight cover, Liechtenstein dispatch, postmarked August 14, 1936.

to the airship's substructure. *Hindenburg*'s first 1937 South American flight followed on March 16. After a planned May 1 Deutschland flight was canceled due to inclement weather, the ship departed Frankfurt for North America on May 3. Mail intended for the Deutschland Flight, postmarked May 1 and featuring a special flight cachet, was dropped over Cologne on the outbound journey to the United States. This Atlantic crossing would be *Hindenburg*'s last. In a disaster of epic proportions, the giant airship caught fire during its May 6 landing at Lakehurst, killing 36 of those aboard and spelling the end of transatlantic passenger airship travel. Despite its brief period of operation, *Hindenburg* left behind a wealth of flown mail. Much of it, including mail flown on the 1936 Olympic Flight, is quite affordable.

At the time of the *Hindenburg* disaster, a nearly identical airship was nearing completion. The *Graf Zeppelin II*, like the *Hindenburg*, would be filled with flammable hydrogen lifting gas. Because the DZR could not obtain non-flammable American helium as an alternative, *Graf Zeppelin II* would never see passenger service. Nevertheless, it made many mail-carrying flights. Like the *Hindenburg*, its early activities included a mail carrying propaganda flight, this time to the disputed Sudetenland region of Czechoslovakia. As with the *Hindenburg*'s 1936 Propaganda Flight, the *Graf Zeppelin II* dropped leaflets urging a "yes" vote for annexation. Remarkably, more than 100,000 pieces of mail were carried on this December 1938 flight. Not even a fiery airship disaster had dampened the public's enthusiasm for zeppelin mail. That enthusiasm carried over to 1939, when the *Graf Zeppelin II* attracted throngs of sightseers at weekend air shows across Germany. All of these flights carried mail, and each featured a unique flight cachet. A card from the airship's July 30 flight to Kassel is shown in Figure 6. Although a flight to Königsberg had been scheduled for the weekend of August 26, impending hostilities with Poland forced its cancellation.

The Second World War marked the end of the line for the mothballed *Graf Zeppelin* and the *Graf Zeppelin II*. Both were removed from their Frankfurt sheds for the last time in 1940

Collect Zeppelins! Join the Fun!

Because zeppelin mail was avidly collected and preserved at the time of its use, it continues to provide an enormous treasure trove for today's collectors. Although some of it can be quite expensive, especially rare drops and mail from obscure treaty nations, much of it is both affordable and accessible. Its vast scope provides for infinite collecting approaches. Collectors can focus on major demonstration flights, South American flights, flights from a certain year, flights to a common destination, mail from particular countries, crew mail, passenger mail, mail bearing specific zeppelin stamps, and much more. The U.S. zeppelins provide yet another layer of collecting opportunities. Comprehensive specialized catalogs (Sieger's Zeppelin Post Katalog and Michel's Zeppelin und Flugpost Spezial catalog) simplify the identification and pricing of zeppelin mail, and an active collecting community freely exchanges research and information on a regular basis. The Facebook Group "Zeppelin Collectors: Stamps, Mail and Ephemera" has over 800 members at this writing and often features new posts on a daily basis. Helpfully, Facebook's comment feature allows collectors and experts to contribute additional knowledge and observations about the posted material. In addition, zeppelin collectors meet regularly at large stamp shows, where "show and tell" sessions and formal presentations provide more opportunities to gain knowledge and engage fellow collectors. It's a wonderful group that's a joy to be a part of, so come join the fun! Become a zeppelin collector!

About the Author

Jim Hill has avidly collected zeppelin mail for more than twenty years. He has been a frequent exhibitor and lecturer at World Series of Philately shows, and together with Cheryl Ganz, coedited *The Zeppelin Collector* between 2001 and 2011.

U.S. Navy Zeppelins

Any survey of zeppelin mail would be incomplete without mention of the rigid airships operated by the U.S. Navy as ocean scouting vehicles. The first of these was the ZR-1 (USS Shenandoah), which was built by the U.S. Navy. It flew between 1923 and 1925. Although Shenandoah never carried official mail, it did carry unofficial mail on several flights, most notably its 1924 transcontinental flight, its 1925 flight to Bar Harbor, Maine, and its ill-fated final flight, when it crashed in a violent storm near Ava, Ohio. The second Navy airship was the ZR-2, USS Los Angeles, the former LZ 126 that the Germans had transferred to the U.S. as war reparations. The Los Angeles conducted official mail carrying flights to Bermuda, Puerto Rico, the West Indies, Cuba, and various domestic locations. She was decommissioned in 1932.

The Goodyear-Zeppelin Corporation of Akron, Ohio, built two other rigid airships for the U.S. Navy. The USS Akron, ZRS-4, flew between 1929 and 1933, carrying official mail on two flights, along with unofficial private mail on several other flights. Akron crashed in a storm off New Jersey's Long Beach Island on April 4, 1933. The USS Macon, ZRS-5, flew from April 1933 until it crashed at sea off Point Sur, California, on February 12, 1935. Although Macon never carried official mail, it did participate in a historic unofficial mail drop to President Roosevelt while he was at sea in 1934 aboard the USS Houston. Sparrowhawk fighters launched from Macon's cargo hold dropped sixteen covers, which President Roosevelt later signed. They are among the greatest prizes of zeppelin mail. In addition to official and unofficial mail, Akron's and Macon's activities were commemorated by thousands of non-flown "event covers" that colorfully documented the airships' flights. An example of a Macon event cover, posted from minesweeper USS Grebe on the night of the airship's crash, is shown in Figure 8. Event covers are an inexpensive and fun way to explore the history of these two historic airships. The recently published U.S. Zeppelin and Airship Mail Flights, by Cheryl R. Ganz, is the definitive study of the U.S. zeppelins and their flown mail. U.S. airship event covers are comprehensively treated in Mellone's Photo Encyclopedia of USS Akron and USS Macon Event Covers.



Figure 8. Macon crash memorial cover from the USS Grebe, postmarked February 12, 1935, the day of the crash.

Romance of the Flying Boats

Jon Krupnick

Flying boats are like no other machines. They were created out of the same desire to explore that drove the early pathfinders from Columbus to Captain Cook. The giant Sikorsky and Boeing flying boats that took to the skies and the seas more than half a century ago created a mysterious and romantic kind of flying that can never be duplicated The designers and engineers who brought these flying boats to life built more than airplanes. They created art. But their time was short. Runways built for World War II were the concrete stakes that pierced the heart of the giant flying boat.

Jimmy Buffett

For over 40 years, I have been fascinated by the history of Pan Am's flying boats in the Pacific. Jimmy Buffett was correct when he said their time was short. The Clipper era of the flying boats lasted only eleven years, from April 1935 to April 1946. I have written three books and created a 10-frame stamp exhibit based on this fascinating history. Jimmy Buffett and countless others have called this short 11-year period the most Romantic Era of Flight.

Juan Trippe, founder of Pan American Airways (later Pan American World Airways, often called just Pan Am), was a visionary with his heart and his head in the clouds. The son of a Wall Street banker, he attended Yale and became friends with classmates connected to the richest and most powerful families in the world-the Vanderbilts, the Whitneys, and the Rockefellers.

On June 2, 1927—just eleven days after Charles Lindbergh electrified the world with his solo crossing of the Atlantic—the families of Trippe's wealthy college friends invested



Figure 1. Pan Am's Pacific Pioneers: a Sikorsky S-42 overhead, a Martin M-130 taxiing, and a Boeing B-314 taking off.

\$300,000 in his newly formed Aviation Corporation of the Americas. A month after forming his corporation, Trippe acquired Pan Am, which had no planes but did have the inside track for obtaining the first Foreign Air Mail contract (known as FAM 1) to fly the mail the 90 miles from Key West to Havana. The contract required Pan Am to start

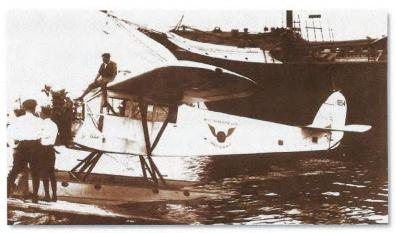


Figure 2. Borrowed plane used for Pan Am's first flight.

regular air mail service by October 19, 1927. Pan Am's new planes, however, could not be delivered in time to allow Pan Am to meet the strict conditions of the contract.

At the last possible moment, Trippe located a pontoon seaplane in Key West that was being delivered to Central America. With a \$145 "off the books" payment to the pilot, Trippe was successful in leasing the plane (see Figure 2). On October 19, 1927, seven sacks of mail were flown to Havana using this borrowed plane. With this flight, the contract was saved, and Pan American Airways was born! Trippe was only twenty-eight years old.

In early 1929, Trippe hired Charles Lindbergh as Pan Am's "technical adviser." At the time, Lindbergh was the most famous man in America. Trippe knew that he needed Lindbergh's "star power" to convince the skeptical public that flying was modern, glamorous, and above all, safe. Lindbergh's contract was for four years at a salary of \$10,000 per year plus stock options. With Pan Am's success, the stock options allowed Lindbergh to never work again!

By 1931, Pan Am had conquered the Caribbean along with Central and South America, and Trippe set his sights on Europe. For the European flights across the Atlantic, Trippe and Lindbergh developed specifications for "flying boats having a range of 2500 miles with

300 pounds of airmail." Six manufacturers were asked for bids, and only Sikorsky and Glenn Martin submitted proposals.

Sikorsky proposed three planes at \$242,000 each and Martin proposed three planes at \$430,000 each (see Figures 4 and 5). These planes would be by far the biggest and most expensive aircraft ever built. Early in 1932, Pan Am shocked the aviation world by accepting both bids with delivery promised for 1934.

With this order Pan Am's survival depended upon obtaining landing rights in Europe. The United States refused to grant foreign carriers landing rights in New York or Hawaii, so the Europeans retaliated by denying Pan Am landing rights in Europe. Barred from Europe, Trippe turned his sights to Asia. With the loss of the lucrative European



Figure 3. Juan Trippe and Charles Lindbergh, 1929.

market, most businessmen would have tried to cancel the contracts for the six new aircraft, but not Trippe. He refused to quit! Publicly he pretended that flying to Hong Kong was just as good as flying to Europe. British Hong Kong, however, joined with Europe, and they too denied Pan Am landing rights. Trippe had landing rights in the U.S. possession of the Philippines, so Trippe pretended that the backwater of Manila was just as good as Hong Kong. Again, Trippe refused to quit!

In August 1933, while awaiting delivery of the new aircraft, Pan Am used its newly acquired subsidiary, the China National Air Corporation (CNAC), to fly a survey flight from Hong Kong to Manila. They used a Sikorsky S-38 that only had a 600-mile range to make the 700-mile flight, so they had to refuel at sea. This amphibious plane was dubbed the "flying cigar," due to the color of its canvas skin. Harold Bixby, Pan Am's manager of CNAC, stated, "The primary purpose of the flight is planning for the trans-Pacific line to the Orient that will be coming through to China within two years." A cover carried on the flight is shown in Figure 6.

The first of the new Sikorsky S-42s was delivered to Pan Am in December 1934. It had a range of only 1,500 miles, so to fly the 2,400 miles from San Francisco to Honolulu, it had to be outfitted with onboard fuel tanks. The new Martin M-130s with a range of 2,500 miles, would not be delivered until late 1935, so all four Pacific survey flights leading up to the first flight of the Martin M-130 *China Clipper* were made in a Sikorsky S-42 modified with on-board fuel tanks.

By April 1935, Pan Am was ready to start Pacific survey flights using the Sikorsky S-42 modified with onboard fuel tanks. Between April and October 1935, four survey flights were successfully completed: April to Hawaii; June to Midway; August to Wake; October to Guam.



Figure 4. Sikorsky S-42.

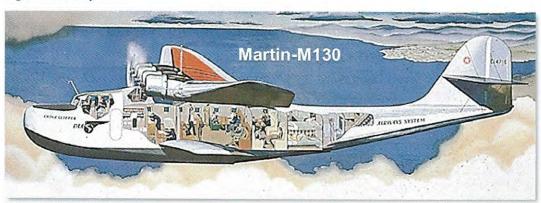


Figure 5. Martin M-130.

With layovers in Honolulu, Midway, Wake, and Guam, it took five days to fly from California to Manila (see Figure 7). Therefore, to make weekly flights required two aircraft. Finally, in November 1935, two of the long-awaited Martin M-130s were delivered to Pan Am.

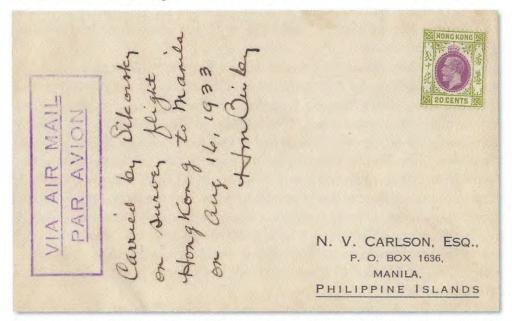


Figure 6. This envelope, signed by Harold Bixby, Pan Am's manager of CNAC, was the only piece of mail carried on the August 1933 survey flight.



Figure 7. S-38 in Manila in 1935.

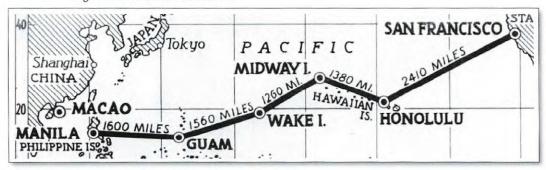


Figure 8. FAM 14 San Francisco to Manila, November 22, 1935.

On November 22, 1935, 100,000 people watched the China Clipper's takeoff. The souvenir mail for the inaugural China Clipper flight filled 59 mail bags. So much mail for collectors was carried by the China Clipper that two crewmen who had made all four survey flights were left on the dock. The China Clipper, heavily loaded with fuel and souvenir mail, could not gain altitude quickly enough to fly over the Oakland Bay bridge, so Captain Musick was forced to fly under the bridge, which was still under construction. Somehow Captain Musick's China Clipper avoided the construction wires hanging from the bridge. The public never realized that they had almost witnessed a disaster, but Captain Musick and John Leslie, Pan's Am chief aeronautical engineer for the Pacific Divi-

sion, were both so shaken by the incident that immediately after the inaugural flights of the *China Clipper* and *Philippine Clipper*, both aircraft were returned to the factory for more powerful engines. In spite of these severe maintenance issues, publicly the inaugural flights were a total triumph for Pan Am. See Figures 8–10.

Eight short years after Lindbergh soloed the Atlantic, Pan Am had established regular scheduled service across the vast Pacific.



Figure 9. Mail for the inaugural flight of the *China Clipper*: 59 bags, or 110,000 letters.



Figure 10. Captain Musick missed the wires flying below the Oakland Bay Bridge.

In 1937, isolated New Zealand broke with the British and granted landing rights to Pan Am. Under the agreement, Pan Am had to establish regular mail service by the end of 1937. The British would still not permit their Pacific Islands to serve as landing sites, so Pan Am was forced to use the very dangerous route through Kingman Reef and American Samoa. Again a Sikorsky S-42 with onboard fuel tanks was used for the first New Zealand survey flight in March 1937. Through good luck and the unmatched skill of Pan Am's chief pilot, Ed Musick, the survey flight was successful.

The second survey flight to New Zealand in December 1937 was also successful. However, Pan Am's luck ran out on the third New Zealand flight. After the *Samoan Clipper* took off from Pago Pago, an oil leak forced it to return for an emergency landing.

While it was dumping fuel prior to the landing, gas vapors were drawn back into the engines, and the resulting explosion killed Captain Ed Musick and his crew (see Figure 11). The dangerous air route via Kingman Reef and American Samoa was permanently closed, and further New Zealand flights would await both the delivery of new, more powerful aircraft and a safer route.

By utilizing the wing design of the B-17 bombers, Boeing developed the mighty B-314 Clippers in record time (see Figure 12). With the "Winds of War" gathering in Europe, Britain and France quickly offered their islands for flying boat bases. The first Boeing was delivered in January 1939 and had a

range of 3,500 miles. In August 1939, Pan Am used the new and much more powerful Boeing B-314 for the first survey flight to New Zealand over the safer route using Canton Island and Noumea, New Caledonia, as stopover bases (see Figure 13). Regular mail service over this new route started July 12, 1940.

With the outbreak of war on December 7, 1941, all Clipper flights in the Pacific west of Honolulu ceased (see Figure 14). During the war years, airports with concrete runways were built all over the world. These new runways were indeed "The concrete stakes that pierced the heart of the giant flying boats."

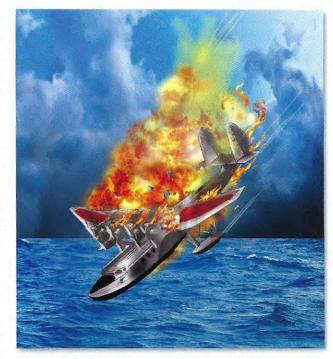


Figure 11. A colorized image of the *Samoan Clipper* crash, based on an artist's drawing originally published in the *San Francisco Chronicle*, January 13, 1938.

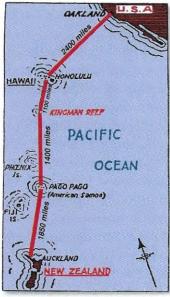


Figure 13. New Zealand route, 1940.



Figure 12. The mighty Boeing B-314.

Pan Am's final flying boat flight in the Pacific (see Figure 15) landed in San Francisco Bay on April 9, 1946. Onboard were envelopes containing letters written by William VanDusen, Pan Am's Public Relations Director, addressed to 2,000 newspaper editors around the country. His letter said in part:

"They (the Pan Am flying boats) had more sex and glamour in five minutes than we can build into land planes in five years . . . So Hail, old timers. Hail and farewell!"

VanDusen's publicity letters, called "Dear Senor" letters, were usually sent on a regular basis to over 2,000 newspaper editors around the country. Only the envelope exhibited



Figure 14. Pan Am route map as of December, 1941.



Figure 15. Official Pan Am photo of the Final Flight crew. Standing: S.D. Terrel, Chet Thayer, Roy Welch, Don Lykke, Don Bond, Tom Kewin, John Krupnick. Kneeling: George Havholm, Gene Dunning, Jim Parker.

below (Figure 16) from Pan Am's final Clipper flight has surfaced. It is an unsolved mystery as why only one of the 2,000 Dear Senor letters supposedly on board the final Pan Am Clipper flight has been found. Tom Kewin, the flight engineer on the final Pan Am Clipper flight, was nice enough to sign my cover for me more than 70 years after Pan Am's final flying boat flight.

I hope this article on the **Romance of the Flying Boats** will inspire you to read more about Pan Am's flying boat era in the Pacific. Thanks for flying back in time with us.



Figure 16. A cover flown on the final Clipper flight, signed by flight engineer Tom Kewin.

References

Bixby, Harold M. Top Side Ricksha. Self-published, 1936.

Kewin, Thomas. The Pan Am Journey. Self-published, 2005.

Krupnick, Jon E. "1st Pacific Survey Flight." *American Philatelist*, June 2003.

——. Pan American's Pacific Pioneers—The Rest of the Story. Missoula, Montana: Pictorial Histories, 2002.

—. FINAL FLIGHT. Toledo, Ohio: Minuteman Press, 2021.

Leslie, Peter. Aviation's Quiet Pioneer: John Leslie. Self-published, 2011.

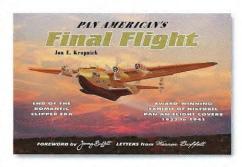
Buffett Quote: ©1998 by Jimmy Buffett. Reprinted with permission of Random House, Inc. Quotation from page 22 of *A Pirate Looks at Fifty*.

About the Author

Jon E. Krupnick is a retired attorney from Fort Lauderdale. He is neither a pilot nor from a Pan Am family. His interest in Pan Am grew out of a childhood fascination with the U.S. Pacific islands of Wake, Midway,



The author with Jimmy Buffett wearing the cap of a Pan Am flying boat captain.



and Canton. In the early 1970s, Jon learned of the pivotal role these islands played in Pan Am's flying boat era in the Pacific. He has written three books on this romantic period in aviation. His third book, *FINAL FLIGHT*, was published in June 2021. For more information on his new book see Jon's website: PanAmClippers.com.