

Robert Novell Year in Review

2012

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Alaska Airlines

Part One - March 2, 2012

“Robert Novell’s Third Dimension Blog”



Good Morning---it is Friday and it is time to talk about Alaska Airlines. I hope everyone had a good week, you enjoyed the preview on Wednesday, and you did a little research on the Caspian Sea Monster which was an interesting, and lethal, concept developed by the Russian military.

Today will be Part One of the series on Alaska Air and I will finish up next week so that you have everything you need to know without waiting too long for me to wrap it up. So, let’s talk about the beginnings of the airline we all know now as Alaska Airlines.

Enjoy.....

Alaska Airlines - Part One

The company that eventually became Alaska Air was founded in 1932 by Linious "Mac" McGee, a veteran of several failed business ventures who had traveled to Alaska in 1929 and set himself up as a fur buyer. In 1931, McGee and a pilot friend, Harvey W. Barnhill, purchased a used three-passenger Stinson prop plane in San Francisco and shipped it to Alaska for use on McGee's fur-buying forays. By January 1932, "Barnhill & McGee Airways" were offering charter flights in advertisements in the Anchorage daily newspaper.

In 1934, McGee merged his struggling airline with another Anchorage airline, Star Air Service, which had a fleet of eight planes. This company had gotten its start in April 1932 when two aviators from Seattle, Steven E. Mills and Jack Waterworth who were backed by a friend who put up the money, arrived in Anchorage with a Deluxe Fleet B-5 two-seater plane and set up shop as flight instructors. With a combined fleet of 15 planes Star was now Alaska's dominant airline but the business, beset by high repair costs to its fragile wood and fabric planes, continued to struggle throughout the mid-1930s.

The era of high-risk Alaska bush flying began to wind down in the late 1930s when Star Air Service started de-emphasizing charter flights in favor of more regularly scheduled service. In 1937, in an effort to stabilize its finances, the company was incorporated as Star Air Lines. The following year Congress passed a bill creating the Civil Aeronautics Authority to regulate the growing commercial airline industry.

In preparation for the advent of governmental regulation Star began paying pilots a salary rather than allowing them to compete for commissions, painted its 15 planes a uniform orange with a black logo, and tried to stick to semi-regular schedules for its flights. In 1940 the Civil Aeronautics Board (CAB) held hearings in Anchorage. As a result of these Stars was awarded temporary certificates in 1942 for most of the routes it desired including many flights from Anchorage to other points. However, the airline's petition for the crucial route between Seattle and Anchorage was denied in favor of politically well-connected Pan Am.

In 1941, the financially vulnerable Star was purchased by New York businessman Raymond Willett Marshall, who had interests in other transportation companies and saw that ownership of Star could be profitable for him. The following year, vice-president and board member Homer Robinson arranged to enlarge Star by purchasing three other Alaska airlines as well as a hangar at the Anchorage air

field. In light of these additions, the company's name was changed to Alaska Star Airlines in mid-1942, and then, in 1943, to Alaska Airlines, Inc.

The most significant change to the airline during this time, however, came after America's entry into World War II in December 1941; the war resulted in a severe shortage of pilots. Nevertheless, the airline purchased its first multiengine plane, a Lockheed Lodestar, in 1943. In that same year, the company's stock was first traded on the American Stock Exchange.

In 1945, with the war winding to a close, the airline hired its first flight attendants. With the arrival of James A. Wooten as president, in 1947, Alaska Airlines began a rapid postwar expansion. Wooten's professional background was in airfreight, his strategy was to buy up surplus planes, engines, and parts from the government, which was selling off vast amounts of equipment, left over from the war. The airline's fleet increased dramatically, and to keep the planes busy, Alaska Air expanded its charter business. The federal government had liberalized the airline industry, and Alaska Airlines planes began flying everywhere hauling almost anything including live cattle. The company flew rice to Chiang Kai-shek's troops under siege by Mao Tse-tung's Communist forces in China and brought back Chinese laborers to work in Canada. Alaska Airlines planes flew Jewish refugees to Israel and 11 loads of German war brides to America. During the Berlin airlift the company made 87 flights into Germany. All of this helped Alaska Airlines to become the world's largest charter airline by 1948.

Closer to home, in the late 1940s the airline added popular charter flights from Anchorage to Honolulu and also began regular, though technically "nonscheduled," flights that originated in Chicago and passed through Seattle on their way to Alaska. The frantic pace of charter flights mandated by Wooten put Alaska Air into the black and finally the airline outgrew its facilities in Alaska moving its base of operations to Paine Field in Everett, Washington, and made Anchorage a branch office.

However, the lax state of federal regulations that had made this flourishing activity possible was ending. In 1949, the CAB shut down Alaska Airlines entirely for a short period for safety violations and levied heavy fines. Subsequently, the airline was completely prohibited from engaging in its worldwide charter business and allowed just eight trips a year between Alaska and the continental United States. Wooten left his post as president shortly thereafter, and the airline's second era of high-flying adventure ended.

With its sphere of activity restricted to Alaska the company turned its attention to consolidation of its standing within the state buying two smaller airlines, Al Jones Airways and Collins Air Service, in 1950. Throughout his tenure as owner of Alaska Air Raymond Marshall had run the company with an eye to his own financial gain rather than the long-term welfare of the airline itself. In 1951, with continued financial improprieties crippling the company's operations, the CAB forced Marshall out of day-to-day control over the airline by compelling him to place his stock in a five-year voting trust. In that year as well the CAB granted Alaska Air a temporary certificate for a route outside Alaska, the long-coveted Seattle-Alaska run.

In 1952 Nelson David, a CAB-appointed president, took over, and a period of rebuilding financial and operational stability within the airline ensued. By 1957, the airline was in functional shape and David and his cohorts departed to make way for the arrival of Charles F. Willis, Jr., a decorated World War II pilot, who took over as president and chief executive officer by purchasing most of Marshall's stock in the company.

Under Willis's direction, Alaska Airlines began to make up in personality what it lacked in capital. The company became the first to show movies on planes in the late 1950s, and with the inauguration of service on its first pressurized plane, a DC-6 that allowed pilots to fly above rough weather rather than through or around it, Alaska Air introduced "Golden Nugget" service, which included an on-board honky-tonk saloon with a piano.

In 1960, the company was allowed to shuck its cumbersome bush routes to tiny towns in the interior of Alaska and the following year the airline entered the jet age with the purchase of a Convair 880. Locked in tough competition with Pan Am, Northwest, and another regional carrier, Pacific Northern, Alaska Air turned to cheap and imaginative gimmicks to try to set itself apart from the competition throughout the 1960s. In addition to the "Golden Nugget" promotion, the company offered safety instructions read in rhyme, fashion shows in the aisles of the planes, and bingo games en route. The airline also worked to promote tourism within Alaska, organizing charters from the continental United States to the frozen north.

In 1964, the company was finally given a permanent certificate from the CAB for its most important route, which was the nonstop flight from Seattle to Anchorage. During this time, Alaska Air also added two important new planes to its fleet. The Lockheed Hercules, a massive cargo plane, which it used to fly oil-drilling equipment to Alaska's North Slope and in the early 1970s to South America; in

addition, the Boeing 727 was added and this would become the company's signature passenger aircraft.

In 1967, as Alaska celebrated its centennial, the company adopted a "Gay Nineties" promotional theme with flight attendants dressed in Edwardian garb. In the same year, the airline expanded its coverage of Alaska to include exclusive service to the Southeast corner of the state with the opening of an airport in Sitka, Alaska. This led to the acquisition, in the following year, of two smaller airlines: Alaska Coastal Ellis and Cordova Airlines. The "Gay Nineties" theme gave way in 1970 to "Golden Samovar" service, complete with Cossack costumes and beverages served from giant Russian samovars, in recognition of the company's introduction of charter service to Siberia. After many years of diplomatic wrangling, the airline was able to win permission for more than two dozen flights in 1970, 1971, and 1972.

Despite all of the promotional fanfare, surrounding service to the Soviet Union, the airline as a whole was in difficult straits. Throughout the first two years of the 1970s company cargo planes sat idle, sapping revenues, as work on the Alaska pipeline was held up. A further blow came on September 4, 1971 when an Alaska Air jet crashed on landing in Juneau with a loss of 111 lives. It was the worst single-plane domestic air disaster to date. Financially, despite the CAB's award of exclusive rights to serve Southeast Alaska, the airline was struggling badly. Finally the president, and chief executive officer, Willis was deposed in 1972 by the airline's board and replaced by Ronald F. Cosgrave, a board member who had gotten his start in business providing Alaskans with mobile homes.

[Source Document](#)

(Part Two of the series will be presented March 9, 2012)

An interesting beginning for what is now one of the most profitable airlines in the US. Next week we will wrap up our story---I have a few photos for you at the end of the blog--- and until then I wish you and yours a good weekend.

Take Care and Fly Safe,

Robert Novell

March 2, 2012



Archives, University of Alaska Fairbanks



Archives, University of Alaska Fairbanks



Archives, University of Alaska Fairbanks



Archives, University of Alaska Fairbanks





Alaska Airlines

Part Two - March 9, 2012

“Robert Novell’s Third Dimension Blog”



Good Morning---it is Friday and it is time to continue our series on Alaska Airlines. I hope everyone had a good week, that you enjoyed the preview on Wednesday and found the sales brochure on the Wright Flyer to be an interesting footnote on aviation history.

Today will be Part Two of the series on Alaska Air and this will finish up the series. So, let's continue with our story and if you need to refresh your memory on Part One click here..... [Alaska Air-Part One](#).

Enjoy.....

Alaska Airlines

Part Two of Two

When Cosgrave took over, Alaska Air was \$22 million in debt to its creditors. In an effort to salvage the company, the airline cut flights and employees and dropped its freight business entirely. The new management also set out to improve the airline's punctuality in hopes of banishing its unflattering image as "Elastic Airlines." By 1973, the airline's performance had improved and it was turning a

small profit. In this new, less-flamboyant phase symbolized by the more sober logo of a native Alaskan that was painted on the tail of the company's planes, the airline remained profitable throughout the mid-1970s.

With the passage of the Airline Deregulation Act of 1978, the American airline industry underwent a radical transformation. Alaska Airlines also underwent a transformation of sorts at the start of the new era. The real estate arm of the company was broken off into a separate company. Cosgrave became chairman of the new firm, relinquishing the reins of the airline to his close associate, Bruce R. Kennedy. In alliance with Alaska Air, Cosgrave then launched a failed campaign to take over one of the airline's competitors, Wien Air Alaska, that later resulted in federal fines for Alaska Airlines and its leaders for improprieties during the attempt.

Kennedy's role as leader of Alaska Air was to shepherd the airline through the marked expansion of the brave new unregulated world of the 1980s. Immediately, the company placed two more continental American cities on its route map: Portland, Oregon, and San Francisco, California. The Arctic cities of Nome and Kotzebue, and then Palm Springs, California, were added shortly; and Burbank and Ontario, California, came on line in 1981.

By 1985, Alaska Air was serving cities in Southern California, Idaho, and Arizona as well, and profits were up. The company was able to settle a three-month-long strike by its machinists in June, part of an overall strategy to pare labor costs to the bone and maintain peace with its unions. In November, the company introduced a popular daily airfreight service from Alaska called "Gold Streak."

Anticipating further expansion, the airline formed Alaska Air Group as a holding company in 1985. Horizon Air, a Seattle-based regional commuter airline serving the Pacific Northwest, was purchased in 1986. A year later, the company bought California-based Jet America Airlines, which was merged into Alaska Airlines after being slammed by larger airlines on its East-West routes from Southern California to the Midwest. Despite this setback, Alaska Air pressed ahead with its expansion into the hotly contested California market.

In an effort to compensate for the seasonal imbalance in travel to Alaska, much of which takes place during the summer, the airline in 1988 inaugurated service to the Mexican resort cities of Mazatlán and Puerto Vallarta, whose high season is the winter. By 1989, the company served 30 cities in six western states outside Alaska, and 70 percent of its passengers flew south of Seattle. The airline had successfully

used its base in Alaska as a springboard to profitable performance in larger markets. Alaska Air continued its emphasis on customer service as its calling card, stressing higher-quality food and more legroom on its flights than on other airlines.

In 1990, the company unveiled a strategic plan that included lease orders for 24 new Boeing 737-400 aircraft. One provision of the transaction was the company's sale of a \$60 million preferred stock position to International Lease Finance Corporation (ILFC), lessor of the airplanes. A creative feature of the stock transaction was that the conversion rights were purchased by a large group of Alaska's management employees, who were to redeem the stock from ILFC and convert it to common stock no later than 1997. The conversion feature was structured to create an incentive for management to achieve strong stock performance through operating results. At the same time, Alaska announced a large repurchase of shares, using proceeds of the preferred stock sale, and began an employee stock purchase plan.

The airline further expanded its route map in 1991, adding the international destinations of Magadan and Khabarovsk in the Russian Far East, and Toronto, its first city served north of the American border and east of the Rockies. (Toronto was eventually dropped in July 1992) As the company notched awards for customer service, and marked its 19th consecutive year of profits in a turbulent industry, Kennedy retired in May 1991 and was succeeded by Raymond J. Vecchi.

Furious competition descended on Alaska Air's home turf after the carrier declined to buy its rival MarkAir Inc. in the fall of 1991. Since it began carrying passengers in 1984, MarkAir had worked out feeder arrangements with Alaska Air that kept competition to a minimum. However, after the buyout offer was refused, it unleashed low-cost service on the Anchorage-to-Seattle market and others within Alaska, where Alaska Air earned nearly one-third of its revenues.

In 1992, Alaska Air posted its first loss--\$121 million--in 20 years. Under Vecchi, the carrier canceled two planned maintenance facilities and deferred a massive \$2 billion aircraft purchase; it was able to increase utilization of its existing planes, however. The company cut back on unprofitable routes and even tampered with its award-winning customer service formula, economizing on in-flight meals and other amenities. Attempting to reduce costs on labor resulted in predictably tense relations with the unions. The strict fiscal regimen produced prompt results; Alaska's losses fell to \$45 million in 1993 and produced a \$40 million profit in 1994. Record-setting cargo operations accounted for about eight percent of these revenues.

In 1993, competition heated up, as the legendary low-cost airline Southwest Airlines entered the Pacific Northwest market by acquiring regional carrier Morris Air. United Airlines simultaneously transferred many competing routes to its less expensive shuttles. Alaska Air was able to reduce its costs, while maintaining a level of customer service that helped make it the leading carrier out of Seattle, Portland, and Anchorage. Alaska Air billed itself as "the last great airline." Still, analysts argued that Alaska Air was in need of deeper cuts, and the company was also plagued by union strikes by flight attendants.

In early 1995, Vecchi was dismissed and replaced by John Kelly, formerly CEO of Horizon Air. Alaska and Horizon expanded West Coast routes to capitalize upon a new "open skies" agreement between the United States and Canada. Alaska Air also added a new Russian destination. Its competitor MarkAir had by then centered its jet service on Denver.

In 1996, Alaska Air conducted the first commercial passenger flight using Global Position System (GPS) navigation technology. It announced plans to become the first airline in the world to integrate GPS and Enhanced Ground Proximity Warning System (EGPWS) technology, adding a real-time, three-dimensional display of terrain. The system was scheduled to be operational in all of the carrier's Boeing 737-400s by April 1999.

Innovation was important to the company. In 1989, Alaska Air had become the first airline to use head-up guidance systems to operate in foggy conditions. In 1995, it became the first U.S. carrier to sell tickets over the Internet. The airline installed self-service "Instant Travel Machines" that printed boarding passes and allowed customers to bypass the traditional ticket counter. The addition of an X-ray device to the unit was being tested in Anchorage in the spring of 1999, which would allow passengers to check their own baggage.

I have a few photos for you at the end of the blog you will enjoy and until next week, I wish you and yours the best life has to offer.

Take Care and Fly Safe

Robert Novell

March 2, 2012



Alaska State Library - Historical Collections



University of Alaska Anchorage, Archives & Manuscripts Dept.



Archives, University of Alaska, Fairbanks



Silver Wings with the Letter "G"

- March 16, 2012

“Robert Novell’s Third Dimension Blog”



I think most of you reading this have some background on what the gliders accomplished in WWII but I would like to give you a little more knowledge about the airplanes, the aircrews, and their accomplishments. Let's start with some information copied from the National WWII Glider Pilots Association:

"The intrepid pilots who flew the gliders were as unique as their motorless flying machines. Never before in history had any nation-produced aviators whose duty it was deliberately to crash land and then go on to fight as combat infantrymen. They were no ordinary fighters. Their battlefields were behind enemy lines."

"Every landing was a genuine do-or-die situation for the glider pilots. It was their awesome responsibility to repeatedly risk their lives by landing heavily laden aircraft containing combat soldiers and equipment in unfamiliar fields deep within enemy-held territory, often in total darkness. They were the only aviators during World War II who had no motors, no parachutes, and no second chances.-- General William C. Westmoreland, U.S. Army, Retired"



National WWII Glider Pilots Association, Inc. Eight Missions

American glider pilots, along with airborne forces, spearheaded all the major invasions, landing behind enemy lines in their unarmed gliders in Sicily, Normandy, Southern France, Holland, Bastogne, Rhine Crossing, Luzon in the Philippines, and Burma.

One veteran American glider pilot painted a vivid picture of the stark terror they experienced. "Imagine", he said, "flying a motorless, fabric-covered CG-4A glider, violently bouncing and jerking on a 11/16 inch thick nylon rope 350 feet back of the C-47 tow plane. You see the nervous glider infantrymen behind you, some vomiting, many in prayer, as you hedge-hop along at tree-top level instinctively jumping up in your seat every time you hear bullets and flak tearing through the glider. You try not to think about the explosives aboard. It's like flying a stick of dynamite through the gates of Hell."

There were only about 6,000 American military glider pilots, all volunteers. They proudly wore the silver wings with the letter "G" superimposed on them. The brash, high-spirited pilots were not a bit bashful about letting everyone know that the "G" stood for "Guts".

American glider pilots were scheduled for "Operation Eclipse," the Allied airborne offensive planned to capture Berlin. However, the glory went through political default, to Russian ground forces. They were spared an invasion of Japan when the atomic bombs fell on Hiroshima.

They suffered heavy casualties and their ranks have thinned through the years until now only about 390 are banded together in The National World War II Gliders Pilots Association with its headquarters at 4037 Ringdove Way, Roanoke, TX 76262. They are a vanishing breed. There will be no future generations of American military glider pilots. The Defense Department ended the military glider pilot program in 1952.

World War II Glider Pilots; none had ever been before and probably none will ever be again; a hybrid breed like jackasses with no need to reproduce themselves; definitely one of a kind understood only by themselves and some completely beyond understanding. A few more years and military glider pilots will be an extinct species remembered by few. However, they did exist and were involved in some mighty important and exciting military actions in WWII.

[Source Document](#)

I cannot begin to imagine the pressure the crews, and passengers, were under when they released from the tow plane. Aviation is full of challenges but I don't think you could face a greater challenge than the crews who wore the silver wings with the letter "G."

Now, what about the airplane itself? There were around 14,000 of the CG4A Gliders produced by a number of different companies in the US and the specifications were as follows:

Wing Span--- 83 feet, 8 inches
Length (Overall)---48 feet, 3-3/4 inches
Height---12 feet, 7-7/16 inches
Weight, design--- 3,750 pounds
Gross Weight, design---7,500 pounds
Wing Chord---10 feet, 6 inches

The Americans were not the only ones to employ this asset. The Germans led the way followed by the Russians, USA, and Britain. The British manufactured a glider called the Airspeed Horsa. This was manufactured in Britain by Airspeed LTD, and was named the Horsa after a 5th century German mercenary.



<http://www.paradata.org.uk/media/4150?mediaSection=Photos>

The specifications for the Horsa are as follows:

Capacity---25 passengers
Length---67 ft. (20.4 m)
Wingspan---88 ft. (26.8 m)
Height---21 ft. (6.4 m)
Wing area---1,148 ft² (106.7 m²)
Empty---7,500 lbs. (3,400 kg)
Loaded---15,250 lbs. (6,920 kg)
Towing speed---127 mph (204 km/h)
Gliding speed---100 mph (160 km/h)

There is a lot of information out there on the Gliders used in WWII and I encourage you to take some time to look around and reacquaint yourself with the facts. I have a video that has some very valuable footage on the Glider program but it will take you an hour to view it all; however, it is well worth your time.

Have a good weekend, enjoy your time with friends and family, and please remember that we all need to focus on time management---life is short.

Robert Novell

March 16, 2012

The Seaplane Designed to Compete With the B-52 - March 23, 2012

“Robert Novell’s Third Dimension Blog”



The race was on, during the 50s, and the US and Russia were determined to outspend one another based on ideology. The USAF brought NORAD to life, the DEW line was put in place, and the B-52 became the Strategic Air Commands new intercontinental bomber replacing the B-47; however, the USAF was not the only player.

The US Navy decided that the newly formed USAF was not going to have a monopoly on strategic deterrents and initially proposed a super carrier, USS United States, but budget limitations, and opposition from the Air Force bomber lobby, stopped development on the super carrier. The Navy Bureau then developed the concept of a **“Seaplane Strike Force”** centered around development of large jet powered seaplanes whose performance would be equal to, or better, than the land based jets with the ability to operate off of most of the world’s surface with only a tender, or submarine, needed for re-arming and re-fueling. Interesting concept, especially from an economic point of view, that would put the Air Force at a real disadvantage----maybe.

The request for proposal was sent out to the industry in 1951 with Convair and Martin taking the lead. The competition was won by Martin and they were awarded a contract for two prototypes and up to twenty-four production models. Martin then named its new aircraft the “SeaMaster” and the US Navy was officially in the bomber business much to the chagrin of the US Air Force.

Now, what about this new seaplane? Here are a few facts found on the web and I have credited the site I copied these from if you would like to view the entire article:

“Martin P6M SeaMaster”

The Martin P6M SeaMaster prototype made its first test flight on July 14, 1955. During flight-testing, speeds in excess of 600 mph (966 km/h) were claimed. It embodied all the design features developed during World War II and immediately after the war. In 1952, Martin was awarded a contract, first, for a design study, and then a production contract for two prototypes known as Model 275. They would be modern in almost every way, despite their untimely destruction during tests.

They were effectively seagoing B-52s, having a small crew of four and a gross take-off weight of 160,000 lbs (72,575 kgs), the same as the Convair Tradewind. The technology involved in its design was the latest known and included four Pratt & Whitney J75-P-2 turbojet engines of 17,500 lbs (7,938 kgs) thrust mounted on top of a highly swept shoulder-mounted drooped wing which had a span of 100 ft (30.48 m).

It had a T tail configuration and a high length-to-beam ratio of its 134 ft (40.84 m) hull. The engines were mounted in such a way as to prevent ingestion of the water spray pattern into the engine air-intake ducts and the wing-tip floats were integral, enlarged parts of the drooped wing configuration. These floats served additionally as wing-tip plates and in the mooring and docking of the SeaMaster, they played an important role in picking up the mooring buoy which was the key to swinging the aircraft, almost automatically, into the floating beaching gear or into a dock, whichever system was being used at the time. Also incorporated in the design of the P6Ms was a watertight rotary bomb bay. This could be flipped over in flight to expose the bomb racks, which could be loaded on the inside of the hull with bombs, mines, cameras or other ordinance stores.

[Source Document](#)

As most of you may know, I am a big fan of seaplanes and the concept put forward by the Navy should have been a winner for the US but in 1960 the contract was cancelled. There were many problems, which caused setbacks as well as budget constraints; however, I think that which caused the cancellation was the development of the Polaris ballistic missile on board submarines and the nuclear powered carrier, USS Enterprise, which would have long-range nuclear strike aircraft on board.

An interesting footnote to this story is a recent article I found on the Caspian Sea Monster. I wrote an article on this a few weeks ago and it turns out the Russians have decided to revive this program and flight-testing should begin this year:

Russia revives Caspian Sea Monster

Published: 15 July 2010, 13:35

Edited: 10 September 2010, 19:24



The Russian government has commissioned the renewal of the “Caspian Sea Monster,” the legendary ground effect vehicle (GEV). Only 30 such crafts were built in the Soviet Union over two decades.

The revival of GEV production was announced by the Alekseev design and construction bureau, which used to be the leading producer of such vehicles. According to its production branch director, Evgeny Meleshko, the bureau is working on a big model. It will spend two years making the new design with the first tests to be launched in 2012.

“For our company it’s a big project, and most of our specialists will be working on it,” Meleshko told Interfax news agency.

GEVs are high-speed naval vehicles that fly just over the surface thanks to a high-pressure air cushion created by its wings. The first prototype with a wingspan of 37.6 meters and a hull length of about 100 meters could travel at 250 knots and had a maximum take-off weight of 544 tons.

The Soviet Union produced several models, including one for amphibian troop's transportation and a cruise missile carrier. There was also a project for a strategic GEV armed with ballistic missiles.

[Source Document](#)

I hope everyone has a good weekend and enjoys a little time with family and friends. Thank you again for making the 3DB part of your week, please be sure and take a look at the video on the “SeaMaster” below, and I wish you, and yours, only the best that life has to offer.

Robert Novell

March 23, 2012

Aeromarine Was First And Then Came Pan Am - April 13, 2012

“Robert Novell’s Third Dimension Blog”



Good Morning---I hope the week was good for you and you are ready for a little time off. Today I want to talk about a company that was making aviation history flying to Havana, Nassau, Bimini, and other locations long before Pan Am came to the forefront as the USA’s preferred international carrier.

The company is Aeromarine and they had a network of flying boats that operated from Miami, New York, Cleveland, and other locations. The company was created by a merger between Aeromarine Sightseeing and Navigation Company, a subsidiary of Aeromarine Plane and Motor Company, and Florida West Indies Airways who had just been awarded an airmail contract from the US Post Office for the Key West to Havana route. On November 1, 1920, the resulting company, Aeromarine West Indies Airways, began the first scheduled international passenger and air mail service in the United States.

Now I know that Pan Am has been awarded that distinction but let’s take a look at what the archives at the Smithsonian say:

“One year after Aeromarine terminated its service in 1924, aviation interest was revived when a Colombian delegation, en route to the United States to request operating authority, arrived in Havana and requested authority from the Cubans to operate in and out of their territory prior to proceeding to the US . This new air service was sponsored by the Colombian airline, SCADTA, which wished to start a trans-Caribbean air route in to Miami; however, the U.S. State Department would not grant permission. Nevertheless, the episode stimulated official U.S. interest in

foreign air transport, especially for air mail, and this was to lead to the foundation of the U.S. "Chosen Instrument," Pan American Airways."

I find it interesting that after Aeromarine shut down in 1924 the Colombians were the first to pursue a revival of service to the Caribbean. The delegation from the country of Colombia, representing SCADTA the forerunner of the Colombian National airline Avianca, were first on the scene; however, the US State Department would not entertain such a proposal and this is when the well-connected Juan Trippe suddenly found himself being asked to operate the Miami to Havana mail service.

Now you know the rest of the story and I encourage you to do some research on the facts surrounding aviation in the Caribbean and South America. There is a lot of history here and many trailblazers, such as Jean Mermoz who we talked about a few weeks ago, that are not often talked, or written, about.

That is it for this week, enjoy the photos below, and next week I will have one more puzzle piece to the story of Aeromarine and Pan Am. Until next week, my best to you and yours, enjoy the weekend, and remember the standards you set today as an **Aviator** will be adopted by those who are following in your footsteps.

Robert Novell

April 13, 2012

FLY KEY WEST *AND* HAVANA *DAILY*



LUXURIOUS ENCLOSED CABIN AEROMARINE PASSENGER CRUISER

RESERVATIONS THROUGH ANY LEADING TRAVELING AGENCY OR HOTELS

FLY DAILY TO KEY WEST, HAVANA AND CUBA

SEATING DIAGRAM

AEROMARINE AERIAL CRUISER
SIGHTSEEING TRIP
OVER BISCAYNE BAY
ON FLYING BOAT
"COLUMBUS"
FEB. 21ST 1921

The diagram shows a top-down view of the aircraft. At the front is the 'FRONT COCKPIT'. Below it is the 'FORWARD CABIN' with six seats numbered 1 through 6. Below that is the 'PILOT HOUSE'. Below the pilot house is the 'AFTER CABIN' with three seats numbered 7 through 9. Below the after cabin is a 'BAGGAGE COMPARTMENT'. The tail section contains seats 10 and 11.

NAME OF PASSENGER	SAILING DATE
1. MR. MEAD	
2. MISS ALEXANDER	
3. MR. ROSENFELD	
4. MISS ROSENFELD	
5. MRS. J. PORTER	
6. MR. J. A. WATSON	
7. MISS M. S. RAWLES	
8. MISS I. L. DUNCAN	
9. MISS R. LAMBERT	
10.	
11.	

AEROMARINE
WEST INDIES AIRWAYS
INCORPORATED

KEY WEST
FLORIDA

HAVANA
CUBA

1800 TIMES BUILDING
NEW YORK CITY PHONE BRYANT 4505

FLYING BOAT SERVICE—NASSAU-MIAMI

TWO AND ONE-HALF HOURS

Palm Beach—Key West—
Havana

Tampa—St. Petersburg—
Belleair Heights

Swift
Safe



Comfortable
Interesting

Make Reservations at Hotel Desks or Through Our Agents or Offices

NASSAU
Sidney Farrington
327 Bay St.
Telephone 327

MIAMI
37 N. Bay Shore Drive

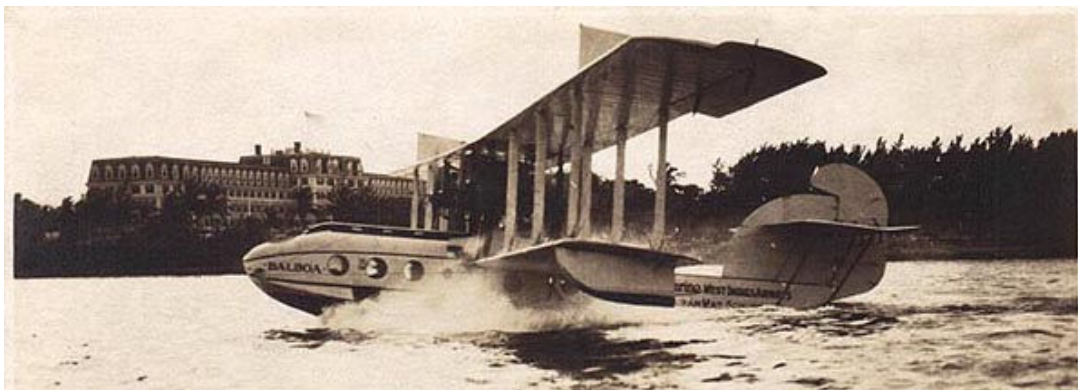
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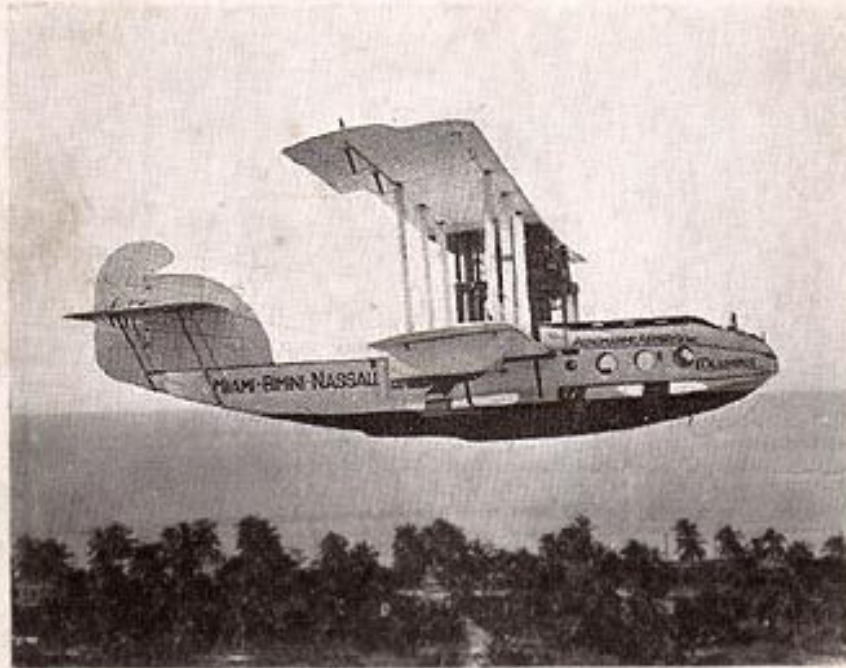
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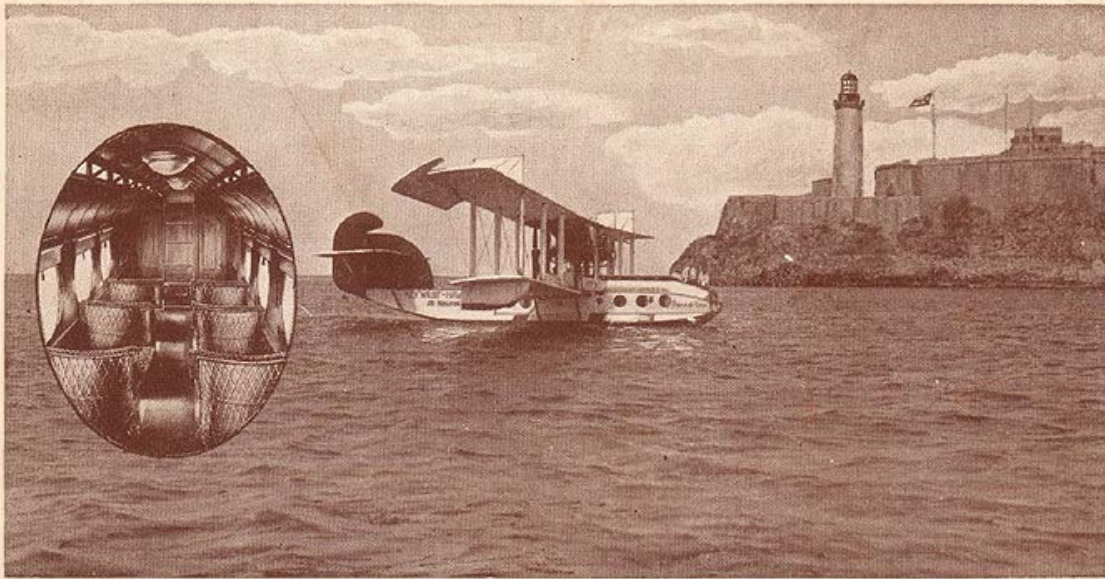
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Panagra

The Airline Pan Am Formed to Enter the Latin and South American Market

April 27, 2012

"Robert Novell's Third Dimension Blog"



Good Morning and welcome back to the "Third Dimension Blog" --- today I have an interesting story to tell you along with a few facts about how this bit of airline history unfolded. Panagra is the name of the airline and my story today tells about how this partnership airline opened up Latin, and South America, to the international community.

Panagra was a joint venture between Pan Am and WR Grace Company. Pan Am was responding to a request to provide service south in to Latin and South America but knew there would be difficulty trying to compete with WR Grace who controlled the west coast of South America, through their steamship routes, and were not about to let some outsider into their territory---especially an airline. Juan Trippe knew that unless

he could get Grace on board there were be no landing rights given to Pan Am for service into Grace's territory. Pan Am's negotiations with Grace culminated in the formation of Pan American-Grace Airways---Panagra---with fifty percent being owned by Grace and fifty percent by Pan Am.

Now that you know how it all came about let's talk about Panagra and at the conclusion of the article I will have some interesting facts that will reveal the rest of the story.

Enjoy and click [HERE](#) when you are finished for a few images I have posted in a separate blog.....

THE PANAGRA HISTORY

(The Pan American - Grace Airways, Inc. History 1929-1967)

Panagra provided air transportation for passengers, mail, and cargo over a 4,251-mile network of routes throughout Panama, Colombia, Ecuador, Peru, Bolivia, Chile and Argentina. Panagra, thus, had accomplished a pioneering job second to none. Less than a year after its inception, it had linked the Americas from the United States to Argentina with a direct, regularly scheduled passenger, mail and freight service. The trip from New York to Buenos Aires by plane could now be made in eleven days which was less than half the time it took by steamer.

Panagra carried American aviation farther than it had ever been before. No other U. S. airline was operating over such great distances at that time; American aviation had barely begun to stretch its wings beyond its territorial boundaries with a few short routes through Central America and the Caribbean area.

Panagra was the first airline in South America to develop and apply airways weather forecasts - and professional meteorologists furnish today all company planes with complete reports on the weather en-route and at destination at all hours. It was the first to adopt the controllable pitch propeller, first to use the revolutionary constant speed propeller, first to deploy a fully equipped radar fleet, and first to introduce the DC-6, DC-6B, DC-7 and DC-8 to South America.

During its three and a half decades of serving the Americas, Panagra did more than carry passengers, freight, and mail. Time and again the airline's planes were sent on missions of mercy carrying a vial of precious lifesaving medicine to a dying man, an iron lung to a girl's stricken with polio, or a shipment of drugs to arrest the spread of an epidemic.

In 1961 in Chile, and in 1948 in Peru, when earthquakes literally shook cities to pieces Panagra placed its entire facilities at the disposal of the stricken nations airlifting tons of medical supplies and food to the disaster area and flying out the victims. Panagra was an important factor in the economic and industrial development of South America. By stimulating an increased flow of trade and travel within the Hemisphere, the airline helped draw South America closer economically and culturally to the United States.

From early 1943 until the merger with Braniff 25 years later there was only one Panagra aircraft lost in operations with no fatalities. A non-compete clause in the agreement between Pan American World Airways, Grace, and Panagra made Panama the northern end of Panagra's route system.

In those early days airports were unknown, radio facilities were nonexistent and meteorology, as we know it today, was unheard of. As routes were expanded and frequencies increased, the airline had to build its own airports, equip its own overhaul and maintenance shops and set up its radio and weather stations along the entire route.

The History began on September 13, 1928, when a tiny single-engined Peruvian Airway's Fairchild FC-2 monoplane with four passengers and a few letters took off from a racetrack in Lima and landed 550 mile away, in a soccer field in Talara, Peru. This was the inauspicious beginning of scheduled commercial air transportation along the west coast of South America and the start of Panagra (Pan American Grace Airways).

A few months later, with the backing of Pan American World Airways and W.R. Grace & Co, Peruvian Airways (founded by Harold B. Harris in 1928) became Panagra. Between 1929 and 1942, Harris held the positions of Vice-President and Chief Operations Officer.

On October 12, 1929, a Panagra tri-motored Ford took off from the airport in Buenos Aires, cruised at a normal altitude over the flat pampas, and after stopping to refuel at Mendoza, Argentina, crossed the formidable Cordillera of the Andes through the Up Sallata Pass at the then unheard of altitude of 18,000 feet. Eight and a half hour after leaving the Argentine capital, the little Panagra airplane landed at Santiago's Los Cerrillos Airport making the first commercial flight across the Andes.

By 1930 Panagra planes had shortened the distance between New York and Buenos Aires to seven days, and two American airmen had written another stirring

chapter in the colorful history of aviation. One of these men was Lloyd R. "Dinty" Moore, a Panagra pilot, who had made an "impossible" dawn to dusk flight between Peru and Panama to deliver the mail on schedule to another pilot who flew it from there to the U. S. The other pilot was Charles A. Lindbergh.

Scheduled airline service between the Americas was now an accomplished fact. Lindbergh and Moore had proven it could be done. Panagra planes were cruising up and down the Hemisphere on a once-a-week schedule. With incredible speed the service was further expanded. More planes were put into operation. New routes were inaugurated. Other cities in Ecuador, Peru and Bolivia were quickly linked with the main trunk line along the west coast of South America.

Just before Pearl Harbor, when war with the Axis was imminent, Panagra, with the assistance of the respective South American governments and at the request of our own State Department, first paralleled and then replaced the services of German controlled SEDTA in Ecuador and Lufthansa in Peru and Bolivia. This was designed to avert an economic and transportation crisis and remove the Nazi threat from this continent.

In 1942, due to the need to move heavy freight, in support of the war effort, Panagra converted a couple of its DC-3's into freighters. Panagra started the first all-cargo route of any American flag airline when it inaugurated a route between the Canal Zone in Panama and Lima. Following the war the pioneer U. S. airline was able to obtain the larger, faster four-engined aircraft needed to inaugurate night operations and eliminate overnight layovers on its route.

Panagra's DC-3's, 4's and 6's featured broad yellow stripes on the wings. These stripes were to help in locating a plane that went down in the rugged terrain. In the first 15 years of operations the safety record was comparable to US domestic operations under significantly more challenging conditions. From early 1943 until the merger with Braniff 25 years later there was only one Panagra aircraft lost in operations with no fatalities. Indeed as the Panagra pilots continued their careers with Braniff and other airlines after the merger, not one life was lost with a Panagra pilot up front!

By 1946, elapsed time between Panama and Buenos Aires had been shortened to less than 24 hours. With the entry of Braniff International into the Latin American market, Panagra started to fly to Miami and New York in the 1950's. While this provided through plane service, north of Panama these were actually Pan American

flights using Panagra planes and crews to Miami and National Airlines on up to New York.

By May 1960, Panagra had introduced DC-8, jets to cut travel time between New York and the Argentine capital to less than 12 hours flying time. In developing air routes where none previously existed, Panagra had to start from scratch.

Its intercontinental DC-8 jet service linked Buenos Aires, Santiago, Antofagasta, La Paz, Lima, Guayaquil, Quito, Cali, and Panama City with Miami and New York. These 585-mile-an-hour jet planes accommodated 24 first class and 94 tourist class passengers in spacious and comfortable cabins that were equipped with bed sized berths, a Fiesta Lounge, and a snack bar.

Braniff began negotiations to purchase Panagra during the Charles Beard administration. Negotiations were later renewed and in December of 1965, a deal was made for the purchase of W.R. Grace's 50% interest. The deal was concluded on March 17, 1966 when the remaining 50% interest held by Pan American World Airways was acquired. This time however, the offer for the airline was raised to \$30 million from the original \$8 million offer.

In July of 1966, the Civil Aeronautics Board approved the plan and President Lyndon Johnson allowed the merger to proceed. The merger and integration of Panagra's operations was completed on February 1, 1967. Braniff acquired Panagra's fleet including DC-7's, DC-8-31's and 55F's, as well as purchase orders for five long-range intercontinental McDonnell Douglas DC-8-62 aircraft.

Braniff went broke in 1982. Apparently someone thought it a good idea to start again, under Panagra name. So in 1996 operations were restarted from Fort Lauderdale, FL. using the Boeing 727. Panagra ceased operations (again) in 1999.

[Source Document](#)

An interesting story but let me add in a few facts that will tell the rest of the story:

1. By 1926 the Germans had started to fly into almost every South American Country. There was a real concern that they would operate through the Canal Zone and pose even a greater threat to U.S. National Security. The U.S. Government let it be known that they were ready to award mail routes to anyone that could fly Central American and South American routes. NYRBA —New York, Rio, and Buenos Aires— purchased four flying boats and had them in Rio, ready to initiate a service on the East Coast of South America. Richard Hoyt, Juan Trippe

and their attorney, "Wild Bill" Donovan were scrambling around trying to get together a consortium to fly these routes, with a bunch of Yale men that were world war one pilots. The route bids went out. Trippe had no aircraft, no crews and bid \$2.35/mile. NYRBA had aircraft and crews, but when they went to negotiate landing rights, they ran into trouble with the local governments. Yes, the Secretary of State was a Yale man, as was the Post Master General who awarded the routes to Pan Am.

2. SCADTA (Sociedad Colombo-Allema De Transporte Aéreo -- Colombian-German Air Transport Corporation) was the first commercial airline in the western hemisphere. It began operations in Colombia on October 19, 1920. It was the product of German businessmen, war surplus airplanes and personnel from the World War I Luftwaffe along with Colombian capital. By the end of 1920 SCADTA had an exclusive airmail contract with the Colombian government. The contract, which lasted eleven years, included the right to print and sell their own SCADTA airmail stamps. Interestingly, it was SCADTA's aggressive expansion throughout South and Central America during the 1920s that led to an appropriation by the U. S. Congress to provide funds for the Post office to subsidize domestic and foreign air transport expansion in 1925. This was the Kelley Bill, the Air Mail Act of 1925.

3. Pan American Airways secretly owned a major part of SCADTA which it had acquired during the early days of the depression with help from the U. S. Secretary of State. This ownership led to PAA ownership of 65% of AVIANCA which was formed from SCADTA when it was nationalized by the Colombian government of President Dr. Alfonso López in 1934.

[Source Document](#)

Next week I will have another post on Panagra but it will be a narrative of a personal story by a pilot who was there, flew the routes, and lived the life of a Panagra pilot. Until then I wish the best to you and yours, take care, and be safe.

Robert Novell

April 27, 2012

Braniff International and the SST

May 18, 2012

“Robert Novell’s Third Dimension Blog”



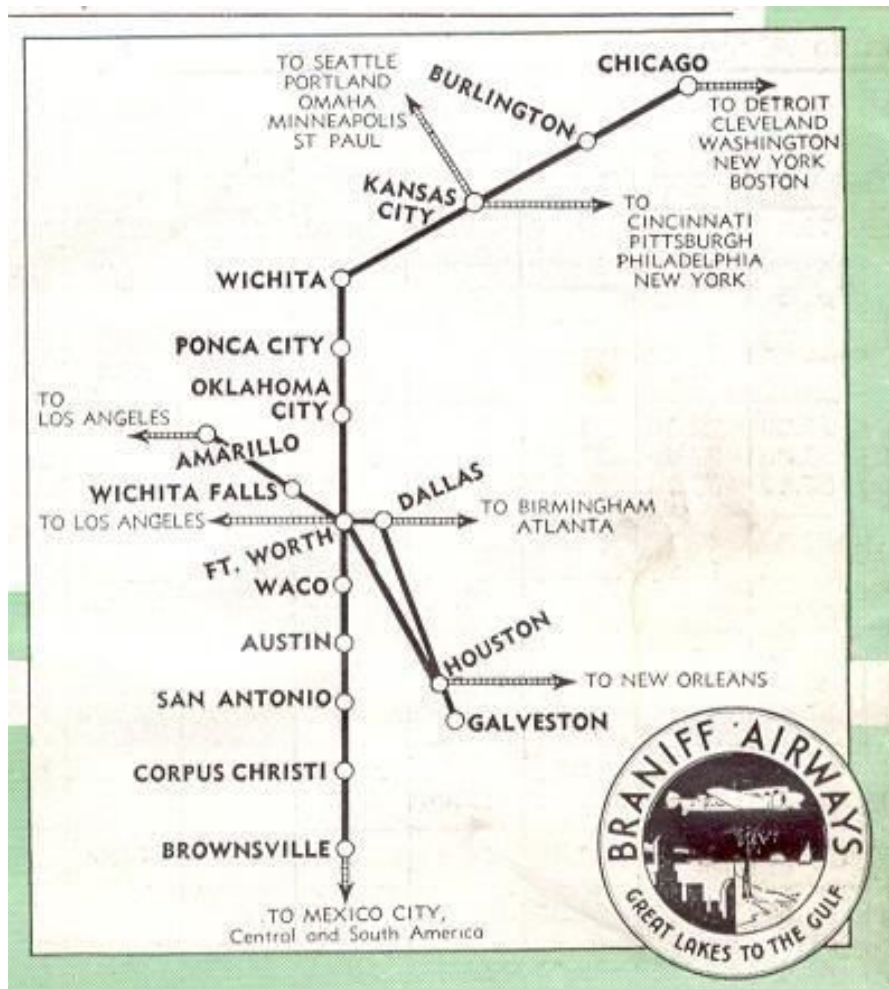
BRANIFF INTERNATIONAL



Good Morning---Hope the week was good for you and you are ready for a little time off. Today we are going to talk about Braniff and a very bold marketing plan that helped break the airline. Braniff Airlines was a unique airline and the only US airline to operate both the British and French Concorde. A really unique story and we will talk today about the specifics but first a little history.



Braniff began operations in 1928 as a one-man show. The man who did this was Paul Braniff. Paul's efforts, with help from his brothers, pushed the airline forward as the 20s turned in to the 30s and by the 40s, Braniff became a main stay in Texas and the Midwest.



The airline grew well beyond Texas, and the Midwest, and became the sixth largest airline in the US; however, what I want to talk about today is how Braniff was the only US airline to fly a SST in scheduled service.

Braniff had signed on to the Boeing SST program, and was a major player in bringing this issue to the forefront for US airlines, but our government opted out of the program after a billion dollar investment and Braniff turned to England, and France, to be a part of their program.

Braniff introduced service on January 12, 1979 between Texas, Washington D.C., and Europe using an interchange program with British Airways and Air France.

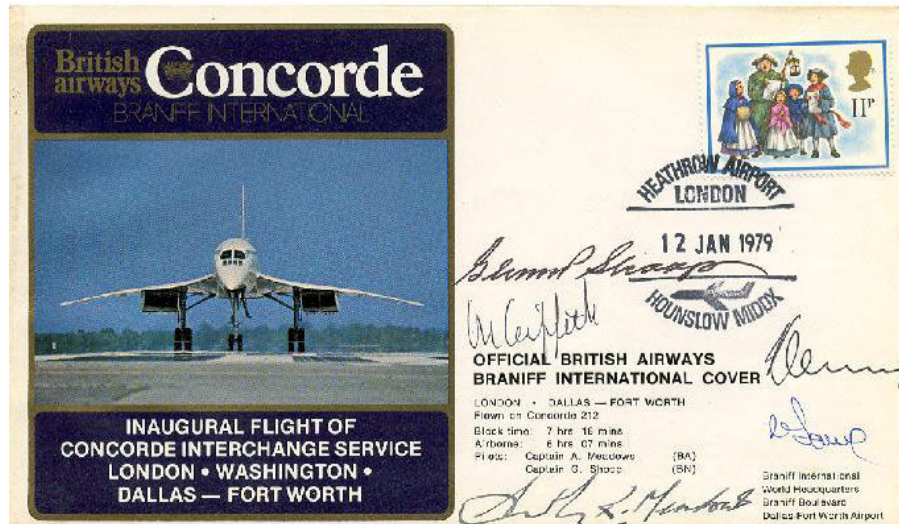
Flights between Dallas and Washington's Dulles airport were operated by Braniff cockpit and cabin crews and French or British crews would take over at Dulles for the transatlantic crossing. Concorde was never painted in a Braniff livery but there were many, as shown above, artist impressions of what an airplane would look like.

The only change that occurred was in the registrations and ownership of the aircraft. When in the US the "G" or "F" was covered up with white tape so a Concorde registered, as G-N81AC would become N81AC when flown in US. This occurred because the FAA would not allow the non-US aircraft a US certificate of airworthiness, the aircraft ownership was transferred to Braniff Airways for the Washington-Dallas segment of the route; in addition, British Airways, at the behest of their insurers were forced to fly a captain and flight engineer as cockpit observers for US segments as in reality the aircraft were still BA owned for insurance purposes.

Fourteen Braniff pilots (3 captains, 5 First offices, 4 flight engineers, a check pilot and check engineer) were trained in both France and the UK to operate Concorde, not just at the subsonic speeds that their services would operate at but also up to its Mach2 cruising speed.

The new interchange was the first of its kind involving a United States carrier and foreign airlines. This was the beginning of code sharing as we know it today.

Braniff terminated Concorde services at the end of May 1980 due to the high cost of operating the service with load factors at only 20%, coupled with Braniff's general financial woes at the time. Travelers were still flying in great numbers on traditional, slower, aircraft on the same route for the same 1st class prices to fly on Concorde. Concorde just never caught on.



I had several friends that flew with Braniff and they never had anything bad to say about the company except they were worried about the overexpansion after deregulation. Two of those friends went to work for Piedmont after Braniff shut down and the other went to teach at a University. My friends were lucky but out of the 10,000 people that were put on the street, many were not so lucky.

I have two videos that go with this article. Well worth your time and very informative. So, until next week I wish you and yours the best life has to offer and I hope that the weekend will allow you some time with friends and family.

Robert Novell

May 18, 2012

Antilles Air Boats

July 13, 2012

“Robert Novell’s Third Dimension Blog”



Hello and Good Morning,

So, what is this week’s blog about? Interesting you should ask because I want to talk about two legends and airplanes. Good combination don’t you think? The legends are Charles F Blair Jr. and Maureen O’Hara with the airplane types being P-51s, supersonic fighters, long rang bombers, and seaplanes. So, let’s move ahead with what I believe to be a real slice of aviation history.

Charles F Blair Jr. was an aviator from birth to death. There was never a challenge he would not meet, and he never met an airplane he didn’t like. He was born in 1909, received his pilot’s license in 1928, received his Naval Aviator wings in 1932, began flying for United in 1933, and became the Chief Pilot for American Export Airlines, which became American Overseas Airlines and was bought by Pan AM in 1950, and he retired from Pan Am in the late 60s.

Interesting fact about American Overseas Airlines: This was an American Airlines venture, which did not work out for American, and of course Pan Am, being the chosen International Carrier for the US, was happy to eliminate the competition

with a structured buy out from American. OK, more about Charlie, which is the name Maureen O'Hara used for her husband.

A few points of interest from his Biography on the web;

1. During World War II, Captain Blair flew for both NATS (Naval Air Transport) and the Air Transport Command. He also flew as production test pilot for the Grumman Aircraft Company testing the F6F, F7F and the F8F Navy fighters, and he flew the original Martin Mars flying boat as consulting test pilot. In 1943, he proposed and flew the first North Atlantic winter airline operations flight nonstop between the United States and the British Isles, again in a VS-44. In 1944 he was pilot in command of the five fastest seaplane crossings of the Atlantic on five consecutive trips. His best time: 14 hours and 17 minutes.

2. After the war, Captain Blair commanded the early proving and the first scheduled flights of Lockheed Constellations and Boeing Stratocruisers on the transatlantic routes of American Overseas Airlines. In his spare time, he owned and operated Associated Air Transport, Inc., a small non-scheduled airline flying between New York and Europe, the Middle East and South America. Most of the flights were made in a single, personally owned "long-range" C-46. After 16 million uneventful" passenger miles, the company was sold.

3. On January 31, 1951, Captain Blair flew his Mustang - which he had named "Excalibur III" non-stop from "New York to London's Heathrow Airport. One objective of the flight was to test the effects of the then-relatively unknown high-altitude phenomenon called the "jet stream." Captain Blair encountered the high-velocity westerly winds at 37,000 feet precisely as he had planned, and the resulting tail wind, in his words, "blew me to London." He covered the 3,478 statute miles at an average speed of 446 miles an hour. His elapsed time of seven hours and 48 minutes set a record for a transatlantic crossing by a piston engine plane that still stands.

4. Four months later, on May 29, Captain Blair took off in this same Mustang from Bardutoss, Norway and headed for Fairbanks, Alaska. It was the first solo flight over the Arctic and the North Pole, and the first by a single-engine aircraft. On this 3,260-mile nonstop flight, which took ten hours and 27 minutes, he proved the accuracy and practicability of a system of navigation that he had developed for flying in Polar Regions.

5. These achievements did not go unrecognized. At a White House ceremony the following year, Captain Blair received the coveted Harmon International Aviation

Award as "the world's outstanding aviator" from President Harry S. Truman. He was also awarded the Gold Medal of the Norwegian Aero Club, only the 16th time in 43 years anyone had been so honored. "Excalibur III" the scarlet P-51 in which he had made his historic flights, is on permanent display at the National Air and Space Museum in Washington, D.C. (see photo at the top of the page)

6. Brigadier General U.S. Air force, an author - he wrote "Red Ball in the Sky" - a pilot with the first squadron of jets to fly over the North Pole, married to Maureen O'Hara, and he is buried in Arlington National Cemetery, Section 2, grave 4966.

To view the complete article used for this please click [HERE](#).

Now, let's talk about Charlie's retirement project. It would seem that at age 59 most people don't think about starting over but Charlie did. In 1968, he married Maureen O'Hara, she retired and left Hollywood, and they began a seaplane operation in St. Croix. (If you don't know who Maureen O'Hara is click [HERE](#).) The name of the operation was Antilles Air Boats.



By 1977, they had a fleet of 23 amphibious aircraft, and were offering 120 flights per day to destinations throughout the Caribbean, and carrying more than 250,000 passengers a year. While billed as the largest seaplane airline, Antilles was also known as the streetcar line of the Virgin Islands. Charlie Blair was killed on September 2, 1978, while piloting a Grumman Goose from St. Croix to St. Thomas. His plane developed engine trouble, crashed and he was killed instantly. After his death, his wife became the first female C.E.O. of an airline. She continued to run Antilles Airboats until 1989, when the fleet was lost to Hurricane Hugo. The lack of proper aircraft available forced the closure of this territorial airline. Charlie Blair is buried in Arlington Cemetery and Maureen O'Hara, age 91, is still alive and living in Ireland.

Now, a few photos for your viewing pleasure:



ANTILLES AIR BOATS

ST. THOMAS 4-1776 • ST. CROIX 3-1776



SCHEDULED SEAPLANE SERVICE LINKING MIDTOWN ST. THOMAS, ST. CROIX, ST. JOHN, TORTOLA AND FAJARDO

EFFECTIVE FEB. 1968
Flights marked with asterisk*
do not operate Sundays

ST. CROIX to ST. THOMAS		ST. THOMAS to ST. CROIX		ST. THOMAS to TORTOLA		ST. CROIX to TORTOLA	
Dep't	Arrive	Dep't	Arrive	Dep't	Arrive	Dep't	Arrive
8:45	9:25	9:45	10:10	7:15*	7:30	12:00*	12:25
8:55	9:35	8:00	8:25	10:55*	11:10	1:20*	1:45
9:05	9:40	8:15	8:40	3:30*	3:45		
9:30 Super Goose*	10:00	8:45 Super Goose*	9:15	TORTOLA to ST. THOMAS		TORTOLA to ST. CROIX	
10:15	10:40	9:05	9:30	Dep't	Arr.	Dep't	Arr.
10:30	10:55	9:35	10:00	7:40*	7:55	12:45*	1:10
11:00	11:25	9:55	10:20	11:20*	11:35	2:00*	2:25
11:30	11:55	10:00	10:25	4:00*	4:15		
		11:15	11:40				
		11:45	12:10				
12:10	12:45	12:10	12:35				
1:05	1:30	12:45	1:10				
2:00	2:25	1:15	1:40				
2:45	3:10	2:15	2:40				
4:00 Super Goose*	4:30	3:15 Super Goose*	3:45				
4:10	4:35	3:45	4:10				
4:30	4:55	4:10	4:35				
4:45	5:10	4:25	4:50				
5:00	5:25	4:45	5:10				
5:15	5:40	5:00	5:25				
5:31	5:55	5:30	5:55				

ST. CROIX to ST. JOHN
Dep't 9:40 Arr. 10:05
9:00 9:25

ST. JOHN to ST. CROIX
Dep't 10:10 Arr. 10:35
9:30 9:55

FARES

ST. THOMAS to FAJARDO \$40.00 rd. trip \$20.00
ST. THOMAS to ST. CROIX \$8.00 rd. trip \$15.00
ST. THOMAS to TORTOLA \$3.00 rd. trip \$14.00
ST. CROIX to ST. JOHN \$10.00 rd. trip \$20.00
ST. CROIX to TORTOLA \$12.00 rd. trip \$24.00
ST. CROIX to FAJARDO \$15.00 rd. trip \$ 30.00

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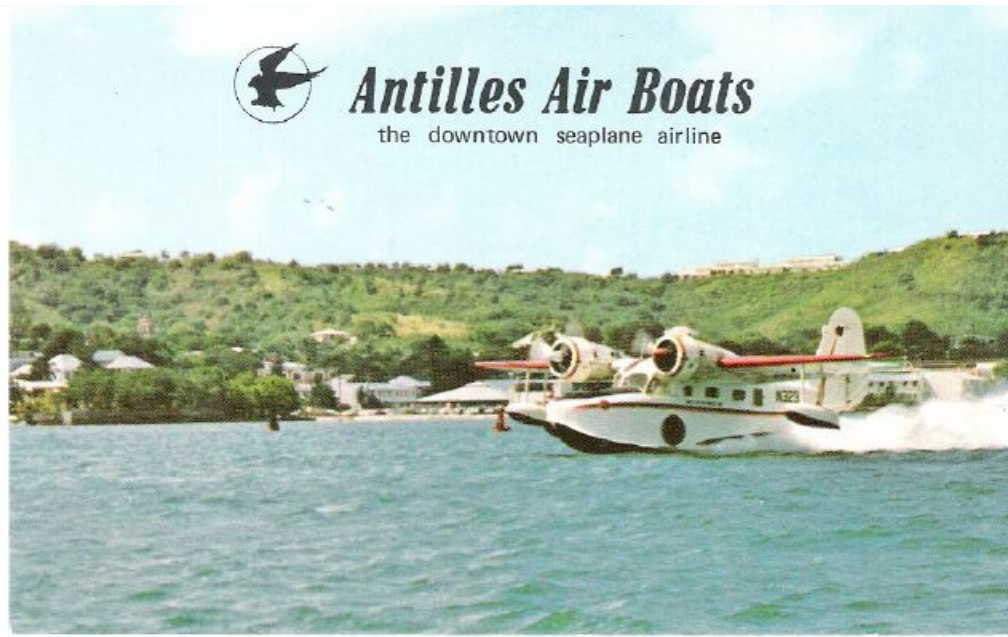
ST. THOMAS to FAJARDO
Dep't 8:40* Arr. 9:05
9:00* 9:25
9:30* 9:55
2:50* 3:15

FAJARDO to ST. THOMAS
Dep't 9:20* Arr. 9:45
9:40* 10:05
3:10* 3:35
3:30* 3:55

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Gr-21A (Seaplanes)

WORLD'S MOST EXPERIENCED SEAPLANE PILOTS





In the spring of 1979, a newspaper reporter asked legendary screen actress Maureen O'Hara if she missed acting. "I'm too busy. I work from six in the morning to 10 at night. You can't miss anything when you're that busy," replied O'Hara in her customary straightforward manner.

At that time O'Hara had been running Antilles Air Boats for six months, following the death of her husband Charles Blair famed aviator and founder of the St Croix, US Virgin Islands-based seaplane operation.

Known as "The Streetcar Line of the Virgin Islands" because of its ultra-convenient downtown-to-downtown seaplane service between St Croix and St Thomas, Antilles Air Boats billed itself as the largest seaplane operator in the world and, by the time O'Hara took its helm, boasted a fleet of 25 aircraft.

Still grieving for the man whom she would later write made her "happier than anyone or anything ever had", O'Hara was determined to keep Antilles Air Boats going strong. "Hopefully, we'll get bigger," she told the reporter, whose article ran on 29 April 1979 in Ohio's Blade Toledo. "We'd like to go into St Maarten and we've been invited to fly into Antigua."

Have a good weekend, take care with you, family, and friends and I hope to see you back next week when we will again talk about seaplanes, JB, and other such things.

Robert Novell

July 13, 2012

The World's Oldest Operating Airline in the Western Hemisphere

August 11, 2012

“Robert Novell’s Third Dimension Blog”



Good Morning---I hope the week was good, work was not too taxing on the soul, and you will have a chance to slow down over the weekend and smell the roses. This week we will finish our story on Avianca. Last week we talked about the origins of the airline, the German involvement, and the Pan Am connection. If you missed last week’s blog click [HERE](#). Now, let’s move ahead and finish our story on the world’s second oldest operating airline.

By the late 1940s, the fleet had been updated with Douglas DC-3s, and most of the seaplane bases had been closed. Avianca resumed international services with a route to Ecuador launched on March 21, 1946, and service soon was added to the Panama Canal Zone. The next year a new Douglas DC-4 was connecting Colombia nonstop with Miami, and Avianca became only the second airline, after Aerovias Brasil, to connect with the U.S. mainland; however, the carrier remained part of the Pan Am system.



Avianca's network reached to New York in April 1949; Lisbon, Rome, and Paris were added the next year. By 1957, Avianca had leveraged its strategic location with a number of new routes to the north and south and had upgraded its international service with the Lockheed Super Constellation, its new flagship.



A number of independent operators had sprung up in Colombia to capitalize on the availability of war surplus aircraft. Most faltered within a few years; Avianca absorbed two of them, "Sociedad Aérea de Tolima" (SAETA) and "Líneas Aéreas Nacionales, S.A." (LANSA), in the early 1950s. The LANSA merger in 1951 reduced Pan Am's shareholding to less than 40 percent. In 1963, Avianca bought the failed "Sociedad Aeronáutica de Medellín, S.A." (SAM), founded by a retired U.S. Air Force captain, through its Aerotaxi subsidiary. Another generation of airlines started in the mid-1950s, including "Lloyd Aéreo Colombiano" (LAC), "Taxi Aéreo de Santander" (TAXADER), "Líneas Aéreas La Urraca," and "Aeroví Condor de Colombia, Ltda" (Aerocondor). Of these, Aerocondor proved the most effective competitor and mishap-laden Urraca survived until 1979. The Colombian Air Force also operated an air service to remote provinces known as the "Servicio Aeronavegación a Territorios Nacionales"(SATENA).

Avianca began flying to New York by jet in October 1960 via a leased Boeing 707. By 1962 it operated Boeing 720 jets on all its international routes, and began flying the three-engined Boeing 727 on domestic routes in January 1966. A couple of years later, Pan Am's shareholding was reduced to 25 percent; it fell to 11 percent by 1975 as Avianca regained its independence, as displayed in a bold brick red color scheme adopted in 1970.



International services were expanded in the 1970s and the airline began operating Boeing 747 jumbo jets in December 1976. Bogotá-Frankfurt became the most important route. A number of air taxi services and tiny airlines sprang up in the 1960s and 1970s, but Avianca remained the dominant carrier by far.

Avianca's influence waned in the 1980s, however. The company ran up debts reaching US\$170 million in 1986, when its terms were renegotiated. As *Air Transport World* reported, Avianca's public image at home deteriorated as its on-time performance fell from 66 percent in 1986 to 32 percent in 1988. The carrier was tremendously overstaffed at 11,000 employees and suffered poor labor relations. SAM, which concentrated on tourist traffic to resorts, maintained a good reputation, unlike its sister airline.

To improve the bottom line, Avianca sold off its massive Boeing 747s and began ordering 767s in 1988 to renew its fleet. It also began to update its computer reservation system, contracting with IBM and acquiring Maxipars CRS from British Airways. The number of employees was reduced to 5,000 by 1990.

U.S. efforts against drug smuggling in the 1980s eventually prompted Avianca to retreat from the Colombia-U.S. cargo market. Penalties totaled US\$14 million by 1988; 450 kilos of drugs had been found aboard the company's planes the previous year. Avianca subsequently invested a huge amount of resources in drug detection. Although it was privately owned, terrorists targeted the carrier after a government crackdown on drug dealers, downing a Boeing 727 in 1989.

Spurred by customer complaints, the Colombian government deregulated the country's civil aviation industry in 1991, opening the skies to 25 foreign airlines and a number of domestic start-ups. Local competitors Aces and Intercontinental hit Avianca hard. Aces even won the right to fly the Bogotá-Miami route, also eyed by United Airlines and Iberia. Mexicana, Alitalia, KLM, and British Airways also were flying to Bogotá by then. Avianca was again allowed to carry cargo to the United States aboard its Boeing 767s; however, it faced competition from ARCA, Aerosucre, and Aces (Aerolineas Centrales de Colombia) and U.S.-based Challenge and Arrow Air on the freight side.

Alvaro Jamarillo Buitrago became CEO in December 1991. He sought to instill a 'corporate mystique' centering on customer service. The company launched a major restructuring in 1994, taking aim at productivity problems and reducing management levels from 13 to five. Catering and ground handling were outsourced. Avianca gained management control over SAM and the helicopter service Helicol in 1994. Its major stockholder was Grupo Empresarial Bavaria, the massive Colombian conglomerate.

Today, Avianca is part of the Star Alliance along with its merger counterpart TACA. Although I have always referred to Avianca as the world's second oldest

operating airline the fact that I want you to remember today is that Avianca is the oldest operating airline in the western hemisphere. So, as Paul Harvey would say, "Now you know the rest of the story."

Have a good weekend/week, enjoy time with friends and family, and remember what President Truman said - "*There is nothing new in the world except the history you do not know.*" Gatekeepers know this.

Robert Novell

August 11, 2012

VUELE en 
EL COLOMBIANO

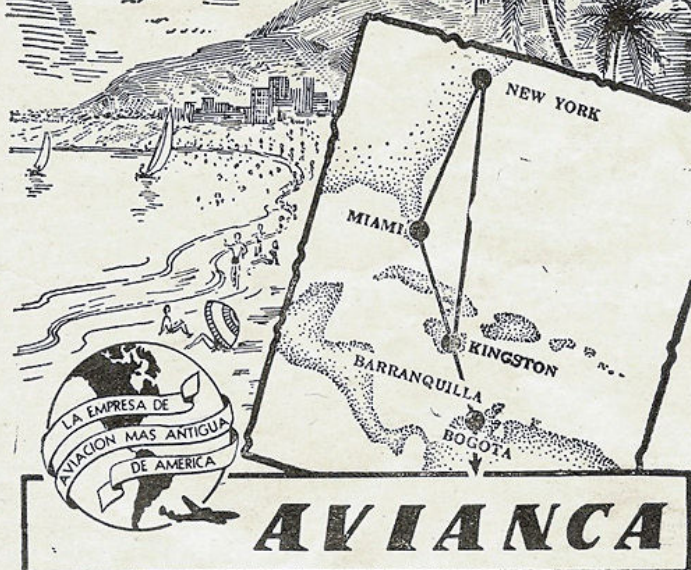
a
Kingston

(JAMAICA)
Y NUEVA YORK

CON EL NUEVO ITINE-
RARIO VIGENTE DESDE
EL 22 DE SEPTIEMBRE

Todos los domingos, nues-
tro servicio sin transbordo
a Nueva York hará escala
en Kingston, (Jamaica).

Los vuelos de los días
MIÉRCOLES Y VIERNES
de "EL COLOMBIANO"
seguirán haciendo escala en
Miami, como de costumbre.



AVIANCA

"EL COLOMBIANO" LO LLEVARA A EUROPA



EL SERVICIO MAS DIRECTO Y UNICO SIN TRANSBORDOS A EUROPA

LA UNICA EMPRESA DE AVIACION QUE LE AHORRA DIVISAS AL PAIS

PRESTIGIO RESPALDADO CON 30 AÑOS DE EXPERIENCIA

CONEXIONES INMEDIATAS A LAS PRINCIPALES CIUDADES EUROPEAS

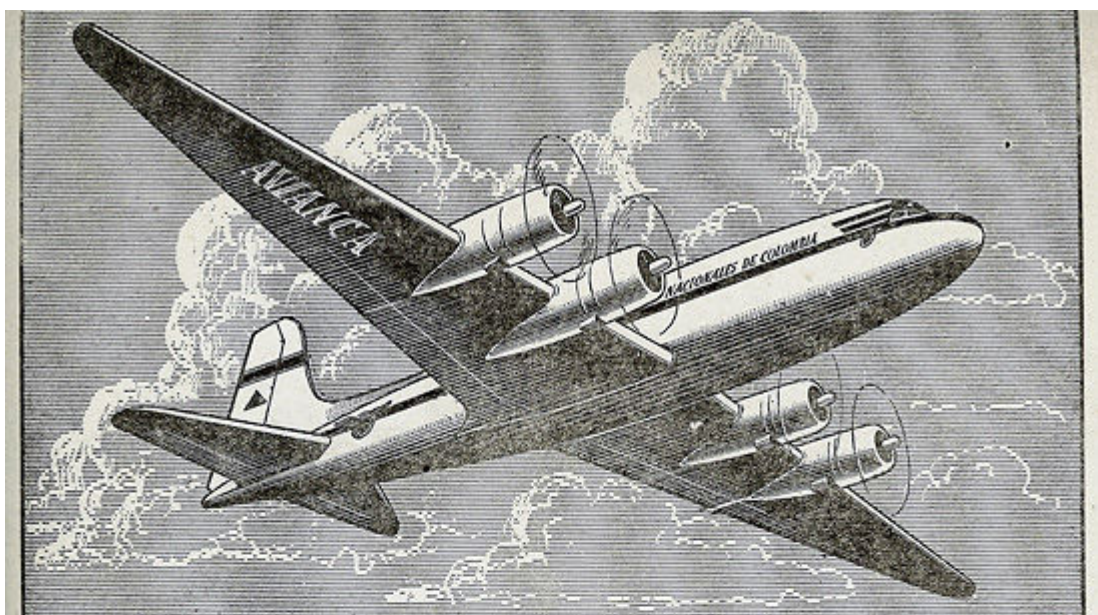
TETRAMOTORES DE LUJO EQUIPADOS TECNICAMENTE

RAPIDEZ, CUMPLIMIENTO, COMODIDAD Y ECONOMIA

TARIFAS	
B/quilla-Roma-B/quilla	\$ 2.470 M.C.
B/quilla.-Roma	
Unicamente	\$ 1.650 M.C.

AVIANCA

LA EMPRESA DE AVIACION MAS ANTIGUA DE AMERICA



AVIANCA

A la vanguardia de la aviación comercial colombiana por su experiencia, su personal, su equipo, sus instalaciones, sus servicios de mantenimiento y radio-comunicaciones, su organización y su extensa red aérea que llega hasta las más remotas regiones del país.

ALGO SOBRE LA AVIANCA

La AVIANCA invirtió en aeronaves, equipos de mantenimiento, equipos radiales y mejora y construcción de aeródromos en el año de 1946, la suma de \$ 6.341.390,13





In the photos above you will notice the Condor on the back of the Avianca DC-4 and Constellation. This was removed from Avianca's airplanes when they adopted the red paint scheme; however, the origin of the Condor comes from the "Colombian Coat of Arms" depicted above.

The Curtiss C-46

The Airplane History Has Forgotten

September 28, 2012

“Robert Novell’s Third Dimension Blog”



Good Morning---Another week of our lives has past and it's time to talk about airplanes. The Curtiss C-46 Commando is an airplane that was overshadowed by the DC-3 and has been largely forgotten; however, I have not forgotten and this week I want to reintroduce you to an airplane that made a lot of history and is still making money for commercial operators around the world.

The C-46 Commando – Enjoy.....

The Curtiss C-46 Commando

The Curtiss Commando began life as a design for a 36-seat commercial airliner with a pressurized cabin, designated the "CW-20", with development initiated by Curtiss in 1936. The CW-20 was intended to provide a larger, more capable competitor to the Douglas DC-3, which was then entering service. The CW-20 featured a roomy "Double Bubble" fuselage, with a cross-section in the form of two circle segments mated together, top, and bottom. This configuration provided large internal volume and the structural strength to support pressurization. The junction between the small segment and the larger top segment was faired over to improve aerodynamics. The CW-20 also featured a low wing with twin radial engines, twin tailfins, and retractable tailwheel landing gear -- the single-wheel

main gear retracting into the engine nacelles. The cockpit windscreen was flush with the fuselage contour, giving the aircraft a whale-like appearance.

Flight tests quickly showed that the twin-fin tail left much to be desired, and it was replaced by a conventional tail arrangement with a single tailfin. The modified aircraft, now known as the "CW-20A," was demonstrated to airlines, and there was some interest in the type. However, in September 1940 the US Army Air Corps (USAAC), implementing an increasingly frantic program to prepare for war, ordered 200 modified "CW-20Bs" with the military designation of "C-46". Production began at the Curtiss plant in Buffalo, New York, with the first "Commando" delivered to the US Army Air Forces (which had superseded the Air Corps in the meantime) on 12 July 1942. With a war on, Curtiss focused on military production, and commercial production was out of the question for the duration.

Adapting the CW-20 to military service as the C-46 Commando needed few changes. The first 25 aircraft, designated C-46, were built essentially to the original specifications. The Pratt & Whitney R-2800 engines were replaced by Wright Double Cyclones and plans to provide pressurization were abandoned, as well as a number of minor changes were incorporated.

The Commando initially went into service on the South Atlantic ferry route, and would participate as a glider tug in the Rhine crossings in March 1945. However, due to its long range, it was primarily used in the Pacific and China-Burma-India (CBI) theaters, becoming the primary cargo lifter for ferrying supplies from India to China over "the Hump", the Himalaya Mountains, after the Japanese shut down the Burma Road in 1943. Commandos of Colonel Edward H. Alexander's "India-China Wing" of the USAAF Air Transport Command flew from primitive airstrips in the Indian state of Assam, climbing with overload cargoes to clear ridges from 3.7 to 4.3 kilometers (12,000 to 14,000 feet) high, to land at Chunking and drop off their loads for USAAF General Claire Chennault's 14th Air Force and Nationalist Chinese forces.

The loss rate of the C-46 was high and it had a mixed reputation with aircrews. Partly the problem was the fact that environment was very harsh, operating conditions were difficult, and Japanese fighters were an occasional threat. However, stories still circulate that the C-46 also suffered from a large number of engineering and manufacturing faults, in particular a leaky hydraulic system. Crews were said to take a barrel of hydraulic fluid along on flights to make sure that the hydraulic systems were topped off before they were used. There was also

apparently a fuel leak problem that took a long time to work out, with aircraft being lost in midair explosions at a steady rate until it was.

It doesn't appear that the C-46 was an inherently bad aircraft, it was just rushed into service without the level of qualification that it would have been run through in peacetime, and it took a lot of work to get the bugs fixed. The aircraft's detractors called it the "Curtiss Calamity" and the "Leaky Tiki", though it was also more affectionately named "Dumbo", after the flying baby elephant in Walt Disney's 1941 animated movie.

The airlift from India to China, "*Flying the Hump*," was the real hour of glory for the Curtiss C-46 Commando. The following is from an article that I found on the web:



In Feb. 1942 President Roosevelt ordered General Arnold to open a supply line across the Himalayas in support of General Chiang Kai-Shek (and his air adviser Claire L. Chennault) at a time when the Japanese offensive was at its peak. Rangoon fell in March 1942 and this cut off the supply via the Burma Road. The initial 26 aircraft for this project were 10 ex-airline DC-3s and some C-53s. The flights were started in late 1942 by the China National Aviation Corporation (CNAC) and the USAAF. By December of that year some 62 DC-3s of various types were involved, but already 15 had been destroyed. Conditions were poor at the airfields serving the China airlift, in September 1942, e.g. fuel was still being pumped by hand from drums.

Chennault, a retired USAAC Colonel who had become special advisor to the Chinese Air Force in 1937, formed the American Volunteer Group (AVG) with 100 US-financed P-40Bs and began operations against the Japanese from bases at Kunming, the first successes recorded on 20 December 1941. In fact, this was the only air defense China had to offer at that time. The AVG ceased to exist on 30 June, 1942. The aircraft were taken over by the 23rd Fighter Group, developing into the China Air Task Force (under Chennault, recalled to active service as a General). Because the Japanese controlled the Chinese coast and the fall of Burma closed off the last remaining supply routes over the ground, all supplies (including aviation fuel!) had to be airlifted in. Existing numbers of aircraft had to be increased to be at all effective.

In early 1943 General Arnold ordered to build up strength to 112 C-47s and 12 C-87s (converted B-24s). Enlarging the effort, they encountered problems of pilot inexperience, weather personnel problems, problems in communications, engineering and maintenance, lack of radio aids and direction finders.... The airfields were not complete and monsoon rains (beginning in June and lasting over 5 months!) played havoc with the facilities. Colonel Alexander, CO of the India-China Wing declared the C-47 unsuitable and requested C-46s. By 15 April 1943, 30 C-46s were delivered, replacing an equal amount of C-47s. More were to follow.

The direct distance between the Assam bases and Kunming was only some 500 miles, but the route is the most rugged imaginable. Chabua, on the banks of the Bhramaputra River, is only 90 ft above sea level but the Valley Walls climb to 10.000 ft. in the Patkai range. A series of ridges rise to a height of 14.000 ft and over, while Kunming itself sits at 6.200 ft. elevation. The icing level is at about 12.000 ft. and the flying was mostly done on instruments in foul weather: constant cloud cover, frequent violent thunderstorms, and tricky wind currents over the mountains.... Men and machines were put through extremes here, pushing the limits!

The service ceiling of the C-46 stood at 16.000 ft., above which it is not completely stable. The Hump was flown at 20.000 or 22.000 ft. eastbound and 21.000 ft. westbound...! As the C-46 cannot climb at 500 ft. per minute, it was necessary to climb near the base to gain sufficient altitude for the crossing.

During the dry season (winter) there was the danger of attacks by the Japanese fighters, but the biggest enemy was the weather. Carburetor icing was encountered, but this was a relatively well understood phenomenon. But there was more... The engines were susceptible to vapor lock at altitude, but as long as fuel was fed from one tank, there was no problem. On attempting to change tanks at altitude, the low atmospheric pressure and the suction of the engine driven pump caused vaporization of the fuel in the line, leading to the engine stopping... The engine could usually be restarted at lower altitude, but over the mountains there was no room to maneuver. The solution proved to be an electrically driven fuel pump inside each tank.

The early C-46s (as flown by Eastern Airlines) were fitted with 3-bladed Hamilton propellers. Fairly early in production these were replaced by the 4-bladed Curtiss electrically operated props. An electric motor was used to alter the angle of the blades. With a little corrosion, the electric contact could be lost, resulting in the prop moving into fine pitch and the engine overspeeding. This was particularly

serious on takeoff from high altitude fields. Like Kunming. With gross weights above those initially intended by the designers....! The cumulative effect of the problems encountered was such that by November 1943, some 721 modifications had been ordered. The flow of new C-46s was stopped for a time while a modification program was put into effect. In 1942, when the airlift was first planned, a target of 7.500 tons per month was set, but this proved to be overoptimistic. This goal was not reached till October 1943. A typical payload for a flight consisted of 23 55-gallon steel drums of aviation fuel and 1 1/2 tons of bomb fuses. Other items carried included earth moving equipment aircraft engines and other spares. Little was carried out of China. From 8 February 1944, 25 C-46s were diverted from their original tasks and were seconded to supplement Troop Carrier Command aircraft for a few days of supply droppings in the Arakan region to help British troops to stem a northward Japanese advance; the 22.000 troops were down to two days supplies. Assignments like these happened quite often. Sometimes the C-46s played their part in evacuations. While the Hump operation progressed, statistics showed impressive figures: in July 1944 19.050 tons was carried, in December 31.935 tons, by 250 aircraft (daily average availability) in 7.612 trips.... Kunming could not handle all this and Luliang (60 miles East) became an India-China Division terminal in August 1944.

The total number of aircraft assigned to the Hump continued to rise to a maximum of 332 in July 1945, during which 71.042 tons were carried. At present day this would take 536 sorties by C-5 Galaxies...! Personnel involved peaked at 22.359. By 1945 the tide of war changed and other routes became available; thus the C-54 could now could be put to use (it lacked the ceiling of the C-46, but on the routes now available it could carry 1.7 times the payload of the C-46).

The Hump was officially closed on 30 November 1945.

[Source Document](#)

Another interesting article that I found on “*Flying the Hump*” was located on CNACs web page and is a reprint of an article from The Wall Street Journal on Saturday, February 25, 2012. You may have difficulty reading this but if you click on the image itself, it will take you to the actual web location.

Help Came Over the Himalayas

China's Wings

By Gregory Crouch
Bantam, 498 pages, \$30

BY MICHAEL J. YBARRA

IN 1931, William Langhorne Bond stepped ashore in Shanghai to take on a new job as operations manager of the China National Aviation Corp., or CNAC. The fledgling airline was a joint venture between the Chinese government, such as it was in the 1930s, and the U.S. Curtiss-Wright Corp. Bond was 37, a refugee from the construction industry. He was new to aviation and looking for a bit of adventure. He found it.

For the better part of the next two decades, Bond's life would be intertwined with the airline—and with China, which was soon attacked by Japan and plunged into World War II, followed by civil war and communist victory. Bond's adventures and China's ordeal are at the heart of the exciting story told by Gregory Crouch in "China's Wings."

Mr. Crouch is a West Point graduate and former infantry platoon commander whose previous book, "Enduring Patagonia" (2008), chronicled his obsession with climbing difficult peaks in South America. "Enduring Patagonia" was essentially a memoir; "China's Wings" is a historical narrative, displaying Mr. Crouch's talents as a researcher, portraitist and chronicler.

When Bond died in 1985, he was working on a memoir that was eventually published as "Wings for an Embattled China." Mr. Crouch, who never met Bond, draws on that work as well as letters and interviews to re-create the world in which Bond lived. That world was inhabited by a host of interesting characters, including Moon Fun Chin, who started flying for CNAC in 1933 and stayed until 1945. Mr. Moon—who lost his entire household as the Japanese invaded Shanghai and then Hong Kong—turns 99 this year.

In the 1930s, China was a country in

name only. The Nationalist government nominally ruled the Middle Kingdom to the east, while warlords and communists held sway in the interior. Aviation promised to help unite the land. A DC-2, for example, could fly from Chengtu to Chungking, at the center of the country, in two hours instead of two weeks.

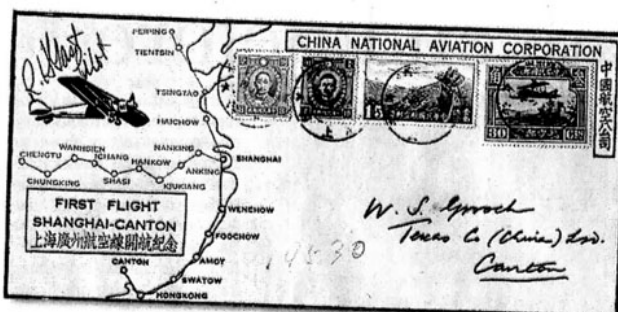
In March 1933, Curtiss-Wright's stake in CNAC was taken over by Pan American World Airways, an aviation powerhouse eager to own a part of what seemed like a promising business. The relationship got off to a rocky start—largely because of pilot error. "In six

Wartime flying was dangerous. In 1938 the Japanese forced down a CNAC plane (not flown by Bond) and strafed the survivors—one of many spine-chilling scenes vividly recounted by Mr. Crouch. After the Japanese overran coastal China, Bond and CNAC retreated to the country's rugged hinterland, though Japanese bombing raids could sometimes still reach them. When the Japanese occupied Burma in 1942, the Nationalist government's last overland supply line was cut off.

Before the Japanese attack on Pearl Harbor, a quasi-private air force called

season took the pilots, one of whom had a broken ankle and had to be carried by villagers, to an American military unit—47 days after ditching their plane.

CNAC's supply efforts across the mountains were "one of the greatest aviation accomplishments of all time," Mr. Crouch writes. "The Hump was the world's first strategic airlift." Yet the airlift's rationale was to keep the Chinese government afloat so it could fight the Japanese—something that Chiang Kai-shek's Nationalist government was loath to do. It calculated that ending the war with Japan would just mean a new one



PAR AVION Airmail carried on China National Aviation Corp.'s first flight.

months," Mr. Crouch writes, "Pan Am had wrecked two airplanes, killed four, injured nine, and its vaunted air service was at a complete standstill."

It fell largely to Bond to whip operations into shape, which he did—just in time for Japan's aggression. In 1937, Pan Am recalled Bond from China and offered him a plum job elsewhere. He declined and, at no little personal peril, returned to flying for the China National Aviation Corp. Dealings with Chinese officialdom were often tense, in part because the Middle Kingdom's bureaucrats were suspicious of the Americans and often treated them as lackeys rather than partners. On one occasion Bond went to a meeting with a Colt .45 hidden in a shoulder holster, just in case.

the American Volunteer Group, or Flying Tigers, had been helping China with its air defense against Japan. The unit was disbanded when the U.S. officially entered the war. Five of its pilots were recruited into the U.S. Army Air Corps. CNAC got 16. Both entities flew supplies to Chungking by traveling over the dangerous Himalayas, the so-called Hump. Despite "the hardest flying in the world," Mr. Crouch says, "CNAC's freight kept making it to China in per-plane quantities that dwarfed Army deliveries."

CNAC lost a number of planes in the Himalayas. Two pilots thought to have died in a crash in early April 1943 turned up, weeks later, in a remote village in India. A British survey unit stumbled upon them smoking opium with the locals. An epic trek during monsoon

In the 1930s, China was a country in name only. A new airline promised to unite this enormous land.

with Mao's forces. Washington sent missions to cajole the Nationalist to fight; the Chinese promised to do so but rarely did.

Stirring though the airlift was for the bravery it involved, ultimately the effort diverted resources from the Allied effort in Europe while doing little to contribute to the battle against Japan. Mr. Crouch acknowledges the futility even as he memorializes CNAC's daring pilots, such as Pete Goutiere, who flew over the Hump 650 times.

By 1947, CNAC was flying from Shanghai to San Francisco in a mere 40 hours. Two years later the communists were running the country. Pan Am sold its stake in the company to the government, and CNAC was dissolved. For his part, William Langhorne Bond retired from Pan Am not long afterward and eventually became a farmer in Virginia. "Bond always felt," Mr. Crouch writes, "that he'd held the most interesting, exciting, and challenging job in the entire history of commercial aviation."

Mr. Ybarra is writing a book about the 1968 Fun Hog Expedition to Patagonia.

The information on the web is not as complete as it should be, and there are many contradictions to be found. The web sites that I used are listed below, and if time permits, do some research on your own and let's see if we can bring history's forgotten airplane back in to the mainstream.

[Web site One](#) ---- [Web Site Two](#) ---- [Web Site Three](#)

Have a good weekend and I hope to see you back here next Friday when we will be talking about..... Take care, fly safe, and be safe.

Robert Novell

September 28, 2012

Wiley Hardeman Post

November 3, 2012

“Robert Novell’s Third Dimension Blog”



Good Morning - Today is all about Wiley Post and I think you will enjoy my story about an aviation pioneer who accomplished more in seven years than most do in a life time. So, let’s begin with a few facts about his early life, followed by a few words from his brother, and then I will wrap it up with a few more facts, and a link to a book titled, “Wiley Post, His Winnie Mae, and the World’s First Pressure Suit,” that you can download and read at your leisure.

"Wiley Hardeman Post"

Wiley Post was born near Grand Saline, Texas in 1898. His parents were farmers and in 1903 they left Texas and headed for Oklahoma. Wiley was never a fan of being a farmer and at an early age decided his destiny lay beyond the plowed fields of his family’s farm. In 1917 Wiley began spending time around the military airfield at Fort Sill, which is near Lawton, Oklahoma, while working with the Chickasha and Lawton Construction Company, and he decided that he was going

to find a way into the flight training program. Wiley's three older brothers had already joined the Army so he enrolled into the Students Army Training Corp. This program taught Wiley about modern communications, which would serve him well on his round the world flights, but before he could finish the course the Armistice was signed, ending WWI, and he was demobilized and returned to civilian life. Wiley opted not to return to the family farm and instead began work in the oil fields of Oklahoma, which is where he was introduced to Barnstorming.

The oil fields of Oklahoma were booming in the 1920s and this attracted the Barnstormers to the area. Wiley went to see, and meet, the members of the Flying Circus and at the conclusion of their performance he paid one of the pilots \$25.00 to take him on a flight and demonstrate all of the acrobatic maneuvers possible during the short flight. Wiley told the pilot he wanted to feel all of the exhilaration of flight because he too wanted to be a pilot. At the conclusion of the flight Wiley was quoted as saying, "Pilots do not have supernatural powers and the lack of exhilaration that I felt during the flight was a major disappointment to me;" however, Wiley still knew he was destined to fly.

Wiley's next encounter with a Flying Circus was quite different. The Texas Top Notch Flyers came to a town close by Wiley's work and when he introduced himself to several of the members, he was told they were looking for a parachute jumper. It turns out that the regular jumper had been injured so Wiley said he would take his place; however, what Wiley didn't tell them was he had never jumped before. Turns out Wiley, was a natural at this, and took over the injured man's job. Wiley stayed with the group for a few months but soon decided that he could make more money doing this alone. Over the next two years Wiley made almost one hundred jumps, began taking flying lessons, and made his first solo flight.

Wiley was still working the oil fields in 1926 and while directing work on a rig an iron chip from a bolt, struck by a roughneck's sledgehammer, lodged in his left eye. When his Doctor found that infection had set in, and was beginning to affect his right eye, Wiley opted to have his left eye removed in order to save his right. The loss of his eye was a severe blow and through the stressful depressing days of treatment, and convalescence, he could have given up his quest out of self-pity but he didn't. Wiley had three factors working in his favor: his inherent genius for aeronautics, his compelling urge to fly, and his steel-willed determination to accomplish his established objective. So, how did he turn this negative into a positive? Wiley was awarded \$1800.00 in workers compensation benefits and in the Spring of 1927 he bought his first airplane and began his Barnstorming career.

Fate enabled him to trade an eye for an airplane but the other eye was on his future and he knew what he wanted.

There were many ups and downs over the next few years but Wiley moved steadily ahead. He was married, continued to fly the barnstorming circuit, and in 1927 as the money from barnstorming began to dry up he landed himself a job as a personal pilot for two wealthy Oklahoma oil men. Wiley flew a number of airplanes for the oilman of Oklahoma but the Lockheed Vega was the airplane he made famous, and the rest of the story is history you should already know.

At this point I think the best way to recap Wiley's life is to let Wiley's Brother tell you of his brother's accomplishments:

“Gordon Post on Wiley Post”

Many rewarding, and some unrewarding, experiences evolve from being the brother of a world-renowned figure. All close relations are extremely proud of the accomplishments and contributions of near and dear kin. Yet, none desire to bask in reflected glory.

Wiley Post, in a short span of seven years, rose from a laborer in the Oklahoma oil fields to a person of world prominence. He was acclaimed world hero by Presidents, the man on the street, and all who knew of his daring achievements in the field of aeronautical science.

Wiley was a barnstormer, speed flier, test pilot, globe conqueror, and a pioneer of pressurized flight. He was twenty years ahead of the field in his thinking with regard to advancement of aviation, and he envisioned the development of air transportation far beyond any dreams of his contemporaries.

At an early age he flew into eternity, accompanied by his close friend Will Rogers, who was known throughout the world as a great humanitarian, the sage of Oklahoma, world citizen, and one who had humble regard for the wellbeing of his fellow man.

It is difficult for me to think of Wiley as a researcher, a pioneer in the field of science, and an explorer in the realm of space. Rather, I remember him as a companion on hot summer nights when we fished and slept on the banks of the Washita River; during the golden-leafed autumn days when we stalked white-tailed

deer in the Big Bend country of Texas; and on the windy wintry days when we hunted ducks on Lake Kickapoo.

This is the way I best remember him, for he was my brother

Gordon Post

Before I wrap it up, with the link to the book I would like you to read, I want to talk about the first pressure suit in aviation.



Wiley was seeking to break high-altitude and speed records. Wiley, as well as others, knew that protection against low pressure was essential. Post's solution was a suit that could be pressurized by his airplane engine's supercharger.

First attempts at building a pressure suit failed since the suit became rigid and immobile when pressurized. Post discovered he couldn't move inside the inflated suit, much less work airplane controls. A later version succeeded with the suit constructed already in a sitting position. This allowed Wiley to place his hands on the airplane controls and his feet on the rudder bars. Moving his arms and legs was difficult, but not impossible. To provide visibility, a viewing port was part of the rigid helmet placed over Post's head.

So, for the record, let's list a few of his many accomplishments:

1. First aviator to fly around the world solo.
2. Numerous speed records.

3. First aviator to discover the jet stream and harness its winds for his flights.
4. First aviator to forecast coast-to-coast flights using high altitude winds.
5. First aviator to forecast supersonic flight.
6. First aviator to study biorhythm cycles and brings the subject to the table for the scientific community.
7. First aviator to use a pressure suit for high altitude flight.

Wiley was man of distinction, an aviation pioneer, and a man of science. I hope you enjoyed this week's article and I hope that you will take some time to review the book which is linked below. Have a good weekend, keep your friends and family close, and fly safe/be safe.

Robert Novell

November 3, 2012

Otto and the Wright Brothers

November 30, 2012

“Robert Novell’s Third Dimension Blog”



Good Morning---I hope the week was not too taxing on your soul and your spirit is ready for the challenge of the new day and the weekend. Today I am going to introduce you to the man who gave the Wright Brothers the necessary knowledge, and inspiration, to accomplish their goal of powered flight. Wilbur Wright described this man as having been the most important influence on flying with his work on aerodynamics, and the theory of flight, prior to current day accomplishments by others, and further stated the following in a tribute to this aviation pioneer:

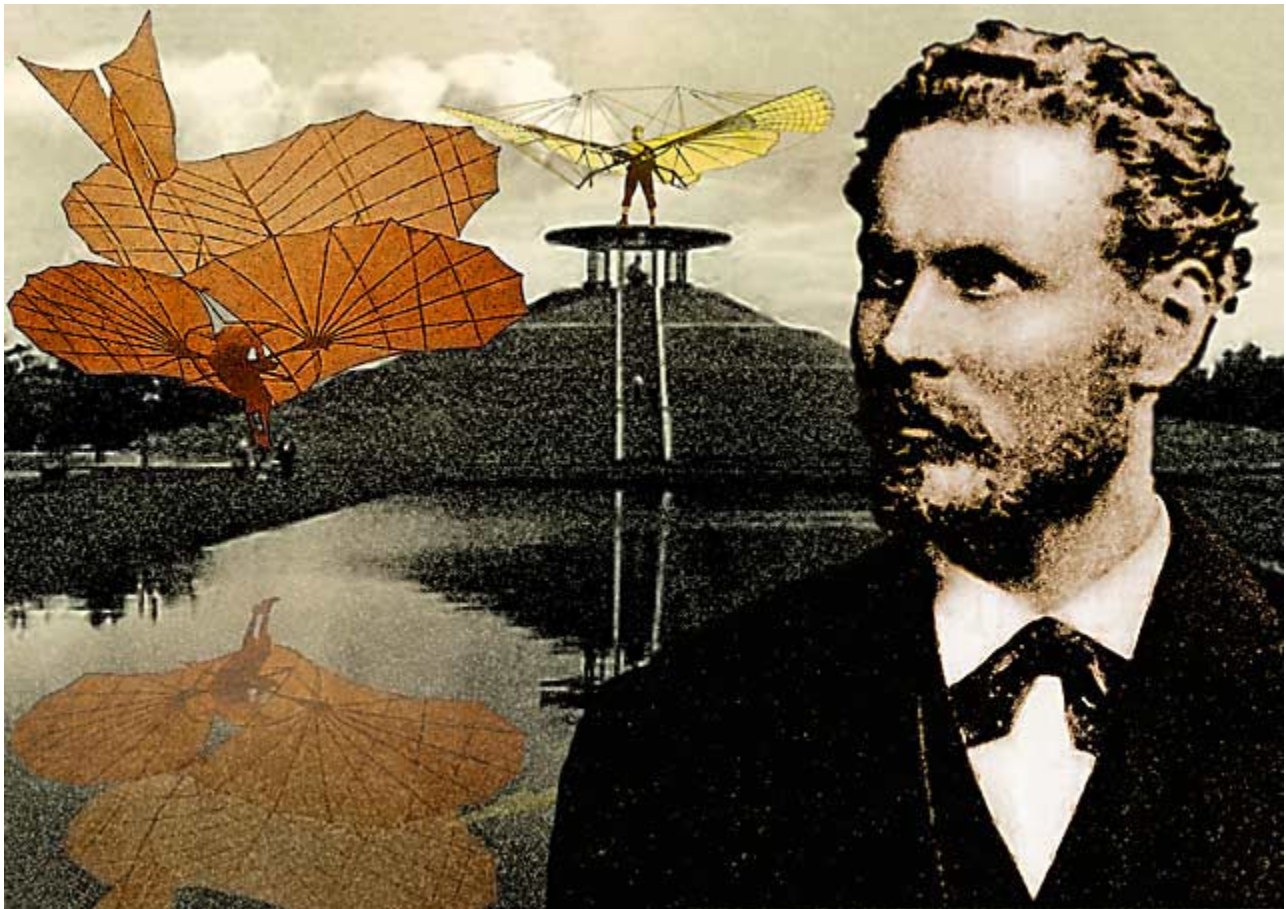
As a missionary he was wonderful. He presented the cause of human flight to his readers so earnestly, so attractively, and so convincingly that it was difficult for anyone to resist the temptation to make an attempt at it himself, ... he was without question the greatest of the precursors, and the world owes to him a great debt.

"Wilbur Wright"

The man Wilbur was paying tribute to was Otto Lilienthal, a German Engineer/Aviator, whose life, and accomplishments, will be our topic today.

Enjoy.....

Otto Lilienthal



Otto Lilienthal was born in Anklam, Prussia on May 23, 1848. Together with his brother, Gustav, Lilienthal developed an interest in flying, and at any early age the two boys began to observe the movements of birds to try to understand the mechanisms of flight. Otto became a professional design engineer, but aerospace studies remained a hobby and a passion. He spent a year in an on-the-job training program at the Berlin Trade School, then three years at the Royal Technical Academy in Berlin. While still an engineering student in 1867, Lilienthal began to experiment with aerodynamics and human flight.

Lilienthal subscribed to glider-based theories of flight, so he focused his attention on the shape of the wings in developing his designs for flying machines. His early experiments in 1874 with the forces of air involved kites and other apparatuses of his own design. In the period from 1891 to 1896, Lilienthal succeeded with over 2,000 gliding flights with many different glider designs, including flapping wing

models. His total of five hours flying time was probably the most important in aviation history.

In 1896, Lilienthal lectured at the Trade Exhibition in Berlin on June 16. This was his last known lecture. On August 10, 1896 he died in a Berlin hospital from injuries following a crash from an altitude of 50 feet (15.2 meters) on the previous day. The accident occurred when a thermal blew him off balance. His glider stalled and his attempted recovery effort was unsuccessful. The resulting impact from the fall caused a fracture to his spine.

At the time of his death, Lilienthal had begun to explore the issues of wing stroke. His belief that learning to glide was the natural forerunner to learning to fly was embodied in the opening paragraph of his article *"Our Teachers in Sailing Flight,"* published in *Prometheus*. He wrote, *"All perplexities concerning light motors, and speculations on the amount of power required for flying, are relegated to the background by the fact that the power of the wind alone is sufficient to affect any kind of independent flight."*

Lilienthal's notion "from jump to flight" is widely regarded as the inspiration for aviation pioneers Orville and Wilbur Wright. In an article in *Century* in September 1908, the Wright Brothers wrote: "It was not until the news of the sad death of Lilienthal reached America in the summer of 1896 that we gave more than passing attention to the subject of flying. We then studied several pamphlets published by the Smithsonian Institute, especially articles by Lilienthal. The Wrights also revealed that the wing surface shape of their 1901 machine was modeled after a Lilienthal design.

Throughout his experiments and his writings, Lilienthal upheld that flight was not to be realized suddenly by the invention of one single machine. He fostered the notion that a long process of study, and a thorough examination of the axioms of aerodynamics, was imperative to the successful invention of a progressive series of viable flying machines with each machine proving more capable than its predecessor.

Two of Lilienthal's original flying machines survived into the twenty-first century. One of his "No - 11" gliders is on exhibit at the National Space and Air Museum at the Smithsonian Institute. Another of his planes, a "little biplane," also survived. Lilienthal's first flying apparatus, however, was lost; only replicas remain. In the 1980s the Otto Lilienthal Museum, in his hometown of Anklam, opened in honor of the 100th anniversary of his first flights.



Fig.
Some of Lilienthal's later designs show multiple
leather-like wing tips.
These were intended to flap, reproducing the
action revealed in the high-speed photography
of Morry and Maybridge.

Lilienthal controlled his gliders by shifting
his weight, as in a modern hang-glider.

An eyewitness wrote:
"The sight of a man supported by large white
wings, moving over you at a great height with
the speed of a racehorse, while the wind makes
a strange droning noise in the gaps, makes
an impression one can never forget."

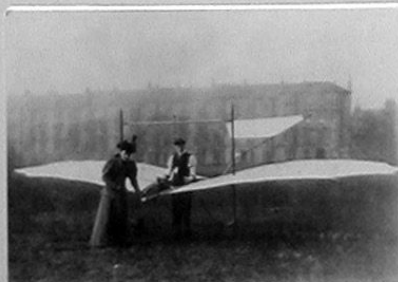
OTTO LILIENTHAL 1848-1896

Lilienthal was the greatest figure in nineteenth century aeronautics. He was a professional engineer who manufactured steam boilers. However, his passion was flight and he undertook a systematic study of the lifting power of wing surfaces, the best form of curvature and the effect of different wing angles on stability.

Unlike Langley, Ader and Maxim he did not believe that a flying machine could be designed that would fly safely on its first day out. More than anyone before he realised that learning to fly was as much part of the problem as design and construction. Photographs of Lilienthal gliding were reproduced in journals around the world, influencing all serious experimenters including the Wright brothers.



Otto Lilienthal
"Sacrifice have to be made," Lilienthal
often said of aviation. His grave in
Berlin bears that inscription.



The engineer Percy Pilcher with his sister Ella
and the Hawk glider, Glasgow, 1896. Pilcher
was Lilienthal's most serious European disciple.

Lilienthal made more than two thousand glides from natural slopes and erected an artificial hill outside Berlin to allow more convenient testing and practice. Curiously, he remained convinced of the value of flapping flight in spite of his great success with fixed wing gliders.

Lilienthal died in a flying accident in 1896. A gust stalled his machine and he was unable to recover.

The brief description I have provided of the life of Otto Lilienthal is a blending of facts from numerous sources but that which is important is that this man is also responsible for the Wright's success in the same way [Charlie Taylor](#) was

responsible; however, there is one more person in the equation of success for the Wrights. His name is Octave Chanute.

After the news of Lilienthal's death reached the US, the Wright Brothers contacted the American authority of knowledge on worldwide flight research. This authority was Octave Chanute who was the publisher of the section "*Aeronautics*" in the "*American Engineer and Railroad Journal*." Chanute had exchanged correspondence with Lilienthal for several years, and was very familiar with all of his research. In Chanute's book, [*Progress in Flying Machines*](#), Lilienthal's latest article was included as an appendix.

Chanute also translated many parts of Lilienthal's books on aerodynamics and as a result he became the scientific link between Lilienthal and early aviation development in the United States which, of course, included the Wright Brothers. Now, you know the rest of the story.....

Have a good weekend, enjoy the video below, which will give you an overview of Otto Lilienthal's life, and don't forget to stop back by next Friday when we will talk about a man who may have beaten the Wright Brothers in the quest to conquer motorized flight.

Robert Novell

November 30, 2012

Thank You

I hope everyone had a productive year and 2012 will be the same. There are many more articles available from 2011 which I did not include so please visit the web site – www.robertnovell.com – and review the remaining contents archived under 2011 or use the search engine to search for a specific article. Thanks again for letting me be part of your year, take care, be safe/fly safe, and protect your profession

Robert Novell
2012