Be A Part of Something BIG!

BOEING C-97 "Angel of Deliverance"
The World's Only Flying C-97!
It is a privilege to report the Foundation’s expansion into greater opportunities to fulfill our mission of history, education, and remembrance about the great Berlin Airlift of 1948 and 1949. We made great progress in the waning months of 2017 when on November 7th, after 17 years of struggle and perseverance, we brought to life the world’s only flyable Boeing C-97 by departing Floyd Bennett Field, New York and flying to our home base at Toms River, New Jersey. Then in the latter part of December, the Military Technology Museum of New Jersey gave the Foundation permission to create a Berlin Airlift display/exhibit inside their facility located at Camp Evans, Wall Township, New Jersey. Both of these additional venues will require an increase of involvement and support to use these assets to our advantage for our educational purposes and to preserve the memory of the Berlin Airlift. There was only one Boeing C-97 used in the Berlin Airlift, having arrived in Germany on May 2nd, 1949. It flew its first mission on May 4th, 1949. It could carry twice the payload of the C-54 and had the Berlin Airlift continued into the 1950’s, the US Air Force was going to replace all 330 C-54’s with 100 Boeing C-97’s. It is only appropriate that this great transport be operated by an organization associated with the Berlin Airlift. This great transport also became the first air refueling tanker built from the ground up solely for the purpose as an air to air refueling tanker. Named the “Angel of Deliverance”, our C-97 carries an angel on the left side near the forward boarding door. The name of the angel is “Hope”. She is holding a torch in her right hand that is a symbol of her role as an air to air tanker delivering energy to the thousands of thirsty airplanes she delivered fuel to. In her left hand she is holding a basket of food that is a symbol of the humanitarian role carrying needed supplies all over the world as a cargo transport including the Berlin Airlift. We as an organization should be proud to keep this very rare, one of a kind, historic transport flying on its mission of history, education, and remembrance.

The privilege to create an indoor display in the Military Technology Museum of New Jersey will give us the opportunity to place on public display many of the Berlin Airlift artifacts we have collected over the past 23 years. A lot of these artifacts were donated by Berlin Airlift veterans which we have displayed inside our Douglas C-54 and plan to also install in our Boeing C-97. Due to the amount of artifacts we have, we still are able to create a very nice display/exhibit making good educational use of these artifacts for public viewing. This type of activity will give us experience in creating an indoor display. Read more about this display/exhibit and how it began elsewhere in this newsletter report.

Beginning a new era with greater responsibilities will also require greater support. We have reached this point in our growth thanks to everyone who has contributed over the past 23 years to make the Berlin Airlift Historical Foundation a success. We hope each and every one of you will continue to help with your kind and patriotic contributions. Please visit our web site at www.spiritoffreedom.org. The Berlin Airlift Historical Foundation is a charity meeting the IRS requirements as a 501(c)(3) tax exempt organization, making your contributions tax deductible.
BOEING C-97G DEBUT SCHEDULED FOR JUNE 2018
AT READING, PA

The big annual World War II Weekend event is scheduled for June 1st, 2nd, and 3rd and we are happy to announce both the C-97 and C-54 are invited to participate. This popular event takes place at the Reading Carl Spaatz Regional Airport in Reading, Pennsylvania and is sponsored by the Mid Atlantic Air Museum. Our C-97 was flown to Reading on November 7th, 2017, and will remain there until after the June event. The reason for this was to insure the C-97 would be there for its public debut and not be stranded at some other airport due to possible mechanical issues. There is the possibility some C-97 crew training flights may be scheduled in April or May, however, such flights would be local flights only and depart and return to the Reading airport. For the past several years our Douglas C-54 has opened this event by taxiing to show center with several re-enactors on board being President FDR, General Douglas MacArthur, Ensign JFK, and Admiral Nimitz. Upon arrival, the boarding stairs are rolled into position and following the playing of our National Anthem, the re-enactors each take turns giving a short report on the war effort from the top of the boarding stairs before deplaning into waiting vintage cars with military escort. It's fun and exciting to watch. As for the C-97, we will be installing temporary Berlin Airlift and Cold War displays inside the fuselage and hope to demonstrate loading and off loading a vehicle or two using the loading ramp. This certainly will draw a lot of attention. The Mid Atlantic Air Museum has done a great job over the past 20 years with this event. There are a lot of World war II aircraft as well as many military vehicles of all kinds plus military re-enactors representing the US, Germany, Japan, and Great Britain. To learn more about this very rare and fun weekend, go to the Mid Atlantic Air Museum web site at www.maam.org. Come out and see our beautiful Boeing C-97G, the "Angel of Deliverance". It is our understanding that there will be one of the two flying B-29's there as well, This will be a history making event where these great Boeing four engine propeller driven aircraft can be seen together in one location. Bring your camera.

Show your support for the BAHF and the C-97 with this great gear!

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https://teespring.com/stores/bahf-store
C-97 PROJECT IN A HOLDING PATTERN:
IMPORTANT TO READ

It cannot be overstated what a difficult undertaking it has been over the past 17 years to bring life to our big and beautiful Boeing C-97G, the "Angel of Deliverance". If it was easy, everyone would be doing it. But it was not easy and as a result we as an organization can be proud and hold our heads high having accomplished this impossible undertaking. It was a massive team effort over many years. There still remains a lot to be done before we can begin flying our C-97 on a routine basis like we do our Douglas C-54. We separated the operational requirements into two phases. 

**Phase One was fly the C-97 out of Floyd Bennett Field, New York where it was parked on May 10th, 2002.**

It was extremely important this be done in a urgent manner to move the project forward. Due to not having the use of the hangar because of the damage caused by Hurricane Sandy 5 years ago, the project had to be completed outside in a make shift work area with all kinds of obstacles and hardships, not to mention the time and expense it takes to make the drive to New York. Having flown our C-97 out of New York on November 7, 2017, **Phase One has been accomplished.** There remains one major task that can’t be overlooked and that is the removal of all of our maintenance support equipment from Floyd Bennett Field. This, too, is a massive and labor intensive undertaking. I'm happy to report this has been going very well and we may possibly have the entire job completed by mid-May. Now we begin Phase Two.

**Phase Two is the operational learning phase to gain the operational experience necessary to safely operate the Boeing C-97.** This will include the selection of qualified flight crewmembers, the installation of some on board educational displays and exhibits, changes of procedures we learned from Phase One, the installation of an updated intercom system for the crew, having the airplane cleaned and detailed for public display, maintenance discrepancies corrected found in Phase One, and fly some local training flights for operational experience. These flights will be accomplished from Reading, Pennsylvania where the C-97 is now parked. **Of course to make all of this possible, it will take funding to be able to meet the goals of Phase Two.** Due to the heavy workloads and demands to prepare the C-97 for its departure from New York, which took years to complete, we have been unable to find the time to formulate a funding plan for the Phase Two operation. We are just now announcing such a plan outlined in this newsletter/report. Please take the time to read the page dedicated to the new funding program for the organization. I've often stated we have made a good team over the past 23 years and I truly feel the best is yet to come as we continue to grow and improve our mission of history, education, and remembrance about the great Berlin Airlift of 1948 and 1949. **Please help support the Phase Two operation of our Boeing C-97G, the "Angel of Deliverance".**
WE NEED A HOME FOR OUR TRANSPORTS

For many years we had a great relationship with the NPS at Floyd Bennett Field where we had an agreement for educational use of our transports for their In Park Interpretive Program in exchange for hangar space for both the C-54 and the C-97. Due to damage to the hangar caused by Hurricane Sandy 5 years ago, we had to vacate the hangar. Returning to Floyd Bennett Field for the winter with the C-54 after its last event each December was curtailed and ever since we have been parking the C-54 in North Carolina for the winter as we continue our search for use of a hangar we can call home. The C-54 is now parked at the Smith Reynolds Airport in Winston-Salem, NC where the Airport Commission of Forsyth County has most graciously agreed to let us park there while we perform a # 3 Service Inspection. This is our 3rd winter at the Smith Reynolds Airport doing this. We enjoy very much performing the inspection there, the real problem is the 10 hour car ride each way to make it work. As for the C-97, after our departure from New York on November 7, 2017, the C-97 was flown to Reading, Pennsylvania where it is now parked. It too, will require a Service Inspection before it flies again. While the inspection on the C-97 will not be a major inspection, the drive each way takes about 3 hours and requires us to bring additional equipment to perform the inspection. It has been very difficult to perform inspections and maintenance without a permanent hangar to work from out of the elements. It has been like living out of a suitcase for the past few years being unable to return to the hangar at Floyd Bennett Field where we had the privilege of using the hangar for nearly 20 years. Meanwhile the search goes on for a hangar large enough to hold both aircraft with the future plans and growth of the organization for an additional two more aircraft, a Douglas C-118 and a Douglas C-47. The obvious solution is to build our own complex which of course the price tag would run into the millions of dollars. Read the article "Planning for the Future" elsewhere in this report. Meanwhile, the search goes on and hopefully the right combination will present itself where the use of a hangar will become available. An ideal location we have been monitoring for the past 3 years is Hagerstown, Maryland. The former Fairchild Aircraft Factory complex located at the Hagerstown Regional Airport remains empty but is tied up with litigation. The answers to all of our needs are right there.

C-54 PROPELLERS DUE 5 YEAR CORROSION INSPECTION

Every 5 years the Hamilton Standard model 23E50 propellers on the C-54 must be removed and sent to a propeller shop where each blade is carefully inspected for corrosion in compliance with a mandatory FAA Airworthiness Directive. In order to not overburden our maintenance schedule, we arranged to stagger the inspection by having the outboard propellers come due one year ahead of the inboard propellers. On January 26, 2018, our maintenance team consisting of Scott Szuhay of Pittsburgh, Pa, Jim Reuger of Wauseon, Ohio, Tim Chopp of Toms River, NJ, and Eddie Ide of Hickory, NC, removed the outboard propellers, disassembled them, and prepared them for transport to H&S Propellers of White Lake, Michigan to have the inspection performed. They will be driven to H&S Propellers by Tim Chopp the week of February 4th. They should be ready for installation by early March. The following year the remaining two inboard propellers will be due the same inspection and will have to be removed as well. The cost for the inspection will be several thousand dollars. We can always use any generous financial support to help defray the cost of this inspection. We are blessed with the fact this Airworthiness Directive does not apply to our Boeing C-97 propellers model 34G60. The reason for this is the C-97 propellers each has their own oil reservoir supply for their operation while the C-54 uses engine oil for their operation.
TILWELL PETROLEUM TO THE RESCUE FOR THE C-97

During the last 15 months our C-97 was at Floyd Bennett Field, Brooklyn, New York, the time came when aviation gasoline would be needed for engine tests and especially for the departure of the C-97. You must realize Floyd Bennett Field is a closed facility with no support what so ever for aircraft fuel of any kind. In today's world of regulations and security, trying to solve the problem on how to get 2200 gallons of aviation gasoline loaded into the C-97 while parked at a National Park in Brooklyn, New York became a real challenge. After contacting 34 companies and vendors to buy and deliver the fuel, no one was able to meet the requirements for permits, truck specifications, delivery specifications for over wing fueling, and numerous other requirements when carrying hazardous fluids like 100 LL aviation gasoline. What seemed to be a simple job soon became a major problem that might not be able to be solved at all. That's when we had the good fortune to cross paths with Tony Cardwell and Tilwell Petroleum LLC of Westerly, Rhode Island. This outstanding company solves petroleum related problems all over the world. Within a few weeks, Tony Cardwell and his expertise was able to put together the right combination and had 2200 gallons of fuel delivered to the C-97. Thanks to Tilwell Petroleum LLC and Tony Cardwell, we were able to perform the necessary engine checks in preparation for the departure and have enough fuel for the departure on November 7th, 2017. We salute Tilwell Petroleum LLC, an outstanding and patriotic company. Check out Tilwell Petroleum LLC on the web at www.tilwellpetroleum.com

**FUELING FACTS**

The KC-97 was capable of carrying over 9,000 gallons of fuel depending on its configuration. The KC-97L had an extra jet engine mounted under both wings which gave it the added speed required for flight and takeoff. This enabled it to refuel jet bombers without loboganning. The KC-97 carried both AVGAS and jet fuel. The AVGAS was used to power its radial Piston engines while the jet fuel was carried to power its two jet engines and to be off loaded to its receivers. Our C-97 started out as a KC-97G with the additional underwing tanks, but was converted to a KC-97L where these tanks were replaced by J47 jet engines.
Now that we’ve gotten the C-97 airborne and out of Brooklyn, I’d like to take the time to talk about our time at Floyd Bennett Field. Way back in 1996, the Foundation entered into an agreement with the National Park Service at Floyd Bennett Field. The Foundation would be allowed to use their facilities in the winter as part of the In-Park Interpretive Program and the Park Service could use the C-54 as part of their Educational Program.

Back in those days, this activity took place in what was known as the Blue Nose Hangar, which was situated between the Ryan Center (Administration Building) and the Hangars that are now the Aviator Sports Complex. After landing, we would have to ramp the landing gear wheels over the curbs in front of the hangar and in between the light stanchions. After the first few years, this became easier to do.

We spent several winters in the Blue Nose, the most important of which was 1997-98, where the C-54 underwent major preparations for our European Tour. We departed Floyd Bennett for Europe twenty years ago on May 5, 1998.

In 2000, these operations were moved to Hangar B, a much larger hangar on the Sheepshead Bay end of the field. Luckily, we didn't have any curbs or obstacles to overcome here. It has hundreds of windows and the natural lighting is great here. Also, there was plenty of room to store many of our tools and equipment necessary to carry out the required inspections on the airplane. It was such a blessing to be inside. We once did a double engine change on the C-54 in the dead of winter. The hangar wasn't heated, but the sunlight blazing in usually made the temperature bearable.

In May 2002, we added the C-97 to the agreement and it began its long residency at Hangar B as well. Knowing that it was safe and under cover there gave us peace of mind while we did the inspections and searched for the proper equipment for it.

During all this, the Park Rangers would be conducting tours of the field and the airplanes. It was always a pleasure to talk to the public about what we were doing and over the years we’ve gotten to know many of the Rangers pretty well. There have been many that have become and still are friends, such as Pete McCarthy, Todd Rosenhaus, Lincoln Hallowell, John Daskalakis, Dennis Quigley, John Baron, and a number of others.

Floyd Bennett Field gave us many additional volunteers who dedicated a lot of their time to helping our cause and became supporters of the Foundation, such as Juan Martinez, Bill Rumpf, David Schurtleff, Walter Henry, Joe Tesoriero, Glen Abel, Frank Zarnitz, Cedric Morrison, Alex Lanctman, just to name a few. These guys became effective volunteers and helped us tremendously, and we appreciate it.

Of course, as all good things have to end someday, Hurricane Sandy put us outside and stepped up the urgency to get the C-97 out of Brooklyn, as we could no longer leave it in Hangar B. While unfortunate, it pushed us to finish the job and turned out to be a blessing in disguise, as we flew the 97 out in November 2017.

We never would have been able to achieve the level of success we have if not for the wonderful folks and the facilities at Gateway National Park—Floyd Bennett Field. We will always cherish the years we spent there and the special relationship between our volunteers and the Park personnel. We salute you!
To meet our funding needs of the future, our Vice President and board member Kevin Kearney designed a new form that will now be used as a multi-purpose support form. You will find the form enclosed with this newsletter. Each category has a brief explanation. We added item # 7 as an option for contributors who do not want to, or are unable to, contribute in any of the other categories. Item #7 will also be used for contributions needed for special needs. A blank space has been provided for contributors to write in a specific purpose for their financial contributions requested for special needs. All categories are important and each serve a specific purpose. As of this writing we now have 17 members of our Angel Program where members contribute a one time $5000. Over the past 17 years, the funds provided from the Angel Program this has been a valuable source of income to help bring the C-97 Program to where it is today. Our special needs at the moment is for the C-97 Phase Two Program that will begin in the spring. Several local training flights from Reading, Pennsylvania will be needed to obtain operational experience and confidence with our C-97. In addition to flight training for pilots, flight engineers, and loadmasters, new safety procedures will be implemented as well as a few improvements to communications such as a improved intercom system so crewmembers can communicate with each other while flying. All of this is part of the Phase Two Program. We need contributors to step forward to help with this important phase of our C-97 "Angel of Deliverance" Program. Cost estimates to fully complete this phase is $18,000. For those supporting members who want to make a contribution towards the Phase Two Program, simply use the new funding form and check item #7, then write in the words "Phase Two Program in the space provided for Special Needs, complete the form and enclose your check and mail to the Foundation. The "Angel of Deliverance" is calling for help now. By supporting any of the other categories will also be a great help.

This newsletter is also the official announcement of our new Tiger Team Program to help meet the financial needs of our C-97. This program is not for everyone. It is designed specifically for those special people who are diehard enthusiasts for the Boeing C-97 who love see it fly, who love the way it looks, who love the sounds of the powerful R-4360 engines and the sounds of the squealing expander tube brakes, and the role it played in aviation history as a cargo transport, tanker, and airliner. In addition to love for the C-97, a Tiger team member also has a Tiger heart and Tiger spirit determine to stay and support the C-97 as a Tiger would be determined to stay with the hunt. The Tiger member must also have the financial means to support the program by contributing $1200 a year, which breaks down to $100 a month. By assembling a roster of Tiger Team members, we will insure the funding is available to pay for heavy spending items, specifically cost of annual insurance and costs associated with flight training and annual flight checks for pilots and flight engineers. Flight engineer proficiency requirements is something new to us since this is not required on the C-54.

We are very happy and proud to report we now have four individuals with the Tiger heart and spirit who have accepted the responsibility to join the Tiger Team.

Tiger # 1 is Mark Meltzer from Palo Alto, California.
Tiger # 2 is Mark Howard from Edmond, Oklahoma.
Tiger # 3 is Alex Mellow from Matthews, North Carolina.
Tiger # 4 is Jeff DeKonty from Glenmoore, Pennsylvania.
Tiger # 5 will be who ???? .

Note: Jeff DeKonty is also an officer and board member of the Foundation as well as a flight crewmember. Jeff also holds a position as Angel # 15 in our Supporting Angel Program. A Tiger patch is being designed for Tiger team members. Members of the Tiger team will also be granted special perks.
Our Boeing C-97G, the "Angel of Deliverance", represents the only C-97 used during the great Berlin Airlift of 1948 and 1949 and is painted in a similar livery as YC-97A, 45-59595, was in May of 1949 when it flew in the Airlift. When Boeing received the order to build the C-97, the first order was issued on January 23rd, 1943, for three test aircraft designated XC-97. Soon after testing commenced, Boeing received a second order for ten more aircraft of which six were designated YC-97, three were designated YC-97A, and the last was a YC-97B. Of the three designated YC-97A, all three were delivered to the US Air Force in March of 1948. The last of the three YC-97A's was identified as 45-59595.

It was assigned to the 1st Strategic Support Squadron and was sent to Germany to participate in the Berlin Airlift where it was evaluated and tested by Boeing and the US Air Force under actual Airlift conditions.

It arrived at Rhein-Main, Germany, on May 2nd, 1949, along with one SAC aircrew, seven maintenance personnel, and over ten tons of specialized parts. Later, additional maintenance personnel and enough people to make up three full crews arrived. Service tests of the YC-97A proved somewhat anticlimactic. Initial assessment of the aircraft showed several problems, including the length of the fuselage, which caused both fatigue and confusion for loaders, and the difference in height between trucks and the aircraft's deck, which necessitated borrowing a conveyor belt from a German company. The Stratofreighter flew twenty three missions, delivering 444.8 tons of cargo to Berlin. It also experienced problems. On May 24, engine problems forced the YC-97A to make an emergency landing in Berlin during which the giant aircraft blew four tires and caused enough damage to close Gatow's runway for over seven hours. The plane remained at the British base until three new engines arrived on June 17, after which it returned to the United States. The use of both the YC-97A and one C-74 proved the heavy lift concept to the US Air Force, which prompted the development of larger, better heavy lift transports.
Activities of the YC-97A 45-59595 during the Berlin Airlift.
FRED HALL MEMORIAL BERLIN AIRLIFT EXHIBIT

We are most happy and very excited to report the creation of the Fred Hall Memorial Berlin Airlift Exhibit now being installed at the Military Technology Museum of New Jersey. Over the past 23 years, many items related to the great Berlin Airlift have been donated to the Foundation for varying purposes such as display, educational value, historical value, for future uses. While a lot of these items are on display inside our Douglas C-54 Berlin Airlift Museum / Exhibit, there remains a lot of artifacts now in storage for future use. Thanks to the wishes of the late Fred Hall, we have now embarked on a new venue to expand our educational mission about the great Berlin Airlift by having an indoor display for public viewing. This will give us the additional space to expand the history of the Berlin Airlift.

Fred Hall was a special individual. A very dedicated and patriotic man and very proud of his service with the US Air Force and his role as a C-54 flight engineer/mechanic during the Berlin Airlift. Fred was a key figure with the Berlin Airlift Veterans Association and also a Flight Crewmember aboard the Douglas C-54 "Spirit of Freedom" with the Berlin Airlift Historical Foundation. Fred was with the C-54 "Spirit of Freedom" in 1998 when it was flown across the Atlantic back to Berlin for the 50th anniversary of the Berlin Airlift.

Following the loss of Fred, his wife Catherine, contacted Foundation President, Tim Chopp and offered to donate part of Fred's Berlin Airlift artifacts to the Berlin Airlift Historical Foundation. Tim arranged to make the drive to Baltimore, Maryland to see what was being offered and was more than pleased with what he saw. Fred had amassed over the years a cache of artifacts that took a truck to haul away. It was during the visit that Catherine told Tim about Fred's wishes to have the appropriate displayable items for public viewing as well as other Berlin Airlift artifacts. In addition, Fred provided a financial contribution to help insure his wishes would be fulfilled. Upon returning to New Jersey along with Fred's collection of artifacts, a search went out to locate a facility willing to allow us to display Fred's artifacts as well as some of the artifacts the Foundation has collected for many years. It took several months of research and thanks to Eddie Ide of the Berlin Airlift Veterans Association, several museum were contacted. These museums remain interested, however, the Military Technology Museum of New Jersey (Located at the InfoAge Museum at Camp Evans, Ocean Township) was selected due to its location to simplify the logistics required to make a top rate exhibit and access to the volunteers needed for the project. As this entire project was the result of the wishes of Fred Hall, we want to honor Fred by naming it the Fred Hall Memorial Berlin Airlift display/exhibit. Items that belonged to Fred will be marked "Donated by Airlift Veteran Fred Hall". Curator of the project is Glenn Abel, a 3 year supporting member of the Berlin Airlift Historical Foundation and also a C-54 Loadmaster aboard the "Spirit of Freedom". Glenn owned his own Graphics business and is well experienced in what it takes to create a worthy exhibit. Glenn's help on the C-97 project was a key factor in our quest to get the C-97 airborne. Work has already begun on the exhibit. We will keep everyone informed on this special project. We owe our gratitude to Fred Hall and want to say a sincere thank you to Catherine Hall for bringing Fred's wishes to our attention.
ANGEL GETS ITS WINGS

The maiden post-restoration flight of the Berlin Airlift Historical Foundation's Boeing C-97G Angel of Deliverance has brought to a close one of the most remarkable projects in the recent history of aircraft preservation. With the first air-to-air photos of this magnificent Cold War transport, we tell this story.

WORDS AND PHOTOGRAPHY JAY SELMAN

The following pages are an article originally appeared in Aeroplane Monthly January 2018. Reproduced with permission.
When Boeing C-97G N117GA lifted off the runway at New York's Floyd Bennett Field on 7 November 2017, it represented the culmination of an immense labour of love for Timothy Chopp, president and founder of the Berlin Airlift Historical Foundation. And what a labour it has been.

This story actually began when Tim Chopp was six years old. He recalls, “One day, I was sitting in our neighbour’s living room and started looking in a magazine whose pages were filled with pictures and articles on the Douglas C-54. This was 1950 and probably an article about the Berlin Airlift. I was immediately captured by this beautiful airplane. With each page I looked at, I tell a little bit more in love with the C-54. It is a love that has only grown with each passing year.”

As he grew older, Chopp devoured every bit of information he could find about the Berlin Airlift, the operation that inscribed the C-54 in the history books. “Surprisingly,” Chopp continues, “I was amazed at the general lack of knowledge the average American citizen had regarding the airlift. This was incomprehensible to me, since the success of the Berlin Airlift proved beyond any doubt that the airplane as an aerial supply platform had come of age. I began dreaming about buying a C-54 and using it as a flying classroom, travelling from airport to airport to tell the story of the greatest humanitarian event in the history of aviation.”

When Chopp was 44, his mother passed away suddenly at the relatively young age of 64. “That was a major wake-up call for me... it hit me right in the gut that tomorrow is not guaranteed and if I was going to make my dream come true, I needed to get started now”. So, in 1988, Tim formed the Berlin Airlift Historical Foundation (BAHF), “to preserve the memory and legacy of the greatest humanitarian aviation event in history: the Berlin Airlift. We intended to do this by using aircraft from the airlift as flying memorials and classrooms to educate the public about this pivotal event.”

He acquired a C-54, which he named Spirit of Freedom, and began fulfilling his dream by using it exactly as he had envisioned. But Chopp had his eye on a more ambitious project — to acquire a C-97 in honour of the one example of its type that served in the Berlin Airlift. Chopp explains, “When it became apparent that C-97s were a seriously endangered species, I set out to save one to duplicate what we were doing with the C-54.”

In April 1949, a single YC-97A, 45-59595, joined the 1st Strategic Support Squadron, and began flying in support of the Berlin Airlift (see Database, Aeroplane May 2017). Chopp explains, “As a new design, it went into service in Berlin with many bugs yet to be worked out. On early flights, it damaged its landing gear while landing at Gatow in the British sector after experiencing a double engine failure upon arrival. But the time the airplane was repaired, the blockade was lifted. Yet the C-97 did record a presence in the Berlin Airlift. If the airlift had continued into the 1950s, the US Air Force planned to replace all 330 C-54s with 100 C-97s, as the C-97 could carry a 40,000lb payload compared to the 20,000lb payload of the C-54.”

The BAHF’s C-97 began life as a KC-97G, serial 52-2718 (c/n 16749). Delivered to the US Air Force on 27 April 1954, its initial home was with the 98th Air Refueling Squadron (Medium), part of Strategic Air Command and stationed at Lincoln AFB, Nebraska. It was transferred between several other Air Refueling Squadrons at Malmstrom AFB in Montana, Plattsburgh AFB in New York, and Milwaukee, Wisconsin, before being converted into a KC-97L with the addition of a pair of General Electric J47 jet engines in August 1965. It returned to duty with the Utah Air National Guard in Salt Lake City during September 1972. Four years later, 52-2718 was sent to the Military Aircraft Storage
and Disposition Center at Davis-Monthan AFB, Arizona, and was dropped from the air force inventory a year later.

For most military aircraft, the story would have ended here. But in 1986 the tanker was auctioned to an unknown group, which converted it to C-97G configuration by removing the refuelling equipment and installing a cargo door. Not much is known about the first two years of its civilian life, but some conclusions can be drawn from the fact that in 1988 the US Marshal Service seized the machine.

It was later purchased by Grace Air of Corpus Christi, Texas and registered N117GA. Dr Terry Elder, president of Grace Air, used the aircraft in a dual role. During the summer, the C-97 was kept busy hauling fish in Alaska. But in winter it migrated south, where Elder used the transport on humanitarian missions to South America. He converted the generous cabin into a surgical theatre, performing much-needed surgical procedures on citizens of countries in Central and South America.

Fate brought Chopp and Elder together in the mid-1990s. Chopp relates, “A few of our members who went to Oshkosh told me a C-97 was there — I was already restoring the C-54. I was given Terry Elder’s business card, and I wrote him a letter that very day and stated, if he ever wanted to sell the C-97, to call me first.”

In early 1996, that call came. Chopp dropped pretty much everything and headed out to Moses Lake, Washington, to inspect the aircraft. This was the first time he saw N117GA. The Berlin Airlift Historical Foundation purchased N117GA on 22 April 1996, and the long journey began. It happens to be the same aircraft that Jeff Akrige, president of Columbia Pacific Aviation — which restored the B-23 covered in the November ’2016 Airplane — flew for a summer and helped maintain. Akrige was extremely helpful in storing and protecting the C-97 during its temporary retirement at Moses Lake.

At the time, Chopp was preparing to take C-54 Spirit of Freedom over to Europe to commemorate the 50th anniversary of the Berlin Airlift, so Angel of Deliverance sat at Moses Lake under Akrige's watchful eye for a year-and-a-half. About the only activity Chopp had time for was getting type-rated in the C-97.

CLOCKWISE FROM TOP LEFT: The project's early days at Greybull, Wyoming, home of Hawkins & Powers — the aircraft was painted there during 2000; Steve Grubesich (left) and David Schulteef making one of the mighty R-4360 engines; Tim Chopp getting to grips with a fraction of the C-97's wiring.
with Gene Powers, co-owner of Hawkins & Powers Aviation, which owned one of the very few flyable examples in the world.

Once back from Europe, Chopp again turned his attention to the C-97. On 8 October 1998, *Angel of Deliverance* — as it had become known — was ferried to Greybull, Wyoming, home of Hawkins & Powers. Along with maintaining a fleet of veteran transport aircraft converted for aerial firefighting duties, the company specialised in restorations.

*Angel of Deliverance* stayed at Greybull for two-and-a-half years, while Hawkins & Powers performed maintenance and modifications on the aircraft. Tim Chopp recalls, “Nosewheel tyres had long since disappeared from the face of the earth, but H&P owned an STC [supplemental type certificate] that replaced the original axles and wheels with the nosewheel axles and wheels from a DC-8. One aileron saw brief service during the Berlin Airlift.”

In July 2001, *Angel of Deliverance* was ready to fly east to its new temporary home at Floyd Bennett Field with a stop in Bismarck, North Dakota to pick up fuel donated by Exxon — only it didn’t happen quite that way. “An hour or so out of Bismarck”, says Chopp, “engine number three developed problems, and we had to divert to Aberdeen, South Dakota. Hawkins & Powers loaned us an engine, but changing an R-4360 is a challenge at a facility that has all the necessary equipment. At an outstation, it is a daunting task. Upon completion of the engine replacement, the flight was further delayed due to New York airspace restrictions as a result of the 11 September attack on the World Trade Center. Finally, in
November 2001, our Angel was back in the air and headed to Millville, New Jersey. There she sat until 10 May 2002, when the C-97 was ferried to Floyd Bennett Field, not realising that this would be her home for the next 15 years."

Kevin Kearney is a busy man. He says, "I'm the vice-president, and on the maintenance crew and a flight engineer on the C-54. And the webmaster. And the social media guy and the newsletter editor/graphic artist. Yeah, I wear a lot of hats. Oh, and another fellow and I built all the displays in the C-54. Lots and lots of hats. Tim is pretty much the chief mechanic, but I'm right up there, though. I earned my A&P [aircraft and powerplant maintenance licence] through experience with the foundation in 2001."

Kearney gave *Aeroplane* an insight into the challenges that the foundation faced when it began in earnest to bring the C-97 into its FAA-approved inspection programme. "By the time the C-97 arrived at Floyd Bennett Field", he says, "BAHF had owned the C-54 for some eight years. In retrospect, maintaining the C-54 was like building a Mercury Redstone rocket. There were, and still are, several C-54s flying, and therefore there is still some good support available. When we bought the C-97, it was sort of like skipping Project Gemini and going right to a Saturn V rocket and Project Apollo. Both the Redstone and the Saturn rockets fly using the same principles, but there the similarities end. There were only two viable C-97's left in the world that were airworthy enough to fly and support equipment was virtually non-existent. In many cases, it took longer to find or build support equipment than it did to complete the maintenance project."

Chopp adds, "Many of our challenges were unforeseen until we actually were up against them. Here's one example. The vertical stabiliser of the C-97 stands 38ft high, as opposed to 28ft for the C-54. Recognising the potential problem of getting the C-97 into a standard-size hangar, Boeing built its large transport with a vertical stabiliser that folded over. In fact, it folds down to a height of 26ft. We needed this feature to hangar the airplane at Floyd Bennett. However, this procedure required a special..."
**SPECIAL RECOGNITION TO THOSE PATRIOTS WHO STEPPED UP TO BECOME "ANGELS" OF DELIVERANCE!**

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<th>#</th>
<th>Name</th>
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<tr>
<td>1.</td>
<td>Randy McConahy</td>
<td>Freehold, New Jersey</td>
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<td>2.</td>
<td>John Enggren III</td>
<td>Forked River, New Jersey</td>
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<td>3.</td>
<td>Yvette Straet</td>
<td>Brussels, Belgium</td>
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<td>4.</td>
<td>Ruth Jorgensen Smock</td>
<td>Silver Springs, Maryland</td>
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<td>5.</td>
<td>Marjorie J. Armstrong</td>
<td>New Castle, Pennsylvania</td>
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<td>John P. Amtower</td>
<td>Gettysburg, South Dakota</td>
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<td>7.</td>
<td>Zadalee Furlano</td>
<td>Lakewood, New Jersey</td>
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<td>8.</td>
<td>Justin Benson</td>
<td>Toms River, New Jersey</td>
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<td>9.</td>
<td>Jason Pence</td>
<td>Woodstock, Virginia</td>
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<td>12.</td>
<td>Charles &quot;Pat&quot; Patterson</td>
<td>Hamilton, Montana</td>
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<td>13.</td>
<td>Mark Meltzer</td>
<td>Palo Alto, California</td>
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<td>14.</td>
<td>James G. Cole</td>
<td>Kempner, Texas</td>
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<td>15.</td>
<td>B. Jeffrey Dekonty</td>
<td>Glenmoore, Pennsylvania</td>
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<td>16.</td>
<td>From the Family of Captain Harry P Badger, Commanding Officer of Navy Transportation Squadron VR-6 during the Berlin Airlift.</td>
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<td>17.</td>
<td>Helga Johnson</td>
<td>Belvidere, New Jersey</td>
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**Who Will Be #18? Will It Be You?**

**WE NEED MORE ANGELS!** As the Foundation is a 501(c)(3) charitable organization, here your contributions are tax deductible. Consider making history by helping to keep our C- 97G flying.!

**NOTE:** A list of the names of all of our supporting Angels is displayed inside the C-97 to this day. This list will always be on permanent display and will be improved and updated. We are very proud and thankful for our supporting Angels!
When I submitted the initial documents to officially incorporate the Foundation in 1990, the articles of incorporation were specific as to the purpose and mission of the organization. The first article pertained exclusively to the Douglas C-54 as a true flying museum about the great Berlin Airlift with a museum/exhibit on board for educational purposes. The second article pertained to acquiring other types of aircraft also used in the Airlift that included the Douglas C-47, the Boeing C-97, and the very rare Fairchild C-82 Packet of which seven were used to help build the Tegel Airport in the French sector of Berlin. Another transport used was the Douglas C-74 Globemaster I, the forerunner of the famous C-124 Globemaster II. As time went on, we have partially fulfilled those articles by acquiring the C-54 and now the C-97. We have by no means given up on fulfilling the purpose of the second article of incorporation. After 23 years operating the C-54 "Spirit of Freedom" we have learned there are no Douglas C-74’s remaining and the only remaining flyable Fairchild C-82 Packet is owned by our friends at the Hagerstown Aviation Museum in Hagerstown, Maryland. It is our desire and full intention to acquire a Douglas C-47 as that aircraft was one of the main aircraft used by the US and Great Britain, holding 2nd place to the workhorse of the Berlin Airlift, the C-54. Discussions have taken place that when we do acquire a C-47, we may honor Great Britain's role in the Airlift by having it in British markings. We welcome your views on this matter. We might also use the C-47 for a ride program which is becoming more popular among operators of the C-47 because of the funding it can produce. We have mixed feelings about doing this as well.

Except for the C-47, other types of aircraft used in the Berlin Airlift by the US are unavailable. As a result, an exciting idea came to light that would enhance greatly our educational mission and give more depth to our subject matter. As Harry S. Truman was President during the Berlin Airlift, the idea of creating a replica of his Presidential Aircraft, a Douglas C-118 named the "The Independence". The C-118, with its civilian counterpart, the Douglas DC-6, was the big brother to the C-54. The vast amount of history associated with these four great transports would provide a kaleidoscope of ways to enhance our mission of history, education, and remembrance about the great Berlin Airlift of 1948 and 1949. Such a broad base of history surrounding these four aircraft would warrant our own facility for maintenance and protection to house our aircraft collection and also be designed to include an area for our own museum and learning center. I can envision all of the above happening in our future. All it takes is the efforts from people who believe and share in this vision.

As I've often said many times using the famous quote from history, "Damn the torpedoes, full speed ahead". I've often said we make a good team.

* The quote "Damn the torpedoes, full speed ahead" was spoken by rear Admiral David Glasgow Farragut on August 5th, 1864 during the Civil War Battle of Mobile Bay. His fleet of wooden ships was approaching Fort Morgan in two columns being led by iron clad monitors when the monitor Tecumseh struck a mine (then called torpedoes) and was severely damaged. The wooden ship Brooklyn stopped, causing the two columns to become unorganized. Admiral Farragut who was lashed to the top sail mast so he could see above the smoke then shouted those famous words.
Here come 20 tons of payload!

Call it a “one airplane airlift” if you like. It’s the new twin-deck Boeing C-97 Stratofreighter and it set an impressive record during the final stages of the Berlin blockade.

Within a single period of three days, this workhorse of the Air Force completed a total of ten round-trips into the German capital, delivering 200 tons of food, fuel and supplies.

An exceptional feat, but not for the 14,000 horsepower Stratofreighter. Despite the great loads, the big freighter found no difficulty in coming in over the 5-story buildings flanking Tempelhof, and stopping in less than two-thirds of the field’s 5,300-foot runway.

The Stratofreighter is designed for high performance and versatility as a teammate of the great new Boeing B-50 Superfortress.

Boeing is now building for the U.S. Air Force 39 improved model C-97A’s, recently approved for operation at a new gross weight of 148,000 pounds.

Their two altitude-conditioned decks can carry 153 fully equipped troops or up to 45½ tons of freight—even tanks and heavy guns. In these planes America has the fastest, most powerful, most efficient air cargo carriers in the world.

Sister ship of commercial aviation’s new luxury liner, the Boeing Stratocruiser, the Stratofreighter was designed and built in co-operation with the Air Force to do big jobs fast at low operating cost. It fills a vital need in America’s defense program.
History of Boeing C-97 “Angel of Deliverance”

s/n 52-2718

Manufactured by Boeing Aircraft Company, Seattle WA, as KC-97G and delivered to the USAF on April 27, 1954.

Apr. 1954 to 98th Air Refueling (Medium) Squadron (Strategic Air Command), Lincoln AFB, NE.

Sep. 1954 to 96th Bombardment (M) Wing (SAC), Altus AFB OK.
(Deployments to Ernest Harmon AB, Newfoundland, Elmendorf AFB AK, and Mountain Home AFB ID).

Sep. 1957 to 96th Air Refueling (M) Squadron (SAC), Altus AFB.

Jun. 1958 to 97th air refueling (M) Squadron (SAC), Malmstrom AFB MT.

Feb. 1961 to 407th Air Refueling Squadron (SAC), Malmstrom AFB

Jul. 1961 to 26th Air Refueling Squadron (SAC), Plattsburgh AFB, NY

Feb. 1962 to 4108th Air Refueling Wing (SAC), Plattsburgh AFB

Jan. 1963 to 497th Air Refueling Wing (SAC), Plattsburgh AFB

Aug. 1964 to 128th Air Refueling Wing (Air National Guard), General Billy Mitchell Field, Milwaukee WI

Aug 1965 Converted to KC-97L (Two General Electric J-47 jet engines installed under outboard wings, so the aircraft could refuel the fast jets.)

Sep. 1972 to 151st air Refueling Group (ANG), Salt Lake City MAP UT (Deployments to Rhein Main AB, Frankfort, Germany, “Operation Creek Party”)

Sep. 1976 to Military Aircraft Storage and Disposition Center, Davis Monthan AFB AZ.
SAC COMMUNICATION HISTORY AND THE C-97

by Corporate Secretary Jeff Dekonty

Most of us know about AM and FM radio. These are two different ways of transmitting and receiving signals and pretty much anyone who’s worked a car radio knows about them. But there’s a third “mode” of communication that’s not as familiar but is very much in use and has history that is linked to our beloved C-97!

Single Side Band (SSB) communication is a method of voice communication that is very efficient. Using limited power, you can transmit voice signals over great distances. In fact, compared to AM or FM, SSB takes only about one fourth the power to achieve similar results. In the 1950’s, this efficiency attracted the attention of amateur (ham) radio enthusiasts. As post-war technology enabled greater access to SSB equipment, a few hams saw potential for applications beyond collecting QSL cards on their radio shack walls. These hams happened to wear blue suits to work everyday, and they also happened to have stars on their shoulders.

Strategic Air Command (SAC) Generals Curtis LeMay (also known by his radio call sign K3JUY) and Francis “Butch” Griswold (K0DWC) were avid ham radio enthusiasts. As SSB began taking over the amateur frequencies, they recognized that it had tremendous benefits compared to the AM radio equipment that had been standard-issue in military aircraft since before World War II. Working with their friends and colleagues Art Collins, WØCXX, of Collins Radio, and Leo Meyerson, WØGFQ, of World Radio Labs, they set about organizing a series of test flights to prove that SSB was the future of military aviation long-distance communication.

Enter the C-97! In 1956, using a SAC C-97 (tail number 92595) Griswold, Collins and others staged two test flights with commercially-available ham radio gear installed in the passenger area. Their ability to maintain continuous contact with the home base in Omaha while travelling to Fairbanks and then on to Okinawa and back followed by a second journey to Greenland, then over the North Pole and back home via California proved that SSB was far superior to AM communications. As a cost effective proof of concept, these tests laid the foundation for SAC to equip it’s then-leading-edge bomber, the B-52, with radio gear befitting a new generation of military aircraft.
Fast forward sixty years. C-97 Angels and Tiger Team members Mark Meltzer and Jeff DeKonty, share an interest in ham radio. Through connections Mark had on the West Coast, he put Jeff in touch with Loney Duncan, a retired Rockwell Collins VP and engineer. After a few late-night phone conversations and traded emails, a plan was born. Working together, active and retired Rockwell Collins people and the Foundation will re-create the test operating position from the SSB test flights using period-accurate radio gear.

Duncan is already familiar with the installation of ham radio stations in aircraft. He was instrumental in making the AM equipment on the B-29 “Fifi” operational. Leveraging the knowledge and contacts from that project, Loney began organizing the components necessary to have a fully-operational ham radio station onboard the C-97. Already he has accepted the donation of a 75A-4 Collins receiver. Paired with a Collins KWS-1 600 watt transmitter, this configuration was referred to as the “Gold Dust Twins.” Adding a second receiver, antenna tuner and an airworthy external wire antenna will complete the historically accurate and fully operational ham radio station, capable of operations in the air and on the ground.

Ham radio operators love “working” a distinctive and unusual station and it is hoped that calling CQ from the C-97’s “aeronautical mobile” ham radio station will further the mission of education while generating interest in the C-97. For more information, check out the full presentation on the historical flights at www.k5rwk.org. Under “RWK Documents in the presentations section you can find “The SSB Revolution.”
Be A Part of Something BIG!
Supporting the Foundation, the C-54 and C-97

There are several ways you can support the Foundation's mission of history, education, and remembrance, as well as help keep the C-54, the "Spirit of Freedom" flying and support the big and rare C-97 "Angel of Deliverance".

1. Register as a Supporting Member each year by contributing a minimum of $120. We will place you on the mailing list as well as our general volunteer roster for project support, other than flight assignments.

2. Become a Lifetime Member for a one time contribution of $1000, your name is placed on the mailing list and also on the general volunteer roster for life with no annual contribution required.

3. * Sponsor the C-54 or C-97 with a $1500 one time contribution. Volunteer flight crewmembers are selected from our sponsors pending satisfactory completion of the selection process.

4. Become a Supporting Angel of the C-97 Program by contributing $5000. Your name will be aboard the C-97 on a special recognition plaque, you will also receive a special plaque for your home. To date, we have 17 Angels in the Program who have made a real difference in the progress of the C-97.

5. The C-97 Tiger Team Contributor- Being a Tiger Team member is only for the serious C-97 enthusiasts who contribute $1200 each year. The purpose of the Tiger Team is to provide funding for the yearly insurance needed for the C-97 and for yearly flight checks for the flight crew required by the FAA. Members of the Tiger Team will receive special recognition and perks.

6. The Corporate Tiger Team Contributor- For those corporations willing to contribute $12,000 yearly to help sustain the C-97 "Angel of Deliverance Program. We need corporations who want to show their Tiger spirit as this is what it will take to keep the C-97 flying. Have your corporation’s name displayed in our C-97 as a Tiger Member. Rare big projects require special support. Tiger spirit required.

7. As a contributor for Special Funding Needs or for Those Who Want to Contribute who do not want to be a supporting member.

DON'T MISS OUT! LEND YOUR SUPPORT TO THE FOUNDATION AND KEEP THESE RARE AIRCRAFT FLYING

NAME_____________________________________________

STREET ADDRESS_________________________________

CITY, STATE, ZIP_________________________________

TELEPHONE (_____)____________ - ________________

EMAIL:__________________________________________

The Berlin Airlift Historical Foundation is a tax exempt, publicly supported charity as described in Section 501 (c) (3) of the Internal Revenue Code.

I want to help support the Foundation’s Mission of History, Education, and Remembrance.

I have enclosed my check for $__________________.

CHOOSE YOUR SUPPORT PREFERENCE)

☐ Supporting Member ☐ Lifetime Member

☐ Aircraft Sponsor ☐ “Angel Of Deliverance”

___C-54 ___ C-97

☐ C-97 Tiger Team ☐ Corporate Tiger Team

☐ Special Contribution for:

Make checks payable to:
Berlin Airlift Historical Foundation
P.O. Box 782
Farmingdale, New Jersey 07727

*NOTE: ALL VOLUNTEER FLIGHT CREWMEMBERS ARE SELECTED FROM THE C-54 AND C-97 SPONSORS. THIS DOES NOT MEAN IF YOU DONATE AS A SPONSOR, YOU ARE ALSO SELECTED AS A FLIGHT CREWMEMBER. ALL FLIGHT CREWMEMBERS MUST SATISFACtORy COMPLETE A SELECTION PROCESS BEFORE BEING SELECTED. CONTACT THE FOUNDATION FOR MORE INFORMATION AS THE VOLUNTEER FLIGHT CREWMEMBER ROSTER IS LIMITED TO A SPECIFIED NUMBER OF CREWMEMBERS.
Operating our Douglas C-54 can be related to a cute little kitten. A little kitten purrs softly and will walk between your feet rubbing its side up against you seeking love and attention, while the C-97 is like a Bengal Tiger. We will need supporters, crewmembers, and maintenance people with the same killer instinct as a Bengal Tiger. Operating the C-97 will separate the men from the boys. Go get a helmet and get in the game. Life is short and opportunities like this don't come often, Be A Part of Something BIG!