

Missions for America

Semper vigilans!
Semper volans!



The Coastwatcher

Newsletter of the Thames River Composite Squadron
GON
Connecticut Wing
Civil Air Patrol

<http://capct075.web.officelive.com/default.aspx>

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SCHEDULE OF COMING EVENTS

For Future Planning

Cadet meetings normally start with drill and end with aerospace history, current events, and Commander's moment. Blues are worn on the second week of the month and BDUs at other times. Main topics may be indicated on the schedule below. See website for updates.

03-05 JUN-Red Cross Exercise
03-05 JUN-CT/RI USAF Evaluation
07 JUN-Meeting
10-12 JUN-CTWG Mini-Encampment-Stratford
01 JUN-Meeting
18 JUN-RST Make-Up
19 JUN-Open Cockpit Day-NEAM

21 JUN-Meeting
21-25 JUN-National AEO School
28 JUN-Meeting
30 JUN-First draft IG evaluations due
09 JUL-CTWG Encampment Training-Wing HQ
09-16 JUL-RSC-McGuire AFB
09-16 JUL-Cadet Ldrshp School-Concord, NH
14-15 JUL-KC-10 Orientation Flight
22-23 JUL-Mini-bivouac-ES and Drill
23 JUL-07 AUG-NESA (two sessions)
07-14 AUG-CTWG Encampment
13-20 AUG-Reg. Cadet Ldrshp School-McGuire
17-20 AUG-CAP National Summer Conference
10 SEP-Multi-Squadron SAREX-Tentative
22-24 SEP-AOPA Summit-Hartford
22-23 OCT-CTWG Convention
24 SET-Cadet Ball-Courtyard Marriott, Cromwell

CADET MEETING NOTES

31 May, 2011

reported by

Capt Robin Wojtcuk

The cadets met at the Woj Abode for a sports/game 5th Tuesday celebration. The cadets started with a mile walk, then engaged in a game of Capture the Flag. Refreshments were served and the word game Taboo, played. A discussion about the new CAP Leadership Program concluded the meeting.

SENIOR MEETING NOTES

31 May, 2011

Maj Neilson, Capt Noniewicz, and Col Bergey led a discussion on planning for the upcoming USAF evaluation. The main topic was determination and allocation of the available resources. Three air crews will be ready to launch at 0700, personnel assigned to Hartford will sign in by 0800, and the TRCS ground team will await orders at Groton.

AEROSPACE CURRENT EVENTS

SINGULAR COINCIDENCE AT CAPE CANAVERAL

Shuttle *Atlantis* rolled from the Vehicle Assembly Building to its launch pad on the same night that Shuttle *Endeavour* landed after its 16 day mission. This is the last rollout for a shuttle and the last landing for *Endeavour*.

AEROSPACE HISTORY

AEROSPACE HISTORY MILESTONES THIS WEEK

05 June, 1929 - Herr Prof. Hermann Oberth is awarded the Esnault-Pelterie-Hirsch International Aeronautical Prize for his book, *Wege sur Raumschiffahrt* (*The Way of Space Travel*).

06 June, 1936 - Socony-Vacuum Oil Company of New Jersey uses the revolutionary catalytic cracking process to produce 100 octane aviation gasoline.

07 June, 1936 - US Army Air Corps Maj. Ira C. Eaker flies a Boeing P-12 from New York to Los Angeles completing the first transcontinental blind flight.



P-12E Diorama

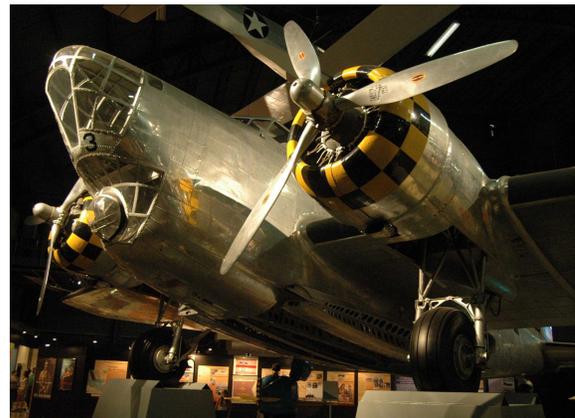
08 June, 1947 - American Airlines commences New York to Los Angeles passenger service with an intermediate stop in Chicago. Utilizing the Douglas DC-6, the flight takes ten hours.



Air Transport Command C-54 Skymaster, the Military Version of the Douglas DC-6 on the ramp at the Dover AFB Air Mobility Command Museum.

09 June, 1927 - President Calvin Coolidge issues the first executive order restricting airspace when aircraft are forbidden to fly over Washington, DC during the celebration of Charles Lindbergh's return from Paris after his solo North Atlantic crossing.

10 June, 1942 - The US Navy utilizes a blimp and a Douglas B-18 in Project Sail, the development of the first magnetic anomaly detection system.



Douglas Bolo, a DC-3 Derivative and Pioneer MAD and RADAR Platform and Sub Hunter in the Early Days of World War II.

11 June, 1937 - Reginald Mitchell, Chief Designer of Supermarine, responsible for the Schneider Cup seaplanes and the graceful Spitfire, goes West.



Supermarine Spitfire Mk I Exhibits Its Beautiful Elliptical Wing Tips

NOTABLE AIR MISSION OF THE MONTH

The following article is a continuation of our series on notable air missions. It is a two part history of the Berlin Airlift. Part I, below discusses the political situation which led to a divided Germany, the Soviet actions to drive the Western allies out of Berlin, an historical review of previous airlift attempts, and the strategic and tactical problems involved in mounting an airlift. Part II will follow in the next edition.

Operation Vittles/Operation Plane Fare The Berlin Airlift 24 June, 1947-13 May, 1948

The Political Situation

When World War Two in Europe ended in April of 1945, the major allied nations, the United States, Great Britain, and the Soviet Union established zones of occupation in the national territory of Germany. Throughout the war, the Allies considered their policies in respect to a defeated Germany but no firm decisions were made. The

British were extremely suspicious about Soviet intentions in Europe. George Kennan, who was a most perceptive US Foreign Service Officer and

specialist in Soviet affairs warned the State Department that Soviet ambitions in eastern Europe would be inimical to the formation of independent states from the pre-war nations.

Berlin, the German capital, had been a valued prize but General Eisenhower, the commander of the Allied Expeditionary Force in Europe, was reluctant to risk the casualties since Soviet troops were so much closer. Soviet forces took the city and as the dust of battle settled, the Roosevelt and Churchill governments accepted a plan which would place the western sector of Germany under the control of the Great Britain, France, and the United States and the eastern region under Stalin's Soviet Union. Berlin would be located some 100 miles inside the Soviet zone but occupied by the four powers. Just as the war ended, President Roosevelt died and was succeeded by Harry Truman who decided to accept this plan.

The Western Zone was the most heavily industrialized regions of Germany, stretching from the seaports on the Baltic to the Ruhr Basin in the south. Russia occupied the agrarian east upon which much of pre-war Germany depended for its food. Byzantine negotiations ensued to divide the "spoils" and these were complicated by differences in policy; the United States and Britain on one side and the Russians and the French on the other. Fundamentally, the differences had their roots in historical experience. Both France and Russia had suffered enormously from German aggression in World Wars One and Two. Their objective was to reduce Germany to a third class agrarian nation so as to never again threaten either of them.

To this end, the Soviet Union stripped their occupied territories of industrial resources, machinery, and tooling. Factories were denuded of everything from their power plants down to their simplest tools. In addition, Russia had parts of eastern Germany annexed to Poland, soon to be a Soviet vassal state, and France demanded the Ruhr Basin as compensation for their losses.

On the other hand, Great Britain and the United States remembered the lessons of World War One and how the draconian peace treaty obligations forced on the Weimar Republic at Versailles had led to the rise of Adolph Hitler. They also believed that a strong industrial Germany was necessary for the economic health of Europe in general.

The Soviet Bluff

During April and May of 1947, Russia decided to squeeze the Allied powers by exercising their right, under the four power agreement, to govern traffic over the rails, roads, and barge canals which served Berlin. They made numerous and questionable demands which delayed and sometimes halted traffic entirely. In response, the western allies instituted what came to be called the "Little Lift." A scant force of USAF and RAF C-47s and British chartered commercial aircraft brought supplies to the allied garrisons. Harassment continued. In the most serious incident, a Russian Yak-3 had collided with a British European Airways Viking which was on approach to Gatow Airport. Both aircraft crashed killing all aboard.



This C-47, the TICO Belle, flew the Airlift towed gliders on D-Day and participated at Arnhem, the Bulge, and the Rhine Crossing.

Negotiations among the four "allies" became paradigms of intransigent behavior and deadlock resulted. In another context, George Kennan opined that "nations do not have allies, they have interests" and the morass of arguments, threats, bluffs, claims, and counter claims soon led to a showdown over one such interest, monetary policy.

Any functioning civilization needs a stable fungible medium of exchange, money. Immediately after the end of the war, currency inflation struck the German economy. The old Reichsmark, overprinted as occupation money by the Allies, flooded the market and the value of the Reichsmark for the purchase of goods plummeted. Consequently, a barter economy developed in which cigarettes and chocolate became a substitute medium of exchange. A cigarette was equivalent to five marks or about five dollars and a chocolate bar was worth about 15 dollars worth of marks, far more than the official exchange rate. Foodstuffs and other necessities of life could not be purchased with German money and the population suffered while the currency manipulators profited.

The economy was in chaos as inflation drove prices beyond the reach of the average citizen and commercial establishments were forced to close. The western Allies decided to issue a new currency at the rate of one to ten of the old. The Soviets offered their currency at the rate of one to one but certain portions of the population would even be denied an exchange. Neither side could come to an agreement and the meetings between them ended. On June 24th, 1947, Berlin's surface access from the west was cut by Soviet force of arms. The blockade had started. What the Russians had not counted on was a cast of characters who understood poker and its strategy of bluffing and stake raising and who could finesse the deck.

The Western Allies Call the Bluff

First among the players was the new President of the United States, Harry S Truman, a wily street-smart poker playing politician who had quickly grasped the implications of the Soviet actions. When confronted with the abandonment of Berlin during a staff meeting, he succinctly stated that "There is no discussion on this point. We stay in

Berlin-period.” Another player at the table was a brilliant administrator, Lt. Gen. Lucius D. Clay, Deputy for Military Government to the Supreme Allied Commander. When the Russian initiated the blockade, his first thoughts were to run an armored convoy down the *autobahn* and into Berlin. However, an alternate was proffered by an RAF officer who knew that the convoy plan would mean war at a considerable disadvantage to the western allies. For the Soviets had over 300,000 troops on hand in the Berlin environs while the Western allied force numbered only 6,500. The RAF officer, Air Commodore Reginald Waite had considered the possibility of supplying Berlin by air and Clay, who had previously dismissed this method, was quickly convinced to make the attempt. The Soviet Union had no means except acts of war to close down the three air corridors that previous negotiations had created. Clay believed that the Russians were unwilling to start a full scale war and called their bluff. He ordered the commencement of a full scale airlift.

Some Previous Attempts at Airlift Operations

Supplying an enclave from the air had been tried before with mixed results. The first effort occurred during the siege of Kut el Amara in what was then Mesopotamia, now Iraq, during World War One. British Imperial Forces under Maj. Gen. Charles Townshend were trapped by Ottoman forces about 100 miles north of Basra. Elements of the Royal Flying Corps, the Royal Naval Air Service, and the Australian Flying Corps flew 140 sorties and dropped some nine tons of supplies in a fortnight. The effects were minimal and the garrison eventually surrendered to the Turks.

During World War Two, Germany attempted to resupply the trapped 6th Army, invested by the Soviets at Stalingrad. Some quarter-million German and allied troops required 800 tons daily but the *Luftwaffe* only had a maximum capability of supplying about 100 tons. Under even the best

conditions, the operation was doomed from the start. The conditions were unfavorable for a successful airlift. The weather was atrocious and Soviet fighter, anti-aircraft, and artillery forces destroyed around 500 aircraft. Stalingrad fell and almost 100,000 German troops became prisoners of war.

One great success at aerial resupply emerged from World War Two. In the China--Burma-India Theatre, the Chinese army, acting as a force in being, forced the Japanese to maintain approximately half of their entire army in China and Manchuria. Supplies were shipped over the Burma Road, from the British held seaport of Rangoon to Chinese bases in western China. When the Japanese captured Rangoon and cut the Burma Road, the only resupply option was to transport the supplies by aircraft from India to China over the southwest Asian jungles and the Himalayan Mountain range, some of the most forbidding terrain in the world.

The resupply effort came to be known as “flying The Hump.” Starting with a few dozen aircraft in early 1942, by 1945, the young Air Transport Command had committed over 600 transports to the effort and maintained supplies not only for the Chinese but for US forces in China. US Army Air Force leaders gained experience in mounting large scale aerial supply operations, lessons and experiences which would soon be applied in Europe, half a world away.



Hump Workhorse; The Curtiss C-46 Commando.

The Berlin Airlift is Initiated

In the poker game with Berlin as the stakes, a hand was dealt to Lt. Gen. Curtis LeMay, Commander of the United States Air Forces in Europe. As it was, the hand was weak. LeMay had some 275 aircraft while the Soviets had some 4000 to put into the pot. General Clay made a decision and, without receiving permission from Washington, called LeMay and asked whether or not he could haul coal. LeMay was not dismayed and replied, "...the USAF can deliver anything. How much coal do you want us to haul." "All you can," replied Clay. Clear decisive decisions were being made by strong men from Harry Truman on down. Clay, like Truman, sensed that even though the Soviets possessed an overwhelming local military advantage, they would not raise the stakes and risk a war with the West.

The operation needed a name. The former British colonial cousins chose the colloquial "Operation Vittles." An erudite British punster came up with "Operation Plane Fare" for their part in the airborne relief of Berlin.

At the start, finding the necessary resources to deliver the goods was the problem. The RAF and USAAF managed to make thirty four flights into Tempelhof Airport, delivering 80 tons of food and medicine in four days. This was far too little.

The Operational Problems Involved in Staging an Airlift with Specific Considerations About the Berlin Blockade and Some Details About the Solutions

Eight problems needed to be solved. First, the entire effort had to be organized in such a way as to coordinate all of the disparate elements of the operation and to solve problems as they arose. The commander and planners had to be as flexible as a politician's promises.

The military also had diplomatic problems to resolve with their political masters, German civilians, and probably most difficult and frustrating, those dealing with their own varied military departments, each like a feudal fiefdom, often dominated by the ego of a rival commander.

Gen. LeMay, without delay, appointed Brig. Gen. Joseph Smith as the Provisional Task Force Commander. Operation Vittles began immediately after the Russians broke off negotiations. When it became certain that a long term effort would be needed, Maj. Gen. William Tunner, a Military Air Transport Service Deputy Commander and the leader of the extraordinary difficult but highly successful "Hump" resupply effort in World War Two was placed in charge. There is some irony in that an expert in moving cargo should have a surname which is a near homonym for the standard shipping weight of 2,000 pounds



General William "Willy the Whip" Tunner
(USAF Photo)

The second problem was aircraft. Berlin required approximately 4,500 tons per day: 3,000 tons of fuel and 1,500 of food. The Douglas C-47, the most common air-lifter, might carry around 2.5 tons. Assuming the aircraft might make six trips each day, it would require a minimum fleet of 300 aircraft to meet the quota, not counting spares to make up for grounded and lost aircraft.

The largest usable aircraft was the Douglas C-54 Skymaster. The "Four" had four times the payload of the C-47. Therefore, if it were the main aircraft utilized, the number of aircraft movements and crew requirements would radically

reduced, the problems of air traffic control would be simplified, and loading and unloading the the freighters would be faster. Tunner and his team called in C-54s from all over the world. Within three months, over 200 Skymasters were engaged in the airlift. This accounted for almost 50% of the entire USAAF fleet. The US Navy even sent two squadrons of their C-54s, which they designated as R5Ds, in from the Pacific.



The Douglas C-54 Skymaster At McClellan AFB

The third issue was crews. Each plane flew with two pilots and a flight engineer or radio operator. A minimum number of personnel would be two crews per plane totaling 1200 pilots and 600 engineers and radio men.



A C-54 analog computer used to calculate how much weight could be placed in each section of the aircraft.

Crew requirements were rationalized and special training programs were established to provide more crews. During the Airlift, reservists were recalled and the Great Falls, Montana air base operated a special 21 day training unit for the Airlift bound crews. Planes were ballasted with full loads, frequencies were the same as used in Germany, controllers followed the Tempelhof guidelines, and approaches and landing were made on runways with the same headings and lengths as those in Berlin.

Tunner had little control over personnel assignments and temporary duty, austere living conditions, and a heavy work load contributed to morale problems. Tunner had to work tactfully around the command prerogatives of fellow commanders and the conflicting interests of their commands. This task may have been one of his most difficult but he was aided by the enormous amount of good will which the relief operation engendered and very favorable publicity produced by the news organizations.

Airplane maintenance was the fourth problem. They require minor maintenance, oil changes, and a schedule of major phase checks. Maintenance requires skilled workers, tools, and facilities. With most of the US military demobilized and that the bulk of the remaining technicians stationed everywhere but Germany, serious problems arose.

Tunner's solution was to task his statistically astute staff to design a plan to rationalize the scheduling of aircraft so as to allow a certain portion of the fleet to enter maintenance status in defined intervals of time. For example, suppose ten aircraft each requires one day of maintenance every ten days. A rational schedule to allow for smooth operations would have one aircraft in maintenance every ten days and on any day, 90% or the fleet would be flying. This method has been successfully used in the China-Burma-India Theatre during the "Hump" airlift.

Mechanics were another problem. Then, the US command realized that a large pool of highly skilled former Luftwaffe mechanics were available and very willing to work. Tunner located Gen. Hans von Rohden who not only had been involved in air transport while serving in the Luftwaffe but also was fluent in English. Gen. von Rohden recruited and organized a complement of German mechanics and also translated US maintenance manuals into German.

The inadequate facilities in Germany also hampered efficient maintenance. To meet the need,

Tunner had RAF Burtonwood, a huge base near Liverpool, reactivated and staffed with mechanics brought in from the United States. The facilities were more than adequate in size and offered more amenities than the war-torn German bases. Aircraft in need of major work could be quickly flown to England for repairs and periodic inspections.

Fifth, airbases are needed from which to launch and receive aircraft. Each base requires sufficient runway length, runway strength, and ramp space to allow the aircraft to operate. Most German airfields, heavily damaged by bombs and artillery during the war were not an option.

The air heads for the US effort were situated in the western zones of Germany at Rhein-Main and Wiesbaden and the terminal was located at Berlin's Tempelhof. The British flew south from their zone of occupation into Gatow. They used a grab-bag fleet of RAF and civilian two and four engine taildraggers: Lancasters, Tudors, Hastings, and Yorks to name just a few. They also used Sunderland flying boats to fly corrosive materials like salt onto Lake Havel. When the Lake froze over, Handley-Page Halifax bombers with special cargo panniers were used instead. The land airports were first jury-rigged with pierced steel planking and then improved with hard surfaces. The rubble of Berlin provided much of the base over which the concrete was laid and local labor supplied the manpower. The French even allowed the United States to construct a new field at Tegel.



Handley Page Hastings



Avro York C1

Sixth, if you want to fly supplies, they must be delivered to an airhead and loaded and then unloaded when delivered. The work crews which loaded and unloaded the aircraft were recruited from the German population. The promise of employment, a hot meal in the middle of day, and opportunities for scavenging attracted a very enthusiastic labor force. Unloading time was reduced to under a half hour and a record set when a ten ton shipment was removed from a C-54 in five minutes!

Some of the commodities shipped required special handling. Coal and flour were both packaged in sacks but the dust from both of these necessities could lead to serious maintenance problems. The coal dust was so valuable that it was swept out and repackaged for heating fuel. Some very large items required considerable amounts of ingenuity to ship. Bulldozers were cut into segments and then welded back together in Berlin. A few of the brand new Fairchild C-82 Flying Boxcars transported some bulky items. Flight Refueling, Ltd., a British company founded by the great long distance flyer, Alan Cobham, used converted Lancasters to ferry gasoline, kerosene, and oil into Berlin.



Under the tutelage of Bill Maroon, retired USAF navigator and docent at Dover AFB's Air Mobility Command Museum, CTWG Cadets view artifacts of the Airlift.

In order to speed up movements, crews did not leave the vicinity of their aircraft during loading and unloading. Food and snacks were brought to the plane and operations would deliver the clearance and manifest documents directly to the aircraft commander.

Seventh, hostile acts by the enemy will impede any operation and the Russians, although not overtly hostile, were obstructive. As Kennan had pointed out, our erstwhile allies, the Russians, had overriding interests which were diametrically opposed to those of Great Britain and the United States. Consequently, in addition to their ground blockade, they, engaged in aerial provocations. They staged anti-aircraft practice in close proximity to the air corridors used by the airlift. At night, searchlights were used to illuminate the supply planes in an effort to dazzle and disorient the pilots. Tunner stated that the nastiest of their acts was the posting of poison pen letters to the crews which falsely reported the infidelities of their wives. Some of these letters were mailed from the United States!

The eighth problem, European weather, seriously hampered air service to Berlin. Rain and fog are characteristic of central European weather and can easily disrupt air operations. Central Europe is a

continental temperate climate and average 90 days of fog each year.. In the vicinity of Berlin, one can expect pleasant summers but June and August are the rainiest months. Continental winters are characterized by bitter cold and snow.



Diagram Illustrating the Four Occupation Zones and the Air Corridors to Berlin

The solution was to run the entire operation under Instrument Flight Rules, in all weather, using an invariant schedule of flight and parameters. First, two inbound flight corridors were established into Berlin: one from the British zone in the northwest and one from the US zone in the southwest. Departures were dispatched through a central westward corridor with US and British aircraft changing course and returning to their home bases after departing the western end of the corridor.

Altitude assignments and aircraft separation criteria were established. Aircraft were assigned for take-off in blocks with the slower C-47s preceding the faster C-54s. Aircraft were separated by three minutes in time and as little as 200 feet in altitude. Landing minimums were a four hundred foot ceiling and one mile visibility.

Anything less and the pilot was required to fly a missed approach and return to the originating base via the central corridor. Standardized procedure, a systematic schedule, and a precise rhythm were established. In Tunner's own words:

It is this beat, this precise rhythmical cadence, which determines the success of an airlift. This steady rhythm, constant as the jungle drums, became the trade-mark of the Berlin Airlift, or any airlift I have operated. I don't have much of a natural sense of rhythm, incidentally; I'm certainly no threat to Fred Astaire, and a drumstick to me is something that grows on a chicken. But when it comes to airlifts, I want rhythm.

And regimentation. I insisted on complete regimentation in every aspect of flying for every pilot, co-pilot, and radio operator. There was only one best technique for each flying maneuver—take-off, climb out, cruise, descent, and landing. No variations.

At maximum effort, the Tempelhof runway recorded a take-off and a landing every 90 seconds, 24 hours a day.

Part II, next week, will present three anecdotes about personalities and incidents during the Airlift, the record setting "Easter Parade," subsequent notable airlifts after Berlin, and a conclusion.

**A CONTINUATION OF OUR
CELEBRATION OF THE 100TH BIRTHDAY
OF NAVAL AVIATION**

Aircraft Carriers



USS Langley, CV-1) "The Covered Wagon" first US carrier converted from collier Jupiter.



USS Shamrock Bay, CVE-8, an escort carrier. They were small and slow and served as convoy escorts and with sub hunter groups.



USS Midway CV-41, Fleet Carrier

A dramatic incident occurred on her deck on 29 April, 1975 when Maj Bun-Ly of the SVNAF landed a two seat Cessna O-1 with his wife and five children.



USS Forrestal (CVA-59) and Saratoga (CVA-60) await final disposition at Newport, R.I.



USS Carl Vinson (CVN-70), third ship in the nuclear powered Nimitz Class



USS Ronald Reagan (CVN-75)