# 54 AIR REFUELING SQUADRON


**MISSION**

The 54 Air Refueling Squadron provides initial aircrew qualification training in the KC-135 for pilots, navigators and boom operators. Safety, airmanship, operating procedures, regulations, instructional techniques, aircraft systems and capabilities are taught to more than 600 students and instructor candidates annually, preparing them for ground and in-flight duties.

The squadron also teaches the KC-135 Central Flight Instructor Course. The course provides the Air Force with highly qualified KC-135 instructors.

**LINEAGE**

54 Transport Squadron constituted, 30 May 1942
Activated, 1 Jun 1942
Redesignated 54 Troop Carrier Squadron, 4 Jul 1942
Redesignated 54 Troop Carrier Squadron, Heavy, 20 Jul 1948
Inactivated, 5 Mar 1949
Activated, 20 Sep 1949
Discontinued and inactivated, 25 Jun 1965
Redesignated 54 Flying Training Squadron, 14 Apr 1972
Activated, 1 Oct 1972
Inactivated, 1 Apr 1997
Redesignated 54 Air Refueling Squadron, 1 Jan 1998
Activated, 16 Jan 1998

**STATIONS**

Hamilton Field, CA, 1 Jun 1942
Bowman Field, KY, 19 Jun 1942

Florence, SC, 3 Aug-17 Oct 1942
Elmendorf Field, AK, 15 Nov 1942-5 Mar 1949 (detachment operated from Rhein-Main AB, Germany, 2 Jul-26 Sep 1948, and Fassberg RAF Station, Germany, 26 Sep-30 Nov 1948)
Elmendorf AFB, AK, 20 Sep 1949
Donaldson AFB, SC, 23 Jul 1956
Hunter AFB, GA, 1 Apr 1963-25 Jun 1965
Reese AFB, TX, 1 Oct 1972-1 Apr 1997
Altus AFB, OK, 16 Jan 1998

**DEPLOYED STATIONS**
Rhein-Main AB, Germany, Feb-19 Aug 1959

**ASSIGNMENTS**
64 Transport Group, 1 Jun 1942
315 Transport (later, 315 Troop Carrier) Group, 11 Jun 1942
Fourth Air Force, 23 Oct 1942
XI Air Force Service Command, 15 Nov 1942
Eleventh Air Force (later, Alaskan Air Command), 10 Oct 1944-5 Mar 1949
Alaskan Air Command, 20 Sep 1949
5039 Air Transport Group, 1 Jan 1951
Eighteenth Air Force, 23 Jul 1956
63 Troop Carrier Wing, 1 Jul 1957
63 Troop Carrier Group, 8 Oct 1959
63 Troop Carrier Wing, 18 Jan 1963-25 Jun 1965
64 Flying Training Wing, 1 Oct 1972
64 Operations Group, 15 Dec 1991-1 Apr 1997
97 Operations Group, 16 Jan 1998

**ATTACHMENTS**
Troop Carrier Group [Prov], 1 Jul 1943-18 Feb 1944
United States Air Force in Europe, 2-29 Jul 1948
Airlift Task Force [Prov], 29 Jul-30 Nov 1948
57 Fighter Wing
63 Troop Carrier Group, 23 Jul 1956-7 Oct 1959

**WEAPON SYSTEMS**
C-60, 1942-1944
C-47, 1942-1949
C-54, 1946-1949
C-82A, 1949
C-54, 1949-1952
C-82, 1951-1952
C-124, 1952-1965
T-38, 1972-1997

KC-135

**COMMANDERS**

Maj William G. Harley, 1 Jun 1942
Maj Luther B. Matthews, 22 Jan 1943
Maj Joaquin P. Hawley, 20 Sep 1943
Lt Col Louis B. Grossmith, Jr., 4 Feb 1944
Lt Col William B. Wright, Oct 1946
Lt Col James N. Sammons, Nov 1946
Capt James C. Crilly, 30 Jun 1948
Lt Col Harry N. Tower, 10 Aug 1948
Capt James C. Crilly, 3 Sep 1948
Capt Howard W. Knudson, Sep 1948
1lt R. Barney Carlson, Unkn-12 Jan 1949
1lt James D. Jelley, 13 Jan 1949-Unkn
Capt William H. Hare, Unkn-22 Nov 1949
Lt Col George P. Basel, 23 Nov 1949
Lt Col Jack W. Streeton, 27 Oct 1951
Lt Col Joseph L. Harris, 1955
Lt Col F. Cable Steinemann, Apr 1958
Lt Col J. L. Honir, Jul 1958
Lt Col Robert A. Hamrick, Oct 1958
Maj Harry C. Leyser, Iii, 21 Sep 1959
Maj Victor E. Fienup, Jan 1960
Lt Col David B. Smith, Feb 1960
Lt Col Victor E. Fienup, 8 Jul 1961
Lt Col David B. Smith, 25 Apr 1962
Lt Col James S. Liptak, Jul 1962
Maj F. L. Foiles, Dec 1962
Lt Col Foy B. Frost, Jan 1963
Maj F. L. Foiles, Apr 1963
Lt Col Ned G. Munsey, May 1963
Lt Col James S. Liptak, 4 May 1963
Lt Col William E. Yeates, 29 Nov 1963
Lt Col Carl J. Roeser, 15 Mar 1965
Maj Robert D. Paul, 1 Apr-25 Jun 1965
Lt Col R. A. Ingram, 1 Oct 1972
Lt Col James C. Gibler, 1 Jul 1974
Lt Col Wesley K. Blanchard, 2 Sep 1976
Lt Col Eddie C. Norrell, 6 Apr 1977
Lt Col Barry S. Brower, 17 May 1978
Lt Col James W. Mcintyre, 16 Feb 1979
Lt Col Donald W. Neff, 8 Feb 1980
Lt Col David A. Warner, 14 Dec 1981

Lt Col John D. Vrettos, 4 Jun 1982
Lt Col David R. Lloyd, 2 Mar 1984
Lt Col Elvy Pettit, Jr., 17 Sep 1984
Lt Col David S. Taylor, 15 Nov 1985
Lt Col David C. Turner, 15 Sep 1986
Lt Col John W. Dalton, 29 Jun 1987
Lt Col Gary J. Bundy, 18 Jul 1989
Lt Col Stanley Gorenc, 14 May 1991
Lt Col Terence L. Gilbert, 18 Jun 1992
Lt Col Robert A. Herris, 10 Jun 1994
Lt Col Mark V. Gallagher, 30 Apr 1996

**HONORS**
**Service Streamers**

**Campaign Streamers**
World War II
Aleutian Islands
Air Combat, Asiatic-Pacific Theater

**Armed Forces Expeditionary Streamers**

**Decorations**
Air Force Outstanding Unit Awards
1 Jul 1957-10 Dec 1962
1 Jan 1973-31 Dec 1974
30 Apr 1981-29 Apr 1983
1 Apr 1984-31 Mar 1986
1 Apr 1988-31 Mar 1990
1 Oct 1995-[1 Apr] 1997
[16 Jan]-30 Jun 1998
1 Jul 1998-30 Jun 1999
1 Jul 1999-30 Jun 2000
1 Jul 2000-30 Jun 2002
1 Jul 2002-30 Jun 2004
1 Jul 2004-30 Jun 2006
1 Jul 2006-30 Jun 2007
1 Jul 2007-30 Jun 2008
1 Jul 2008-30 Jun 2009
1 Jul 2009-30 Jun 2010
1 Jul 2010-30 Jun 2011
1 Jul 2011-30 Jun 2012
1 Jul 2013-30 Jun 2015

1 Jul 2016-30 Jun 2017
1 Jul 2017-30 Jun 2019
1 Jul 2019-30 Jun 2021

**EMBLEM**



54 TCS emblem: Over and through a light turquoise blue disc, border black, a caricatured beaver brown and tan, leaping through the air, holding an aircraft motor with whirling propeller under each foreleg, and carrying two caricatured paratroopers and two boxes of freight tan and brown, on his back, proper; small speed indication dark brown and white in base point. (Approved, 18 Jul 1956; 20 Feb 1973; modified, 20 Jan 1998)






**MOTTO**
EAGER BEAVERS

**OPERATIONS**

The 54 Transport Squadron predecessor of the present 54 Troop Carrier Squadron was activated at Hamilton Field, California on I June 1942. Original unit commander was Captain William G. Harley. Staff Sergeant Paul M. Pugh was acting First Sergeant. Private Arthur W. Yess, was the third member of the original organization.

The apparent purpose for its organization was to aid in the nationwide military expansion then under way. Just two days after squadron activation the Japanese had attacked two widely separated objectives-Midway island in the Pacific and Dutch Harbor, Alaska, USA. That they were not successful was due to a few far-sighted individuals which enabled us to meet the attack and break the potential threat of a west coast invasion. The stage was set-the properties and actors were to be cast-a new group was to participate in what was to be the greatest all-out war effort the world has ever known.

On the 19th of June 1942 the squadron was transferred to the Troop Carrier Reception Center at Bowman Field, Louisville, Kentucky. During the last week in June, Privates were assigned giving a total strength of one officer and seven enlisted men. While at Bowman Field the squadron became a part of the 315th Troop Carrier Group, consisting of the 54, 43rd, 33rd and 34th Troop Carrier Squadrons.

Base, Florence, South Carolina, for further organization an additional training. Captain Harley became Major Harley as the squadron continued to increase its staff of specialists. It was during this time that the flying personnel of the squadron came together (pilots were second lieutenants or staff sergeants) and began their mutual association that w.as to lead them to adventures over land that many had known merely as a place on the map. The cast was being assembled-the play began to take shape. The pilots were "freshmen" fresh from transition school, their silver wings like a doctor's degree gave them license to practice.

The crew chiefs and radio operators were likewise a shade of green, their schooling had been through now came the opportunity to put that training into actual practice to give the government a return on their investment, their knowledge as mechanics and radio operators. With the expanding organization six C-47's became a part of the squadron and as a member became almost human in their character and behavior.

In the language of the airmen the "paddlefoots" began to arrive in September. These vital officers and men although not wearing wings of flying personnel were just as important for without the clerks, cooks, mechanics, engineering, supply, adjutant and parachute inspectors, and hosts of others the old expression "Keep Em' Flying'" would be hollow and devoid of meaning. Squadron strength at the end of September was as follows: Major Harley, 3FLT's., 27 SL T's, Master Sergeant, Ist Sergeant, Technical Sergeant, 7 Staff Sergeants, 8 Sergeants, 16 Corporals, IS Private First Class, and 161 Privates, a total of 213 enlisted men and 31 officers.

The aircrew members and a portion of the ground personnel were, assigned on I October 1942,

to Lawson Field, Fort Benning, Georgia, for temporary duty. The assignment consisted of flying; training of paratroops in practice jumps and maneuvers.

The Training period originally scheduled was suddenly canceled on the 10th of October by orders to report back to Florence. During the month of July the squadron was slowing building up its personnel.

The 54 Troop Carrier Squadron was assigned 13 new C-47 airplanes on 12 October 1942 and ordered by the First Troop Carrier Command, located at Stout Field, Indianapolis, IN. The Ground Echelon was to move toward Seattle, Washington, while the Air Echelon to proceed to Odgen Air Deport, Odgen Utah, via Mobile Air Depot, Mobile, Alabama. The Air Echelon consisting of 13 airplanes, 27 officers and II 0 men prepared for take-off on 15 October 1942.

Ferry tanks in each airplane were removed at Mobile and the planes proceeded to Hill Field, Odgen, Utah. The planes left for Odgen with the exception of Major Harley's which went to Stout Field, for additional instructions. At Odgen all the planes were winterized for northern operation and instructions given for cold weather operation of aircraft.

With the rumors growing in intensity as to the final destination of the squadron. it having become evident that it was to be a cold assignment, the Air Echelon continued to Gore Field, Great Falls, Montana. As the pilots took-off for Great Falls on October 1942, little did they realize that they soon were going to get a taste of conditions which in the course of much time and more experience they would begin to accept as normal flight. Being used to contact flying and CAVU weather the pilots of the 13 airplanes were not prepared for the instrument conditions they found themselves flying in .as they proceeded to Gore Field. Flying by reference to flight instruments only or the use of the radio range signals as an "aerial highway" were still in the future.

Great Falls was closed the squadron turned back but now Odgen was closed too! The chips were down-an alternate must be found or an attempt to fly out the weather. The alternate was the solution so in a cow pasture near Whitehall, Montana, 13 C-47's came out of the sky to land in a crosswind and "sweat out" the weather. The planes were grounded for two days but finally arrived at Great Falls on I November 1942.

Ten days were spent at Great Falls during which time arctic equipment and clothing was drawn. Airplanes had additional winterization in the form of snow tires, wing covers and check of hydraulic systems. The city of Great Falls provided a last fling before leaving the states. With the final destination still unknown, Edmonton in Alberta, Canada was the next stop. As the pilots were briefed for the run through the Yukon regions of Canada and the Alaska portion they became increasingly skeptic of the route for at that time there were just one or two range stations and the same number of small landing fields.

After some deliberation it was decided that each plane should have an experienced pilot for the last leg to the permanent station, Elmendorf Field, Alaska. With fields being small it was

necessary to proceed in flights of three to four airplanes. After a close-up view of the wilds of Alaska and Canada with its rugged peaks, uninhabited valleys and hundreds of lakes the last planes arrived at destination on 19 November 1942. With the long flight just completed pilots of the squadron now had an average of 300 to 400 hours flying time. Although lacking in time each pilot was not lacking in enthusiasm and willingness to learn.

The Ground Echelon left Florence; South Carolina on 17 October 1942, proceeding by rail to Fort Lewis, Washington. Arrival date 23 October 1942. Fort Lewis provided ground training and the necessary winter equipment and clothing. Departing by boat on 6 November the Ground Echelon arrived at Elmendorf Field on 15 November 1942. The Air and Ground Echelon were joined and placed under the command of the Commanding General, Eleventh Air Force Service Command, APO 942, Seattle, Washington.

The task at hand was obvious-to operate these 13 C-47's in what had been termed the "worst weather in the world", to fly vital supplies, equipment, and personnel where it was needed. Supplies were needed everywhere-weather instrument for Port Heiden, small oil stoves for Cold Bay, medicinal items for Atka, high priority radio for Adak, Naknek had need of vital plane parts, personnel were necessary for the successful operation of Umnak, as were men and equipment for those small remote weather, radio, and radar station spotted at strategic points along the Alaska peninsula and Aleutian "chain".

The Japs were firmly entrenched on Kiska and Attu, their float type Zero's still demanded respect of the air planes, but theirs was to be a losing battle-the American offensive was starting and it was in this here to for little known, much disregarded strip of American territory that the 54h Troop Carrier Squadron was to play its important role as part of a united team to defeat the Japanese and drive them from their first foot mold on American soil.

To the majority of the personnel of the squadron Alaska was a misrepresented "sore thumb “a perpetual icebox situated at one extremity of North America. The Gold Rush days had been portrayed in the motion pictures, the books of Jack London and Rex Beach had been read, the Federal Government project the Matanuska valley was remembered as vague headlines of a few years ago. Unlike the Japs little was known of the modern Alaska-the unlimited natural resources, the fishing industry, the warm summers and the undeveloped land that made up the Territory of Alaska, USA.

Personnel were surprised to see theatres, modern barracks on the Post. Approximately 25% of the squadron lived in tents for the first three months after arrival until additional barracks facilities were available. Crew members were surprised to see the modern hangars where it would be possible to work indoors to do the maintenance work so necessary to the successful operation of any planes. The town of Anchorage came as an additional surprise for it offered many of the conveniences of similar towns in the States, something remote in the minds of many when they thought of "overseas" and Alaska.

The ultimate results of the task at hand, although never in doubt would require sacrifice and

steadfast attention to the problems .at hand with a grim determination that obstacles would be surmounted and final victory complete. Typical "Fly only by visual contact". Such a statement by a pilot of the 54 Troop Carrier Squadron seems foreign and inconsistent when an examination of the record indicates that in May 1944 this same squadron flew a total of 1,794:05 instrument flying hours or 26% of the total pilot flying time.

The date tells the story of young men just out of flying school, young men whose silver wings still had their original luster, a story of determination and a gradual winning battle over the problems of Aleutian Island weather and cold weather operation of aircraft. American Forces occupied Adak on 30 August 1942; the 12th of September a runway suitable for bombers was ready for use. The combined efforts of the engineers, infantrymen and artillerymen had drained a lake and completed the air strip in record time. It was 17 November 1942, just two days after arriving at Elmendorf Field that the first C-47 of the 54 Troop Carrier Squadron took off for Adak.

The history of the Aleutian weather was in complete as there had been practically no peacetime reporting stations. Weather stations were rapidly being established and sequences being planned. Icing .and the flying of an airplane solely by reference to flight instruments were vague phrases, problems that in time were to be met and conquered. Maps were noted for their inaccuracies, heights of peaks such as Pavlof and Shishaldin were subject to question. Radio facilities were meager-Anchorage and Naknek had radio range stations but west of Naknek facilities were still part of that all important army word "logistics".

Lt. Jack Turner was the first 54 pilot to make the trip to Adak or Longview as it was known at that time. The time for the first round trip was seven days; quite a contrast to the present trip of about 16 hours. But we must remember that the year is 1942 and contact flying is the rule, instrument flight is taboo and the pilots are not interested in the amount of icing in the clouds - or if the terminal weather is contact enough for a landing. Rather the school of thought is to stay below the overcast and if this is not possible to stay on the ground.

It is a paradox that the most hazardous part of flying the Alaska-Aleutian route is not, what would be the popular conception, the islands themselves, but the route between Anchorage and Naknek. A glance at a map will readily explain the reason. A direct route between Anchorage and Naknek takes you right between two of the higher peaks in Alaska.

A route less direct but one that offers advantages of lower terrain is to continue out the Kenai Peninsula to Homer and thence across Cook inlet near Augustine Island over the series of mountains south of Iliamna Lake. Peaks of these mountains are over 4,000 feet in height. It is little wonder that many a ship turned back after starting out for Anchorage contact and continuing out the Kenai Peninsula only to find the overcast hovering close to the waters of Cook Inlet and obscuring the peaks of the "hard centered clouds" west of Homer.

These short trips became common. in the winter of 1942-43 and -often the remark "Is the Kenai patrol flying today?" would be heard in the pilots' lounge as they watched the operations

board. In the early days of the history of the Squadron and lasting until the fall of 1943 the weather in Bruin Bay Pass was often a deciding factor as to an airplane proceeding west out of the Aleutian islands. Bruin Bay is located west of Augustine Island in Cook Inlet. The Pass offered a means of flying contact at low altitude near the series of mountains between Bruin Bay and Naknek.

In the early days of operation in this theater a weather station had been established at Bruin Bay to communicate hourly information as to the status of weather in the Pass. The report "Pass closed" at the end of the weather sequence was sufficient to keep planes grounded at Elmendorf until such time as the weather improved to allow flying by visual reference to the ground. Flying west from Naknek the route continues out the Alaska Peninsula to Port Heides and Cold Bay. H was these bases that played so important a part in the defeat of the Japanese attack on Dutch Harbor on 3 June 1942.

Provided the weather is clear as we continue west we can see Unimak Island with its Shishaldin Volcano and Dutch Harbor with Nakushin Volcano. Umnak Island, the site of Fort Glenn, is a few miles west of Dutch Harbor. The island of Four Mountains, Sequam and Atka are passed before we reach the largest base on the "Chain:" Adak.

Climbing out the NW leg of the Adak radio range to flight altitude, a heading of 270 degrees is placed on our magnetic compass. This heading will cause us to pass north of Tanaga island, Gareloi Volcano, Semisopochnoi Island and the North leg of the Amchitka radio range. Kiska is sighted off our left wing and 35 minutes later we pass near Buildir Island. We likewise pass over Shemya and then to Attu, the last island of the Aleutian "Chain" and just 750 miles from Japanese territory.

The contact theory continued in force for the Winter of 1942 and the early months of 1943. Early Flight Reports as compiled by the Intelligence Department of the Squadron are replete with numerous recommendations to fly by visual reference only and not to attempt to fly through or on top of the overcast. Pilots making these recommendations have come a way since those days of 1942-43. Several are still in the Squadron and are now not only qualified instrument pilots but holders of Green instrument Ratings.

The transition from Contact to instrument flying w.as not an abrupt change-rather an evolution that came about through greater confidence on the part of the pilots themselves in themselves and in the airplanes, an added understanding of the problems of Aleutian weather combined with more accurate forecasting and speedier assimilation of weather information, increased radio range and communication facilities plus a determination that the Aleutian. weather, like the Japanese, could and would be defeated.

With the approach of the summer months of 1943 the hours of instrument time began to show marked increase. It was still good procedure to bypass Mt. Iliamna by flying contact through Bruin Bay Pass, so weather information compiled at this spot was studied carefully before flight were made. Over the top and actually flying through the overcast are becoming less of a

mystery and no longer is the phrase "We can top it at 12,000" an idle effort at conversation but a popular altitude and attitude. The earthbound tendency is becoming less the accepted practice as the pilots look upward to better flying conditions and a greater degree of safety.

One of the determining factors in the instrument transition was an order issued by Lieutenant Colonel Patrick R. Arnold, Commanding Officer of the Ist Provisional Troop Carrier Group. It was Lt. Col. Arnold's desire that 50% d the total flying time be Hood Time. Actual instrument time could be used as part of the total in place of the hood or simulated instrument conditions.

By means of this ·order it was the Colonel's wish to illustrate to the pilots that instrument flying was not a difficult technique to master but something that required constant practice and as a result of such practice a confidence in the ability of the pilot and plane to fly under conditions where the ground would not have to be seen between departure and destination.

Colonel Arnold would often take off in his plane from Elmendorf Field at midnight and fly to Adak in time to wake up his pilots and get them out to fly in the weather-good or bad. By this constant' example he showed that it could be done and ·overcame the natural aversion of the pilots to fly when ceilings were low and visibility was restricted.

By the fall of 1943 the instrument transition was almost complete. Monthly instrument time after the Allied occupation of Kiska on 15 August 1943 increases rapidly and continues to do so even through the winter months when the weather on the Aleutians can keep all planes on the ground for several days at a time. Each month of 1944 record an increase-a new record-in total pilot and instrument hours. A record that has been completed by those same pilot whose wings no longer have that original silver luster but the tarnished appearance of a difficult job well done.

It was in August 1942 at Florence Army Air Base, South Carolina that the cadre composing the 54 Troop Carrier Squadron, 315th Troop Carrier Group, began to blossom into a full strength squadron. Prior to this date, the Squadron had been without· airplanes and the pilots had to borrow ships from other organizations for training flight time. By 7 September 1942 the. Squadron had acquired 13 new Douglas C-47 airplanes and most of its enlisted personnel. At this time Lt. William A. Klamm, Squadron Engineering Officer, organized the engineering personnel and made the "line" a functioning unit.

Nearly all the engineering personnel were fresh out of AM school or lacked practical experience. The arduous task of training the crews fell to a few key personnel w1th considerable experience. T /Sgt. Emil E. Krazinski, a veteran from Middletown Air Depot, took over the reins as line chief, S/Sgt. Gordo."' G. Peters tripled as flight chief, inspector and instrument specialist, S/Sgt. Ray Teeple doubled as flight chief and crew chief and several of the crew chiefs rendered considerable aid in training the green mechanics.

With a full complement of airplanes and pilots in the Squadron, training missions got under way and aircraft maintenance and inspection became a reality. This caused Tech Supply to become

the number one problem child of Engineering for there w.as a complete absence of the tools, equipment and supplies necessary to accomplish the required maintenance. For several days all maintenance was accomplished with the tools of one crew chief's kit which was borrowed from the base on a M/R after considerable wrangling.

As a hangar was not available, the maintenance work had to be accomplished during the daylight hours in the field. Dust proved to be troublesome to maintenance and the hot sun was irksome to the personnel. Between the heat and bad landings made by "green" pilots, considerable trouble was encountered with landing gear bungee failures, the replacement of which entailed considerable time and labor. At first a 25 hour inspection was an all day job but the maintenance crews were eager and soon became fairly well acquainted with the routine inspections thereby saving time and improving efficiency.

In these days equipping Tech Supply was a difficult task for the C-4 7 was a relatively new airplane to the Army and there wasn't any backlog of spare parts in the supply depots and with the C-47 being a production airplane only a small quantity of parts were diverted for stock. Consequently it was first necessary to locate the where about of available spare parts and then to try and gel' them from the issuing agency on an inadequate priority. Similar trouble was encountered in obtaining OEL equipment which consisted largely of controlled items. Operations, Engineering and Supply consolidated their efforts and it wasn't long before Supply began to swell with new items.

This was accomplished by having Operations send the pilots going out on cross-country training to the locations of various supply agencies such as Middletown Air Depot, Mobile Air Depot, Charlotte Sub Depot, Pope Sub Depot, etc. Engineering fortified Supply with numerous requisitions, work orders and stores charges and Supply wouldn't dare return from a mission without at least one item. To add to the supply difficulty, there was a Continuous feud between the squadrons of the Group. This was caused by the difference of priority ratings of the individual squadrons which changed from day to day.

This made possible the acquisition of supplies held by one squadron to another if there priority was higher despite the fact the other squadrons did all the work in obtaining the supplies. The member of the priority rating held by the squadron was also a good rumor barometer The higher the priority was, the "hotter" (for overseas) the squadron w.as, and in turn the number of rumors.

The changes in squadron priority ratings also lead to "dog robbing" feuds (the practice of stealing parts from a serviceable airpla.ne of another squadron. Fortunately, the 54 Troop Carrier Squadron always managed to hold its own. By the end of September, the organization was functioning reasonably well. Training, supply and other squadron problems were based on the "Bolero" project-a word that signified movement to and operation in England. The squadron had been waxing hot with a number two priority on the supply barometer. Then it happened again, the priority dropped to number five and greatly alleviated the existing tension. The thrill was not gone for long, however, for on I October 1942 the air echelon preceded to

Lawson Field, Fort Benning, Georgia for thirty days detached service on a mission of training with paratroops.

At the end 0f I0 days the mission was brought to an abrupt halt and the air echelon returned to Florence. The mission was not completed, but it afforded a wealth of experience and keen insight of future necessifi.es to all the participating personnel.

Thirteen new C-47's which had been ferried up from Mobile Air Depot were already at Florence upon the return of the air echelon. The ensuing days seethed with activity. The old airplanes had to be serviced, inspected and checked for transfer. The new airplanes required a similar procedure. Supplies and equipment had to be packed, marked and weighted, the airplanes loaded and a thousand odd tasks accomplished. For this was it; moving out for overseas, destination unknown.

On the morning of 15 October 1942 the squadron was ready to move but there was the usual fly in the ointment. The pilots didn't want to fly airplanes with the para-rack assemblies installed as they not only added weight but reduced the airspeed considerably. Radiograms, teletype messages and telephone calls started to fly. Permission was obtained to leave the para-racks behind.

Thee had no sooner been removed when another message was received rescinding the order. On again went the para-racks. With another message received, off they come again, then on again, etc. After about the fifth trial, not only were the mechanics paid off, but everyone else, so the para-racks were finally stowed as cargo, the disgust and inconvenience of everyone. It was late in the afternoon when the Squadron finally departed, but somehow every ship arrived at Mobile Air Depot safely.

At Mobile the first 25-hour inspection on the new airplanes was completed and the eight ferrying fuel tanks were removed. The fuel systems were also checked for compliance with technical orders making the ships suitable for use with aromatic fuels. The squadron then proceeded on the 16th of October 1942 to Bowman Field, Kentucky, to Lincoln Army Air Base, Nebraska on 17 October and finally arrived at Hill Field, Ogden, Utah on the 18th.

It was at Ogden Air Depot that the major portion of the winterization, was to be accomplished. The depot had orders to move the squadron out at the earliest possible date. Consequently the Depot Engineering Officer made arrangements with the Squadron Engineering Officer to have a large portion of the work accomplished by the Squadron mechanics. Each airplane had a 50 hour inspection, spark plug change and miscellaneous installations accomplished by the Squadron personnel.

The major winterization modifications 3 were accomplished by the depot personnel with the Squadron mechanics assisting. Everything proceeded as smoothly as could be expected for about the first six days. Real trouble was precipitated when some green feather merchant (a civilian depot employee) ruined, an engine on a runup check and another damaged an elevator

which necessitating changing both.

Supply was kept busy and obtained numerous items by means of diplomatic skill. Emergency drinking water was procured by local purchase from a nearby cannery. Shotguns were obtained similarly. Personnel were equipped with winter flying clothing and numerous items of emergency equipment were obtained for the airplanes as well as tools, spare parts and miscellaneous equipment In their haste to move the Squadron out, the Depot did not take time to properly manufacture wing, empennage and propeller covers, partially because the correct material wasn't immediately available but mostly because it required too much time and labor to fabricate them.

As a result, 50% of the covers were damaged by wind beyond practical use and repair even before leaving Ogden. But the Depot was now concerned about this, it's only interest being in getting rid of the squadron as soon as possible. Thence final preparation were made to move on. On 30 October 1942 the Squadron was cleared for Great Falls, Montana from Ogden in weather conditions requiring more skill and experience then the green pilots could be expected to have. After flying through rough air for some time, the Squadron ran into a blinding snow flurry and were forced to land on a cow pasture emergency field near Whitehall, Montana.

There were many thrilling moments as each plane landed on the slippery ow pasture in a cross wind, some nearly ground looping, others bouncing high or skidding toward dangerous terrain. Tires and landing gear assemblies were inspected and the planes moored. After being weathered-in for two nights, the Squadron took off and arrived at Gore Field, Great Falls, Montana on I November 1942.

Gore Field was the final winterization and overseas staging point. The airplanes were equipped with snow and ice tread tires and winter hydraulic fluid. The inertia starters were dissembled, modified, winterized and reinstalled. Tailored pualins were obtained and the substitutes furnished by OAD ditched. Each plane was supplied with a I000 rounds o0f .45 caliber ammunition, 300 rounds of .30 caliber ammunition, skis, snow shoes, ski poles, bindings and a jeep heater (Stewart-Warner, type D-1). Personnel were equipped with arctic clothing and Supply completed filling the OEL and other miscellaneous requirements.

The airplane crews got along surprisingly well with the feather merchants here, probably (ha!!J because they were all women. Great Falls proved to be an excellent. I0 November 1942 is a red letter date, for on this day the Squadron crossed the border on its way to overseas duty. The first step was Edmonton, Alberta, Canada where the crews had their first real initiation to arctic operation. Several planes developed leaky brakes and cowl flaps, struts went flat on others, some iced their spark plugs, and jeep heaters, tire insulators, wing cover and similar equipment necessary to winter operations had to be used.

At this point the Squadron obtained the help of experienced ATC and/or Ferry pilots refused to fly the airplanes with the accumulated 29000 to 30000 pound gross weights. Hence it was necessary to leave part of the load behind and return for it at a later date. Jeep heaters, para-

racks, the occupants of one plane and other miscellaneous equipment of considerable weight were dropped for the time. The remainder of the trip was made in small flights of two or three airplanes each. All 13 planes came up the "interior route" to Fairbanks, Alaska, and thence to Elmendorf Field, Anchorage, Alaska, the ultimate destination. The last airplanes arrived safe and sound on 19 November 1942 but not until after having first overcome numerous mechanical difficulties encountered in the bitter cold of the "Interior".

Engineering promptly set up shop in a modern hangar shared with the 42nd Troop Carrier Squadron at Elmendorf and prepared for operation of the airplanes up and down the Aleutian "Chain." The task ahead was surveyed with considerable awe and attacked with undying determination. The first trouble to concern everyone who had to fly in the airplanes, whether, pilot, mechanic, radio operator, passenger or others was the bitter cold. The airplanes were equipped with a steam heating system which derived its heat from the engine exhaust The system proved to be very unsatisfactory for arctic operation.

The system had to be filled with hot water immediately prior to take-off but even this was no assurance the system wouldn't freeze up before the plane was off the ground. In the event it didn't freeze before take-off was accomplished, the water capacity was insufficient to last on the long trips made. The system was also subject to freezing in flight, especially if the plane made any long glides or descents. In all probability the system is thermodynamically impossible at very low temperatures in as much as the only heat available to keep the water from freezing in the return line from the radiator to the boiler is its latent heat.

To prevent this mixture of alcohol and water were tried with varying degrees of luck, but the fumes from the alcohol made everyone sick. This was greatly alleviated by installing a vent line from the vapor pressure relief valve to the outside of the airplane. The next improvement was an interior filling system which was necessitated by rapid expenditure of alcohol and water, this also worked to a minor degree, but as alcohol has a very low latent heat capacity, insufficient heat was obtained to warm the airplane even though the system was operating.

Because the time element required for successful operation of the heater was nearly impossible under the operating schedules and the replacement of frozen and blurted lines consumed so much time and labor, further attempts in using the steam heating system were dropped. Heat is essential to aircraft operation a well as to life all the colder seasons of the year in the North. The bases on the Aleutian "Chain" were fairly new and part parts for the airplanes and field equipment was unobtainable.

This necessitated carrying a large amou.n.t of equipment and supplies in order to operate. Hydraulic fluid, anti-icing fluid, airplane covers, brakes and cowl flaps hoses and spark plugs are but few of the parts carried. The jeep heater, a portable gasoline engine heater, had to be carried on each plane to heat the engines prior to starting at the outlying bases. The heat was not only. necessary to accomplish starting the engine but to prevent engine accessory drives from shearing and oil coolers from bursting. Because the steam hating system could not be operated satisfactorily, the jeep heater was assigned the dual role of starting planes on the

ground and heating them in flight. The installation was accomplished by extending and venting an airtight exhaust stack from the jeep heater motor to the outside of the airplane through a port in the window. This system worked quite successfully for several months. But this turned out to be the incorrect answer for jeep heater carburetor were not designed to operate at varying altitudes. Because of the improper carburetion mixture, a heater caught fire during flight and had to be thrown overboard into the sea. That ended the heat in airplanes for the remainder of the winter.

At that time winterization of aircraft had not been extensively developed and the principle of operation depended more on preventative methods than on mechanical combatants. Preventative methods actually had little effect and operation was dependent on luck more than anything else. Among the more important continuous, annoying winterization troubles sufficient to ground the airplane were leaky struts, leaky cowl flap and brake cylinders, frozen and ruptured cowl flap and brake hoses and frozen brakes. Little could be done about leaky struts.

The meager preventative methods consisted of keeping the strut clean, to avoid scratching the strut surface and packing surface, checking the tightness of the packing nuts, and keeping the fluid level and air pressure at their proper values. Recent developments have eliminated nearly all strut leakage. This was accomplished by using multiple packings of both leather and improved synthetic rubbers. There is still much to be desired in obtaining satisfactory brake and cowl flap hydraulic piston cups. Preventative methods consist in boiling the cups in water or oil which tends to keep the rubber cup "live".

However, this is not a positive method and low temperatures tend to stiffen the cups and leakage occurs regardless of frequent treatment. Future success is primarily dependent on developing synthetic rubber cups with improved properties. This method, although helpful, is time consuming and laborious. Until such time as this trouble is eliminated, many brakes will be ruined by the hydraulic fluid. The leaky cowl flap cylinders are not as critical as the brakes but cause considerable Iabor and messiness.

To prevent the freezing and rupturing of flexible hydraulic lines, particularly the brake and cowl flap hoses, frequent inspection and replacement is the sole preventative method. Here again the principle is to keep only "live" rubber in service and such hoses that appear to be deteriorating from age, sun light, grease and oil and other materials are replaced. There has been a notable improvement in the quality of recent hoses but there is still room for development. Little could be done to prevent the brakes from freezing other than avoiding deep snow while taxiing the plane.

It is pretty much a matter of luck when snow doesn't get between the brake snow and drum, melt from the friction and freeze within the first minute the airplane stops moving. The cure for this is exceedingly time consuming, requiring long applications oi heat or pulling the wheels. Oil dilution is another necessary evil required in cold weather operation to facilitate engines starting. The gasoline dislodges engine carbon which rapidly fills the oil screens and

necessitates more frequent cleaning of the screens to prevent collapse. Then too, there is always the inherent danger of over dilution or continuous dilution from faulty oil dilution solenoids. Either continuous or over dilution is hard on the engine because of improper lubrication and may cause foaming with the resulting loss of large quantities of oil out of the engine breather. Many other petty annoyances increased maintenance and operational tasks a dozen times over.

For example, the simple job of draining water from the fuel tanks became the tedious job of removing all the strainers in the fuel system, removing the ice, cleaning the screens, and finally reinstalling them. Propeller feathering lines also had to be drained daily to prevent the static oil from gelling and the condensation from freezing.

Having been initiated to the requirements of cold weather operations while enroute to Elmendorf, it was found necessary to bolster the engineering staff. Hence upon setting up engineering operation at the squadron's new home, T /Sgt. Billie D. Rush and T /Sgt. William F. Krebs were relieved of their ships to become an additional flight chief and inspector respectively. The "line" was set up to operate with a day shift, night shift and an alert crew to take care of the odd hours.

Because of the tremendous amount of work involved in cold weather operation, it was necessary to send two engineers on each flight, the crew chief and a helper and the assistant and a helper alternating on every other trip. It was the custom to "sweat out the weather" in the initial months of operation in. as much as the pilots were inexperienced and navigational facilities for other than contact flying were nil. The total time for all the airplanes in the squadron barely exceeded 500 hours a month, but this did not alleviate the pressure on engineering. The maintenance crews had for continually fight the cold weather in keeping the ships prepared for take-off at the first break in the weather.

Frost had to be chipped from the windows, propellers and control surfaces; heat applied to the engines; covers removed and replaced before and after preflight inspections, etc. Such preparation were continuous, sometimes for hours and sometimes for days, but the crucial moment was never passed until the plane was in the air.

The weather won one tragic battle at the very onset of Operations, for on 28 November 1942, during the second week of flying, C-47 airplane 41-38635 was reported overdue on a flight from Naknek to Elmendorf, Cpl. William Caputkin, assistant crew chief, and Cpl. Arthur W. Plumb, helper, became the first casualties of Engineering. In spite of an intensive search for the missing plane it was almost a year later that the remains of the plane were found crashed against a hill in the vicinity of Lake Iliamna. The weather wrought its havoc in many lesser ways which were manifested by severe wind damage, crumbled wing tips and other structural ailments.

By the time winter had started to moderate, crews had acquired a wealth of experience and the flying time began to scar. The alert was outgrown and the "line" revamped to Operate with three full shifts for continuous 24-hour service. Numerous methods and techniques had been

improved or developed to increase maintenance efficiency. Tech Supply was also reorganized and grew into a smooth working unit. As summer made its appearance it became possible for one aerial engineer to handle the work on a single flight but double crews were always sent on shuttle service.

Three more C-47s of the squadron were scratched in the course of time in the fight against the weather. Ship No. 41-38641 was washed out at Amchitka in a landing accident on 5 May 1943 when the pilot attempted landing with a 35 mph. cross wind. None of the personnel were severely hurt. Ship No. 41-38645 mushed into a knoll as the pilot tried to go around again, having failed to set the ship down in a cross wind at the first attempt to land at Atka 21 May 1943. The ship burst into flames immediately and it was only the daring courage of a S/Sgt. John Brtis, crew chief and S/Sgt. Theodore Matson, assistant, that most of the occupants were saved. For the feat, Sgts. Brtis and Matson were awarded the Soldier's Medal.

Engineering faced its third casualty for Sgt. Albert A. Klein perished in the crash. On 27 July 1943, Ship No. 41-38643 failed to clear the top of a ridge on the approach leg, coming into Naknek in soupy weather. With this tragedy Engineering lost Cpl. Andrew C. Malatesta. The permissible service life of the aircraft engines had been extended from 450 hours plus 20% to 650 hours plus 20%. The revised limits carried the squadron through to July before the first engine changes were due. Because all the aircraft were received new and had been subjected to almost identical operation, nearly all the aircraft required engine changes simultaneously.

The Depot Supply was warned of the impending requirements several months in advance but ran short of spare engines in spite d the warning. The situation was alleviated by obtaining replacement engines by emergency air shipments. Considerable time had been wasted unnecessarily during the delay. In order to keep a minimum of airplanes on the ground for maintenance and engine changes, it was necessary to stagger the required changes.

By employing spare engine section sets, the engine changes could be accomplished including all adjustments and run-up in a period ranging from 24 to 48 hours thereby grounding the subject airplane for only a very short time.

It was imperative that all the engine changes be completed by the end of July 1943 for the Squadron had been warned to prepare for its coming participation in the attack on Kiska. Requirement' were surveyed and plans formulated. Tech Supply systematically acquired the specified equipment and supplies. On 6 and 7 August 1943 with the aid of the Alaska Air Depot, each airplane was equipped with a B-25 200-gallon bullet proof bomb bay fuel tank.

The tank was placed in the forward part of the cargo compartment and installed in such a way as to create an independent fuel system, making it possible to operate the airplane without the use of the vulnerable wing tanks. Salvaged armor plate was acquired, cut up and fitted into the cockpits of the airplanes to afford as much protection to the crews as possible. All aircraft received a final inspection and spark plug change. On I0 August 1943 the air echelon departed for Amchitka on its first tactical mission.

The final preparations were started shortly after arriving there. Wing tanks were drained and blown out with carbon dioxide, unnecessary equipment removed, alcohol tanks drained and removed, projections covered with masking tape, etc. With the final battle plans available, it was found to be necessary to install an extra drum of fuel that could be thrown overboard. The extra 55 gallons of fuel were to compensate for the time required to take-off and get into formation and also to make at least one alternate landing field possible. It was Radio Tokyo that instilled the crews with a funny feeling by announcing the arrival of the air echelon at Amchitka along with facts and figures of uncanny accuracy.

But this didn't last, for as the preparations and plans for the attack were revealed, the crews felt reassured. The airplanes, crews and paratroopers were ready to go but the call never came. The Japs had left Kiska without a fight. After sweating out several days of ground fog, the air echelon returned home on 23 August. The squadron renewed its former mission of hauling freight, mail and passengers up and down the "Chain." Flying time was now on the increase and large numbers of the engineering personnel began to leave for various schools in the states. This necessitated a change in the "line" schedules in order to keep pace with the increase of inspections and the decrease of available personnel. T/Sgt. Robert E. Zimmerman replaced T /Sgt. Ray Teeple as flight chief when the latter returned to the States. The ensuing months found two shifts working 12 hours a day whenever necessary, and it usually was.

October and November, I 943 were marked by a transition in equipment. Several of the C-47s (6) were processed for transfer and shipped out and a similar number of new C-47A's were received. Lt. Philip K. Shute was appointed Assistant Engineering Officer and came for work on the "line" I 0 November 1943. As winter set in again, the battle was on and once more disaster struck. On the icy morning of 4 November 1943, Ship No. 42-23848 crashed and burned shortly after take-off from Elmendorf killing all the occupants including Sgt. Donald Lana and S/Sgt. Julien L. Wenzel from Engineering.

The squadron engineering officer, line chief, flight chiefs and inspectors together with representatives of the airplane and engine manufacturers made a first hand investigation of the wreckage. A normal and satisfactory take-off had been witnessed and intensive study of the wreckage didn't reveal any indications of malfunctioning. Probable cause of the crash was believed to be pilot error or possibly severe icing conditions.

Normal winter operations continued on through December 1943 and January 1944, a new era started in Engineering. On this date a mutual transfer of about 50% of the personnel in both the 54 and 42nd Troop Carrier Squadrons occurred. Several airplanes (6), supples and equipment were also interchanged. The 42nd Troop Carrier Squadron returned to the United States and the 54 Troop Carrier Squadron carried on in Alaska.

Lt. Klamm, Engineering Officer, and Lt. Shute, Assistant Engineering Officer, remained with the 54 Troop Carrier Squadron but all of the other engineering staff members were replaced by 42$^{nd}$ Troop Carrier Squadron personnel except T /Sgt. Robert E. Zimmerman, flight chief. The

new staff members were M/Sgt. James E. Hine, line chief, T /Sgt. John D. Baugh and S/Cgt. Edward J. McCormick, flight chiefs and T/Sgt. F. A. Jones and S/Sgt. Charles J. Messick, inspectors. The new staff was well balanced and by combining the better policies and operating techniques of both squadron, a smoother operating, more efficient "line" began to function. The "line" still had a large number of experienced mechanics but a critical manpower shortage existed. This was gradually alleviated by the receipt of replacements. T /Sgt. Max J. Victor replaced T /Sgt. John D. Baugh as flight chief when the latter left for 0. C. S. In the ensuing period from February through May 1944, operations and flying time increased sharply with each succeeding month's record surpassing the former.

As the number of monthly aircraft inspections increased, improved methods of maintenance and inspection records were developed to insure the proper maintenance had been accomplished and a maximum of safety established. Two C-47A's, 42-3837 and 42-23842, were demolished at Shemya on 17 February 1944 when a B-24 airplane that got out of control on a takeoff plowed through the parked aircraft. None of the personnel of the squadron were injured. Two more bloodless mishaps occurred in May. On II May I, 44 C-47A, 42-23845 started to take off with a lock in the elevator and damaged a wing and the landing gear as it ground-looped to a stop.

While taxiing out for a take-off on a frozen lake at Gambell, St. Lawrence island on 24 May 1944, C-47 A 42-23850 broke through the ice, causing minor structural engine and propeller damage. The permanent losses were replaced by C-47 A's 42-93000 and 42-92831. In May the squadron received 42 new pilots who had just been graduated from flying school. This necessitated establishing a transition school for training newcomers. Engineering participated in the program with courses in the airplane in general, hydraulic system, electrical system, power plants, inspection methods, forms, propellers trouble shooting and miscellaneous subjects. Lt. Shute with the help of M/Sgt. Hine, line chief, M/Sgt. Jones, inspector, S/Sgt. McPherson, instrument and electrical specialist and three manufacturers representatives presented the courses given by Engineering.

From the time of the activation of the 54 Troop Carrier Squadron until its arrival in Alaska, the squadron was undoubtedly a liability to its country, but, from that time forth, it has become an asset of ever growing value. The records of the squadron's accomplishments speak for themselves. Most of the glory is derived from the Operations end of the picture, however, like any other team, Operations is dependent on the strength of its "line" and in this case Engineering has kept pace every step of the way. Engineering can also put up a record that will vie with the best. In the eleven month period from July 1943 through May 1944, Engineering obtained an average of 728:25 hours service from 48 engines. Many problems have been conquered and many more are still to be won. The men on the "line" are backing this team that will continually overcome its problems and surpass each succeeding new record as they "keep 'em flying."

In May 1944, the 54 Troop Carrier Squadron was just another outfit in Alaska which silently worked with little publicity or fanfare. It was then that Lt. Colonel Grossmith, the commanding officer encouraged a baseball team to be formed to compete in the Fort Richardson-Anchorage Baseball league. Major Robert G. Delansy was the manager of the team which was to have great success. With Robert Bower as the star pitcher and M/Sgt. F. A. Jones, a good all-around ball player at first base, the squadron team Called' the Carriers went on to win the league championship.

The play of the team caught on immediately and capacity crowds were on hand to witness the games. The fame of the Eager Beavers was starting to spread. The spirit and cooperation between team and fans was the envy of the entire Alaskan Department. No where in Alaska was any team to have the b3cking of the 54 Troop Carrier Squadron. In the winter basketball and hockey again brought the Eager Beavers to the spotlight, under the leadership of Sgt. Stephen J. Hansbury a product of Boston College, the hockey team won the post championship and extended their victories to Nome and Fairbanks to cop the mythical championship of Alaska. While the hockey sextet was notching the triumphs, the Beaver basketball team under the coaching of Sgt. Frank Haber and having such good ball players as Sgt. Robert C. Parker and Cpl. Robert C. Friend were starting to move into the top ranking ball teams of Fort Richardson.

In January 1945, the squadron was fortunate to receive S/Sgt. Martin Zippel, a fine all around basketball player, and then the Eager Beaver Quintet became poison to all of its opponents copping three different titles including a double victory in Fairbanks against two of the best in that section of Alaska. While the Beavers were winning title after title in the major sports the Beaver bowlers and volleyball team also ran away with first place honors.

The Beavers were finally to taste defeat in the 1945 Baseball season when they went down to defe.3t before a surprising tough Signal Corps bunch that battled the 54 tooth and nail to pin defeat to the Beavers. Even in defeat the squadron and the ball team showed the spirit which it was known for and never once gave up. All in all, the 54 Troop Carrier Squadron has written an amazing chapter in the history of sports in Alaska. A record which in all probability will never be broken.

The icy wind and horizontal rain ripped over the airfield at Adak, and the fog hung low in the hollows between the hills. The penetrating chill of early fall weather had driven almost everyone inside their Quonsets, which sprawled on the slopes like huge, halved oil drums. A few jeeps raced frantically across the mat, and a lone mechanic worked behind the cowl of a C-47. The monotony of the sound of the wind making obscene noises as it lashed against the Operations building was broken momentarily by the sound of a departing C-47. The pilot from the CBI looked out of the window just in time to see the Douglas disappear into a fog bank at the end of the runway.

"Dammed fool," he muttered, "poor, damned fool!" He turned to the Lieutenant at the desk. "I've flown the hump," he said, "and I've flown the Hump, but they can have this!" The lieutenant looked up and said, "Oh hell, that's an Eager Beaver." The time was October of 1945.

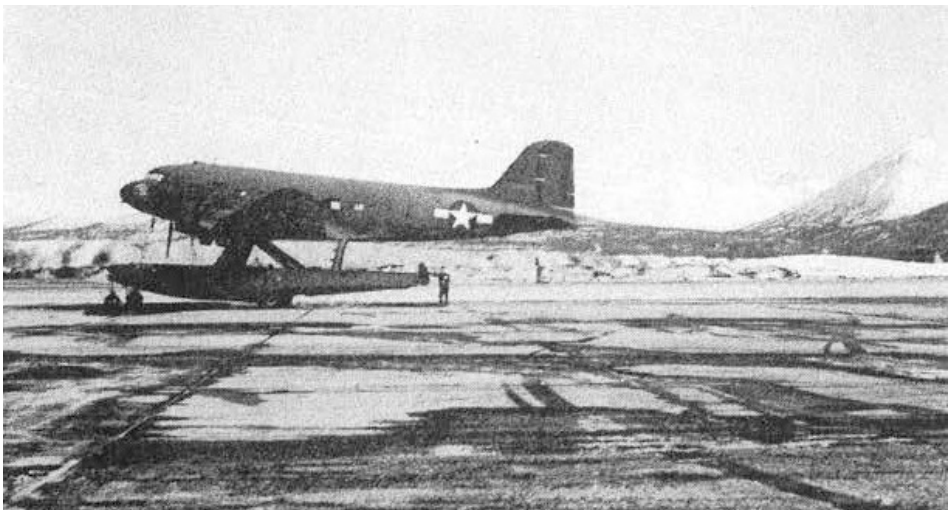
The 'damned fool' sat confidentially at the controls of his C-47, and cruised up toward Shemya. He was expecting a four or five hundred foot ceiling, a mile or two of visibility, and a thirty mile an hour wind at his terminal, and yet all that worried him was a date that he would be unable to keep back at Anchorage.

He didn't know it perhaps, but he was flying with the ability of two and one-half year's experience, gleaned excruciatingly for him by the tribulations of a score of pilots he had never known. The 54 was born out of the hasty mating o0f War and Necessity in June of 1942, a time when some of us were getting diplomas from high school, when some were working at jobs and sweating out the draft, and all were still being shocked by the pictures from Pearl Harbor. We had been at war seven months, and jokes about First Sergeants still went over big back home.

Down in Fort Benning, Georgia, a handful of pilots, mechanics, and radio men ware sweating out orders. They had a few weeks training under their belts and were still in the process of digesting it. The Japs were firmly entrenched on Kiska and Attu, and h.ad hit Dutch Harbor with a task force that threatened Fort Richardson and Nome. It was the same Dutch Harbor that we buzz by now with no more than a radio call to acknowledge our passing, but in the summer of 1942 the sky around Dutch was hotter than an Air Cadet in advanced training. The orders arrived, and thirteen C-47's started the long journey to Anchorage.

The Japs were comi.ng closer, and this was it; this was the dead-line. It is generally conceded that the Aleutians are favored with the worse flying weather in the world, and when the 54 arrived, radio ranges were still aids that the pilots saw in Training Films, and that Clark Gable flew low over high tension wires in his Hollywood Approaches. Crew chiefs, inexperienced in cold weather operation took the bull by the horns and kept their planes flyable in spite of the sub-zero temperatures that froze oil to the constancy of molasses, and cracked hydraulic lines like peanuts.

It was November of 1942 when the 54 arrived at Elmendorf Field the routes to the west down the Chain were uncertain and considered extremely hazardous for airmen. What planes made trips to the west did so with the aid of mariner's charts. Together with the 42nd Troop Carrier Sqdn. an organization formed a few months before the arrival of the 54, operations were started to move the tons of supplies that were necessary to push the Japs off the Aleutians. Air transport was the common denominator for Aleutian logistics, and the crews-pilots, engineers, radio men- shouldered the responsibility, Instrument flying was an adventure, costly enterprise, and the birth of radio aids made it almost impossible most of the time.



And so contact flying was the order of the day. Flights over open water by dead reckoning and pilotage, under the overcast and skimming above the white caps below, hardly knowing terminal conditions beforehand, moved priority equipment to where it was needed at the proper time. Much time was lost while planes waited on the ground for the weather to dear for such flights, and the impractibility of half contact, half instrument flights was proved only two weeks after the squadron started operations on the Chain; a plane was lost near Naknek. Quoting from a flight report of November 29, 1942, the pilot advises, "Follow maps closely and watch contact points. Easy to get lost." Another for the 30th recommends, "Check weather frequently and fly only when able to do so by visual contact. Take sleeping bags and toilet kits." He neglected to include a deck of cards and a good book in the latter part of his report.

By the end of May, 1943, the Japs had been pushed off of Attu, and Amchitka had become another jumping off point. Transports of the squadron, flying between Amchitka and Attu, ran the gauntlet of Jap interception of Kiska. Fighter cover was not always available, and during the entire campaign, C-47's made their scheduled trips without loss due to enemy action. At the peak of the Kiska campaign, ten planes of the 54 left for Amchitka on their first tactical mission; an airborne invasion of Kiska. The Japs, however, left without giving notice, and in a most disconcerting manner, and the first and last tactical mission of the 54 was ended, without a shot being fired.

The months sped by, and the supplies moved down the Chain by air transport with ever increasing efficiency. Slowly radio ranges began to spring up along the islands, and the pilots ventured into the soup for the first time. There had been no instrument training in the States, and these were new horizons to be conquered.

The immediate threat of invasion had been removed, but the multitudinous tons of supplies still had to be moved, and the quickest way to move them was to fly the weather. It was a case of learning by trial and error, and the perspicuity of the crews lowered the margin of error to a minimum. Within the relatively short space of a year, the 54 had become a crack transport organization, flying almost any kind of weather, 24 hours a day, every day in the month.

Statistics have a way of being boring, but is is pertinent to this history to cite that in November of 1942 the squadron flew some 900 pilot hours, 6:50 of which were on instruments, while in May of 1944, just a year and a half later, they flew 6542 pilot hours of which 1795 were on instruments. That figure has increased astronomical and in October of 1945, they flew 6735:50 pilot hours of which some 3357:30 were flown in the soup or on top.

The 'damned fool' delivered his two tons of freight to Shemya at a time when every other plane in the theatre, with the exception of transports in the sky everywhere between Anchorage and Attu, sat on the ground sweating out weather. The mental impulses that moved into the controls of his ship and guided it to a safe landing were spawned by the experience of three years of pilots and crews who had some and gone, but who had blazed a trail across a virgin sky So that others might easily follow their path to happy landings, not only during the exigencies of war, but for those that would follow in peacetime, for this indeed has been a Northwest Passage, pioneered and opened by those who Hew and by those who kept them flyable when the chips were down.

In a very short time, scheduled air carriers will be transporting passengers and cargo between the United States and the orient by way of Alaska and the Aleutian Islands. These aircraft will ply their way through foul weather, safety, and without interruption. Crews and passengers alike will take their trips for granted, seated snugly in their luxurious airliners. A stewardess will smilingly serve full course meals to passengers contemplating business in Tokyo or Chungking the next day. The serum tucked away in the freight compartment will arrive in time to save a life, or a score of lives.

And perhaps some dark night when a transport is high over Amchitka, an astute person might notice in fantasy, the dim outline of an 'outmoded C-47, coated with ice and working its way wearily through the clouds below. The person will look again and the image will be gone, but if there is ever a Flying Dutchman of the Aleutians Chain, it will be a ghostly C-47, manned by a phantom crew, and perhaps on the nose will be a long forgotten insignia; a beaver holding two aircraft engines and pulling a load of men and supplies. Around the insignia will be the names of a group of men, written there in sweat.

Sgt. James Bielazicz of Scranton, Pa., adjusts wing cover during winter operation.

Lieutenant George Tuch of Chicago tries on the anti-exposure suit.

Tech Supply had their own Christmas tree in 1944, decorated with spark plugs, tape, washers, gaskets, and a lonely little doll, it lent a cheerful atmosphere to that well known room, the corner of Hangar No. 3.


Lt Col Louis B. Grossmith, Jr.

In 1946, it began receiving C-54s and C-82s, in addition to the C-47s; in 1952, the squadrons received thirteen C-124. The giant, four-engine cargo aircraft proved invaluable in supporting the construction programs at the various remote sites. The 54, at the time, accounted for approximately 80 percent of all military airlift in Alaska. The 5039th Air Transport Squadron, at Elmendorf AFB, and the 5001st Operations Squadron, at Ladd AFB, accounted for the

remainder.

In 1956, after serving for 13 years in Alaska, the 54 Troop Carrier Squadron was transferred to Donaldson AFB, S.C., and assigned to the Tactical Air Command to support its European deployment requirements. The Alaskan Air Command objected to the transfer. It left the command severely shorthanded in outsized cargo capability. The only aircraft remaining were ten C-119s assigned to the 5039th Air Base Squadron. These were considered "unwanted" and "unsuited" for the Alaskan environment. Also, there were thirty C-47s, which were divided between Elmendorf AFB and Ladd AFB. Half of them were available at any given time.

Conducted the T-38 trainer portion of UPT (undergraduate pilot training), 1972-1997.



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