PREFACE

The leaders of The United States Army Air Force (USAAF) had supported a separate air arm for the military from the beginning. Only after the final battles of World War II did the Nation's leaders concur. The development of the atomic bomb and its final delivery by air made this weapon a keystone in the national security. The proponents of a separate Air Force asserted that the safety of The United States depended upon maintaining an aerial retaliatory (deterrence) capability that would be so fearsome that no enemy would attack the American homeland or threaten U.S. vital interests. The minimum force required would be a seventy group air force.

The United States Air Force (USAF) was formed as a separate arm of the military in October 1947. The USAAF had only one-twelth the total strength it had at the end of WW II by the end of May 1947, and only two groups that were combat ready. Except for the B-29 aircraft in service, there were no bomber aircraft in the inventory. The B-17 and B-24 aircraft were basking in the Arizona sun. The jet bombers were still in the production pipeline.

Even though the USAF was given separate status, the hopes for a seventy group air force were fading due to the financial ceiling imposed by the President. The Korean War changed this and sufficient funds were made available to complete the buildup by the end of 1952.

The 98th Bombardment Wing was reactivated in September 1947 at Spokane, Washington, equipped with B-29 aircraft. The Wing departed for Japan and combat in Korea in August 1950. The Wing returned to the United States after the Korean War ended and was assigned to Lincoln Air Force Base, Nebraska in July 1954. The Wing began its transition from B-29 aircraft to B-47 aircraft. The B-47 required in-flight refueling to complete its assigned mission. The 98th Air Refueling Squadron was formed to become a part of the 98th Bombardment Wing to provide in-flight refueling.

The 98th Bombardment Wing was declared combat ready in June 1955.

HISTORY

98TH AIR REFUELING SQUADRON

The 98th Air Refueling Squadron (SAC) was formed in February 1954, at Lincoln Air Force Base, Nebraska. Special Orders No. 32, Headquarters 21st Air Division (SAC), Forbes Air Force Base, Topeka, Kansas, assigned officers and airmen of the 55th Air Refueling Squadron to Lincoln AFB as the movement of the main eschleon of a unit move. The effective date was February 16, 1954.

Eight crews and support personnel were transferred from the 55th ARS to the 98th ARS. Although the personnel from the 55th ARS did not constitute one hundred percent of the initial staffing for the 98th ARS, these personnel were a majority and were assigned leadership positions. The crews of Peck, Catalle, Brown, Dacus, and Weedlun were transferred intact. The Embry and Callan crews, with crew chiefs Allen Vosburgh and Avis StRomain, were TDY at Mildenhall, England for project "Roundout" when they were reassigned to the 98th ARS. Other personnel from the 55th ARS were Daniel T. Rogers, Ronald L. Brumbaugh, Frank S. Faulkner, Jack A. Williams, Rudy E. Lyon, Joe C. Volden Jr., Raymond D. Cole, and Vivian E. Lock.

Three Instructor Pilots (IP) and crews were assigned to the 98th ARS for the purpose of checking out the air crew members in the KC-97G aircraft. The Aircraft Commanders were Merlin Rice from Smoky Hill AFB, Kansas; William Brown from Davis-Monthan AFB, Arizona; and Leonard Walker from March AFB, California. Other crew members coming from Smoky Hill AFB were P Robert P. Gould, N Bill Brown, R Taulbee, BO Claypool, and BO Cruikshank.

Personnel Actions Memorandum No. 1, 98th Air Refueling Squadron (SAC), February 18, 1954, made the following assignments. Lt Col Daniel T. Rogers, Sqd Commander; Maj Ronald L. Brumbaugh, Sqd Ops Off; Maj Frank S. Faulkner, Sqd Acft Maint Off; Maj Charles K. Hanner Jr., Sqd Staff Off; Maj Frank M. Tompkins Jr., Sqd Sup Off; 1Lt Luis A. Davilla-Apente, Asst Sqd Acft Maint Off; MSGT Raymond D. Cole, First Sgt; MSGT Jack A. Williams, Line Chief.

Crew assignments were -

	AC	Plt	Nav	FE	RO
1	Peck	Ritts	Culwell	Willis	Helmes
2	Embrey	Helt	Funk	Adkins	Hasty
3	Brown	Mann	Richert	Steele	Bemis
4	Dacus	Boss	Alsten	Hale	Truesdell
5	Lock	Lovdahl	Fallis	Burdick	Flowers
6	Catalle	Westfahl	Desenbach	Ryder	Griffin

Crew assignments continued -

	AC	Plt	Nav	FE	RO
7	Wilkinsen	Riley	Lewis	David	Bissener
8	Callan	Welsh	Reinhart	Jones	Barga
9	Johnson	Gartner	Simpson	Watson	Odell
10	Clark	Copeland	Lubash	Hazelwood	Bragg
11	Kinard	Tiffany	Orzen	Schreivogel	Williams
12	Morgan	Lievrouw	Neyrey	McMillan	Smythe
13	Weedlun	Rolfe	Katlin	Bodenbach	Bryant
14	Benson	Berry	Krog	Hermanns	Hayes
15	Smith	Haken	Elliott	Gastevich	Havens
16	Procopio	Lawrence	Jones	Jacob	Doughty
17	Mahler	Sellwood	Reed	Martin	Thibodeau

	Refuel Opr	Refuel Opr	Crew	Refuel Opr	Refuel Opr
1	Wilson	Thomas	10	Schuler	Pollard
2	Karjala	Hamilton	11	Altman	Prater
3	Koenig	Clow	12	Anderson	Berchtold
4	Happ	White	13	Marquith	Vaughan
5	Holsclaw	Smotherman	14	Fox	Dolphin
6	Carter	Rogers	15	Bagby	Toy
7	Lloyd	Galbraith	16	Sanborn	Evers
8	Herbst	Kezar	17	Doucette	Mason
9	Keen	Morrison			

The squadron insigna also came from the 55th ARS. The KB-29 aircraft of the 55th were each favored with some design. One in particular was #622 which had a Woody Woodpecker and gas can as its logo. Raymond Fritz, Crew Chief, and Fred McDonald, Asst Crew Chief, for #622 were responsible for this design. The aircraft was called the "Big Gas Bird" and "We change the range". Since the 98th Air Refueling Squadron was a new organization, there was no squadron insigna. Raymond Fritz and his design came to the 98th ARS where it was adopted. The Lantz Studios refined the final design which became the squadron logo.

The 55th ARS was flying a probe and drogue refueling KB-29 aircraft at the time the personnel were transferred to the 98th ARS. The aircrews without KC-97 experience were sent to the Mats HTTU program at West Palm Beach, Florida for C-97 indoctrination as training space became available. In the mean time, the instructor crews that came from KC-97 units began to pickup new KC-97G aircraft at the Boeing factory at Renton, Washington for the Squadron. The 98th ARS received 21 KC-97G aircraft, including #816 the last KC-97 aircraft built by Boeing Aircraft Company.

The runways at Lincoln AFB were dual 9000 feet long and 150 feet wide built during WWII. These runways were not long enough nor streng enough for fully loaded B-47 aircraft that were to be at the base. New 10,000 foot long runways were built with extra thickness at the ends to support the air-

craft. While the runway and extension were under construction, the KC-97 aircraft were based at Forbes AFB. Beginning in September 1954, the aircrews and ground crews were rotated on temporary duty between Lincoln AFB and Forbes AFB for air refueling training. This TDY ended in November 1954, with personnel and aircraft returning to Lincoln AFB. During this period, there were many changes in crew assignments to keep training at a maximum and facilitate newly assigned personnel.

The 98th Air Refueling Squadron was ordered to Goose Air Base Canada on January 5, 1955, for 45 days temporary duty. The purpose of this duty was cold weather training for the aircraft and support equipment as well as the personnel. Flight leaders at the time were: A Flt Depeyster D. Brown, B Flt Merlin V. Rice, C Flt Albert L. Catallo, and D Flt Waldo W. Peck.

Everyone learned a great deal about operations at a forward base under severe weather conditions. These adverse conditions included flight operations. One aircrew had a scheduled 8 hour training flight with several navigation legs planned from Goose AB/BW1/BW8/Frobisher/Goose AB. Due to unforecasted upper winds, the crew encountered jet stream winds of 100 knots which spoiled the navigation planned. In trying to accomplish something positive, a new flight plan was filed with Frobisher Radio. This new plan was not forwarded to Goose AB.

The crew arrived over Goose AB several hours later than scheduled and low on fuel. The base was on emergency power. Only guard channel was available with emergency power. Ground Control Approach (GCA) was on emergency power with only the plan position indication (PPI) operating. Heavy blowing snow was 90 degrees to the runway and all surfaces were covered with glaze ice.

As the aircraft was on the downwind leg for landing, GCA lost its emergency power and the PPI. The pilot, with some vertical vision, noted the bomb dump fence lights and knew the relative location of the runway. Landing a light aircraft with a severe crosswind on a glazed surface required all the skill and knowledge of the crew. After using the full 10,000 feet of runway, the aircraft was turned onto a taxiway. The aircraft was parked, weather vaned, in an open area for safety and the crew AC Gould, P Tiffany, N Orzen, FE Schrievegel, RO Yankaski, BO Claypool, and BO Prater sought shelter.

The 98th Air Refueling Squadron was ordered to Lakenheath Air Base, England in support of SAC Air Operations for a 90 day temporary duty beginning November 2, 1955. This operation had the entire 98th Bombardment Wing (M), B-47 and KC-97 aircraft, TDY together. The air refueling personnel were quartered at Mildenhall Air Base, England while the tankers were at Lakenheath AB. The Squadron returned to Lincoln AFB the first part of February 1956.

While in England, the 98th ARS and another ARS participated in project "Texas Star". A total of 37 KC-97 aircraft were to refuel B-47 aircraft with all of the tankers scheduled to land in Iceland. Weather in Iceland was forecast to be good. After refueling the B-47s, the tankers arrived over Iceland to find strong winds with blowing snow at the base. The crews were able to see the runway when looking directly down through the weather. The story changed as the planes approached for landing. The horizontal visibility was at bare minimum.

Approach control began landing aircraft under these difficult conditions. Three aircraft had landed before 98th ARS aircraft #724 landed with its landing gear not locked. The landing gear folded and the aircraft slid to a stop off to one side of the runway. A propeller on the right side threw a rock through the aircraft skin, into the lower compartment. Even though a fire-crash vehicle and crew were located a short distance away, no one saw what had happened to #724 because the visibility was so bad.

Approach control and the tower had no immediate knowledge of the mishap. Other aircraft continued to land. If #724 had not been off the runway, the following aircraft would have added much more severe consequences to the incident. There were no other aircraft involved and no injury to personnel. A wheeled tow truck could not move #724 after it was raised and gear locked in place, because of the icy-slick surface. A tracked vehicle had to be driven from another base to tow #724 to the parking ramp.

Another incident occurred during the deployment to Iceland that illustrates how weather can change the normal. The Squadron was required to support a multiple refueling from the base in Iceland. Weather conditions were snow and blowing snow with all ground surfaces covered with ice and a layer of snow. As the aircraft turned onto the runway for takeoff, the crew aborted takeoff because of carburetor ice. After clearing the runway, the brakes were set, carburetor pre-heat applied, and the aircraft returned to takeoff position.

As the aircraft moved into takeoff position again, the two scanners in the rear reported on intercom that the left and right main landing gear were not rolling. The aircraft continued its takeoff with the main gear sliding on the ice. The scanners gave a second warning that the wheels were not rolling and then stated that "They're gonna blow!". Almost immediately, there were loud pops from three of the four main gear tires that had blown.

The aircraft continued to accelerate and litterly slid off the runway over run and into the air. The situation was finally understood by all of the crew and the Control Tower notified. The tower at first would not believe that the aircraft had actually made the takeoff with three blown tires.

After considerable discussion between the crew and the powers in the tower, the crew made a successful refueling and were directed to fly to Lakenheath, England for landing. The aircraft landed with the landing gear extended and then was towed off the runway. Refueling complete, routine flight! AC Fentress, P Rogers, FE Schauffhausen, RO Chaikoff, BO Carter, BO Atchley.

The buildup of the Strategic Air Command (SAC) as part of the seventy group Air Force was initially staffed by transfer of personnel within the Command. This type of staffing led to proficiency stability but did not satisfy all personnel needs of SAC. Other factors such as retention rates, military schools, transfers, and TDY periods of 180 days at a time, caused staffing problems. Due to the priority SAC had for personnel, the USAF instituted projects to transfer personnel from other commands who had been in administrative positions to SAC. One project, "Blue Flame", caught rated persons in nonfyling assignments. In addition, ROTC, service schools, and first time enlistees provided SAC with replacement personnel. "Blue Flamers" included Stokes, Flori, Craighton, Miller, Spino, Wierzbowski, Drinkwater, Rainwater, Franck, and Engelbrecht. "Blue Flame" began in January 1956.

These new personnel began their training and introduction to SAC immediately. Numerous training crews were formed and reformed during ground and flight training so as not to jeopardize combat effectiveness of the Squadron. The influx of so many new people caused some assignment problems because simulator and flying training schedules were not always available. Some of the new personnel were assigned additional duties in the 98th Bomb Wing Headquarters for a time. In fact, some personnel did not receive a permanent crew assignment until 15 months after they arrived in the Squadron.

How can a routine local flight turn into a life threatening, extended cross country excursion? Just another day of SAC operations might do it. KC-97, #2723, was scheduled during October 1956 for the purpose of giving instrument flight checks to Jasper Godwin and Douglas Tiffany. The primary crew was AC Robert Gould, CP Douglas Tiffany, N Morton Orzen, FE Eugene Schreivogel, RO Otis Lemere, and BO Wesley Helder.

Lincoln AFB, this day, was confined to local B-47 transition traffic and Offutt AFB was closed to transition traffic. The crew filed for Rapid City, South Dakota to complete the mission. Weather South and West of Lincoln was bad. With Doug Tiffany under the hood and the aircraft in the traffic pattern, #3 engine surged to over 3300 RPM, followed by oscillation between 3000-3200 RPM. AC Gould took the controls and began check list procedures while putting the aircraft in a steep ascent with added power on the three good engines to gain altitude for possible bailout.

Since #3 prop was uncontrollable, AC Gould ordered FE Schreivogel to cut off the oil supply to #3 engine and sounded the alarm bell for possible bailout. The oil starved engine was expected to throw its propeller, vibrate the engine loose, or have internal failure. After four or five violent lurches, the seized engine snapped the wrist pins and the engine froze. With #3 engine stopped, the aircraft landed safely at Rapid City. After the aircraft was parked, Doug Tiffany asked if he could release the #3 feathering button now. Doug had been told to hold the button in and had done so through out the emergency.

The crew was instructed to stay with the aircraft, no clothes, no money, no nothing, until the aircraft was repaired. Jasper Godwin immediately found a ride back to Lincoln. Four days later the aircraft and crew departed Rapid City for Lincoln AFB with Lockbourne AFB, Ohio as the alternate. Arriving over Lincoln AFB, the crew was ordered to divert to the alternate due to weather. The next day, the crew left Lockbourne AFB for Lincoln with Davis Monthan AFB, Arizona as the alternate. Approaching Lincoln AFB, the weather was reported to be at field minimums. Upon landing, the crew found that the approach minimum altitude was still in the clouds when they went through it to visible conditions. Home at last! Someone must have shown concern for the crew or they needed the aircraft in the schedule.

The combat ready crews of the 98th Air Refueling Squadron were sent to Harmon AB, Newfoundland for temporary duty on November 15, 1956, for the purpose of SAC Air Operations. This was an alert deployment of the Squardron, along with three other air refueling squadrons. This deployment lasted 25 days. The Squadron returned to Lincoln AFB just before Christmas.

A crew was sent TDY to pick up a tanker from prop retrofit just prior to the alert deployment. As they returned to Lincoln, the crew noticed that the parking ramp was bare. All the 98th ARS tankers were gone. Not knowing of the deployment, the AC announced to the crew, "Boys, we are at War!". After contact with the Command Post, the plane and crew proceeded to Harmon AB to join the Squadron.

Letter Orders No. 699, November 15, 1956, ordered the crew of AC Wierzbowski, P Cassidy, N Tolar, FE Scherer, RO M.Smith, and BO Nelles to the Boeing Aircraft Plant at Renton, Washington for the purpose of ferrying aircraft SN53-3816 (nose number 888) to the 98th ARS. This was the last aircraft of its kind to be built.

After returning to Lincoln AFB, the 98th ARS was directed back to Harmon AB for 75 days TDY (actually 91 days) beginning December 26, 1956. The purpose was a SAC Rotational Movement in support of project "Reflex". In addition to the

almost daily refueling of B-47 aircraft returning from the United Kingdom, the Squadron carried on its maintenance and flight requirements under adverse winter conditions. At this time, Harmon AB was primarily a Material Air Transportation (MATS) base. The rotational SAC unit had to provide all or mostly all of its own support equipment and personnel, including maintenance control and the command post. The newly assigned crew personnel were permitted a few flights under supervision, but their main duty was to man the command post and other support positions.

During this TDY, the Squadron participated in the non-stop, around the World flight of three B-52 jet bombers. The 98th ARS provided one of the six in-flight refuelings the B-52s needed to complete their record breaking flight. This was in January 1957.

The Squadron returned to Lincoln AFB in March 1957. Changes began to be made soon after arriving home. Squadron commander, combat crews, and maintenance personnel were all affected. Daniel T. Rogers was replaced by Jasper L. Godwin, Jr. as commander in May 1957. Other departures included Peck, Embry, Weedlun, Brown, Dacus, Catallo, Kinard, Mahler, Clark, Johnsen, Morgan, Benson, Wilkinson, and Callan. Others departed due to the end of their military commitment, new assignment, and schools. The changing of the guard was in progress.

On May 6, 1957, the crew of W.Johnson, W.Peck, M.Alston, S. Simpson, W.Jones, D.Perkins, M.Kezar, J.Svendgard, and W.Mc Bride, were sent to Thule AB, Greenland for a 7 day TDY for the purpose of transporting a Forward Base Survey Team. A second 10 day trip was made to Thule AB on August 3, 1957. This crew was M.Rice, M.Davis, M.Alston, J.Johnson, D.Nutt, L.McLaughlin, E.Craghead, J.Cruikshank, W.McBride, and A. Sowers. Extra navigators were aboard so that Alston could instruct them in grid navigation. While at Thule, the crew made two flights over the North Pole.

The Squadron continued its primary mission of refueling B-47 medium range jet bombers in flight. Most of the refueling missions were scheduled rendezvous with the bombers on training flights. These missions were carried out without a hitch, even though the changes in personnel were numerous. A number of pilots were upgraded to aircraft commanders, new combat crews were formed and reformed, maintenance was faced with the problem of meeting flight schedules and maintaining a number of aircraft on alert status. The alert status was begun as a result of the emergency in the Middle East, Lebanon Crisis. When President Eisenhauer sent the troops ashore, he backed his hand with the strike power of SAC.

Another SAC Rotational Movement (Reflex) was made by the 98th ARS on December 27, 1957, to Harmon AB, Newfoundland for 90 days TDY. It seems the snow gets deeper each time the Squad-

ron goes North. The 4081st Strategic Wing (SAC) is now the custodian at Harmon AB. On March 3, 1958, this TDY was extended to April 12, 1958. The Squadron was given an unannounced operational readiness inspection (ORI) at Harmon. The ORI was passed with professional proficiency.

The Squadron returned to Lincoln AFB in April 1958. In April and May 1958, the aircraft were retrofitted with the new aluminum 34G60 propeller on base. All aircraft had to be flight tested with the new props. The crew of AC Wierzbowski, P Harrop, N Tolar, FE Hale, RO M.Smith, and BO Nelles were the principal flight test crew. The project was completed May 26, 1958. In addition to changing props, there was a major reshuffling of squadron duties in May 1958.

The Summer of 1958 found the 98th ARS performing strip alert at Lincoln AFB. The alert crews could move around the base but had to be within telephone notice at all times with the Command Post. On one ocassion, the crew of AC Gould, P Hansell III, N Orzen, FE Schreivogel, RO Lemere, and BO Helder, were at their evening meal when the call came to launch in support of a B-47 low on fuel. After a rapid take off, the crew made contact with the B-47 returning to Smoky Hill AFB, Kansas from Warner Robbins AFB, Georgia. The B-47 had made an approach to Smoky Hill but found the main forward gear would not lower and fuel was critical. The intercept between the aircraft was made by ground control. Upon visual sighting, the B-47 reported fuel status as minus 1500 pounds. The anxious situation was manifest by the numerous automatic disconnects by the B-47. AC Gould told BO Helder to manually override the boom and try to hold the B-47 as long as practicable. After a few thousand pounds of fuel was tranferred, the B-47 settled down. and was able to receive all available fuel. The KC-97 landed was ready to recycle to meet the B-47 again but area lightning at Lincoln had shut down ground refueling operations.

By this time, Smoky Hill had one of its own tankers in the air and the B-47 was able to secure the landing gear down. Another job well done by 98th ARS personnel averted severe consequences. The only casualty was the boom on the KC-97 which was damaged beyond repair when it was operated in the manual override position.

The Squadron KC-97 aircraft began to show hair line cracks in the aluminum propellers. Maintenance had to magna-flux the blades, crews made preflight inspection of each blade, and aircraft were flown to Westover AFB, Mass. for scheduled propeller modification.

During January 1959, the crew of AC Cleek, P Just, N Weinstein, FE W.Jones, RO Davis, and BO Keener were flying a routine night refueling mission over Western Nebraska. Rendezvous was made with a B-47 and fuel transfer was begun. After a few

minutes, the B-47 crew notified the tanker that there was no indication of any fuel being transferred.

An immediate check of the tanker systems showed that a fuel transfer pump had malfunctioned and had leaked 2000 pounds of JP-4 fuel into the lower belly of the KC-97. AC Cleek notified the B-47 of the problem and requested that the B-47 radio Lincoln AFB of the emergency. The AC then ordered the shut down of all electrical power aboard the aircraft.

Attempts to manually drain the fuel from the aircraft failed. As the aircraft approached the Central Defense Zone for an unscheduled penetration, an emergency flight pattern was flown and then the crew headed home. Arriving at Lincoln AFB, the aircraft orbited until the runway could be foamed. The crew prepared the aircraft for an emergency landing by manually lowering the landing gear to a locked position. With crew members positioned, the aircraft approached the runway with no lights and the jet fuel in the lower bay, for a no flap landing. A successful landing was made with no damage to the aircraft nor injury to a crew member. Crew of the Month was awarded to this crew for January 1959.

The 98th Air Refueling Squadron was deployed to Lajes Air Field, Azores for 90 days TDY on April 7, 1959. This deployment was made with the aircraft making an over-night stop at Harmon AB.

The Squadron deployed in three waves to Lajes Field. All aircraft moved on schedule except #806 and #735. These two KC-97 aircraft made enroute stops to have engine changes or oil leaks corrected. The first wave aircraft arriving at Lajes were immediately sent to the forward (alert) bases at Upper-Heyford, U.K., Torrejon, Spain, and Side Slamine, Morroco. After two weeks, the forward bases were reduced to two bases, Upper-Heyford and Moron, Spain. In addition, there were alert aircraft at Lajes. The Squadron provided air refueling support out of Lajes to reflex B-47 aircraft returning to the United States from Europe and Africa.

The almost daily refueling flights were of short duration. In order to maintain proficiency, pilot transition and navigation legs were flown after the refuelings. On one occasion during this period, five RB-47s were refueled on a scheduled rendezvous off Lajes. Just after refueling was completed, the plane that AC Spino's crew had refueled exploded in the air and went down through the undercast into the Atlantic Ocean. One of the tankers descended to 500 feet and searched the area for survivors, while the other four tankers awaited above. The weather was marginal with rain squalls, visibility less than one-half mile, and a ragged ceiling at 600 feet. No survivors nor debris was sighted by the one tanker and all five returned to Lajes.

The next day, Squadron aircraft began flying low altitude, 50

to 100 feet above the water, searching for survivors. The flights were based on a grid of the RB-47s scheduled track. Although the low level flights did not result in any sightings of survivors or debris, we found that a Portuguese fisherman had found and recovered the navigator the day after the incident. This man was the sole survivor of the exploded aircraft. He said a KC-97 had passed right over him while he was in the water but did not see him.

Maintenance support for the aircraft at the forward (alert) bases proved to be very difficult because they were not prepared to maintain the KC-97 aircraft. Moron, Spain lacked shop facilities, specialists, tools, and parts. Upper-Heyford provided maintenance support only in extreme cases. At Lajes, the 98th ARS Maintenance Section was hampered by inadequate support in the supply area. The base supply functioned only five days a week, 8 am to 5 pm. Our maintenance worked every day, around the clock, to keep the 25 aircraft in service. The 98th ARS aircraft was supplemented by one KC-97 aircraft from four other bases while we were at Lajes. The support problems were agravating but not insurmountable. The 98th ARS completed 134 sorties out of 139 scheduled for April and 142 sorties out of 149 scheduled for May 1959.

Seven Crew Chiefs had perfect records for on time take-offs from April 1 to May 31, 1959. MSGT Dodge 14, SSGT Brooks 14, TSGT Dawe 13, MSGT Riedl 13, TSGT Henrickson 13, TSGT Smith 13, and SSGT Benton 12.

The Squadron began its routine training and proficiency support of the 98th Bomb Wing upon the return to Lincoln AFB in July 1959. Crew and support personnel changes began to take place. Service commitments were completed, upgrading to the KC-135 by flight crew, service schools claimed others, and a change in command for the Squadron was made in August 1959. Walter P. Morton replaced Jasper L. Godwin, Jr. After three years of crew stability, there came a time of constant restructuring of combat crews in the 98th ARS.

The numbers game was instituted with flight crews. Pilots were upgraded to aircraft commander. Integrated crews were broken up to provide a spread of experience with inexperience. Only the Standboard crews were left alone. Even with these disruptions, the primary mission of the Squadron was carried on without any less efficiency. This routine continued through thebalance of 1959 and the first half of 1960.

During the Fall of 1960, the 98th ARS was selected to provide six KC-97 aircraft, crews, ground support, and maintenance support for "strip alert" at Fort Churchill, Manitoba, Canada. The alert facility consisted of one building which included operations, briefing room, recreation room, living quarters, dining hall, and any other activity in support of the operation. The alert aircraft were parked in front of the

building at one end of the 6000 foot runway. The base belonged to the Royal Canadian Air Force and was used as a cold weather training base. The 98th ARS was there to provide in flight refueling for SAC bombers in the event of war. Charles H. Petersen led the first flight of aircraft into Ft Churchill.

This was a new experience for most personnel. Even Harmon and Goose Bay Air Bases had better weather and more conveniences on base and in town. Fort Churchill is located on the Southern end of James Bay, 500 miles South of the Artic Circle.

Summer, all three months of it, was the most pleasant except for an abundance of large mosquitos and black flies which would carry one away. Winter produced snow, ice, and sub-zero temperatures. Normal Winter temps were in the 20 to 30 degree below zero range, with the wind chill factor tumbling as low as a minus 70 degrees. Exposed skin could freeze in less than a minute and skin touching bare metal would stick. The weather was so cold that the oil in the central oil tank and prop domes would freeze without protection. Each week 3 aircraft and crews would rotate back to Lincoln AFB, so that a crew would stay at Fort Churchill two weeks at a time. Some of the first aircraft flying out in the Winter weather found out the hard way how the oil froze when they encountered engine starvation.

During Winter, every KC-97 had a Hermon Nelson auxiliary heater and engine cover on each of its four engines to keep the oil from freezing. A rated flight crew member was required to check cylinder head temperatures once each hour, day and night, to see that the heaters were working correctly. Even under these adverse conditions, practice alerts were initiated by SAC Headquarters. Flight and ground crews would don their Winter gear, rush up the ramp to face the elements, remove the heaters and engine covers, and other protective equipment. The flight crew would then climb aboard the aircraft, exhausted. The type of message received would require different responses. Under these conditions, the alert response time did not quite meet SAC approval.

On one occasion, an alert test almost resulted in a crew member injury. The aircraft engines were required to be started. While the Boom Operator was boarding to close the entrance, he lost his footing on the icy surface and was blown across the ramp into the banked snow causing him to lose conscious. When he did not check in on the intercom, the crew checked and saw this shape on the ground. They stopped engines and found the shape was their missing person, almost frozen. He was carried into the alert facility and attended by persons who revived him and he was returned to duty.

Flying into and out of Fort Churchill in the Winter was an adventure. Polar bears were seen crossing the runway. Horiz-

ontal blowing snow kept weather at minimums. The runway was covered with ice and snow continually. The only way to tell where the center line of the runway was by a red line painted over the ice. Ever try landing in a crosswind with blowing snow looking for a red line on a 6000 foot runway at minimum conditions? The Squadron performed strip alert at Fort Churchill for two years.

In addition to providing support at Fort Churchill, the 98th ARS flew scheduled training missions out of Lincoln AFB and sent aircraft and crews to Harmon AB for alert duty during the last five months of 1960.

On November 4, 1960, KC-97 #2735 was returning to Lincoln AFB from alert duty at Harmon AB, Newfoundland. The crew experienced an in-flight emergency of major proportions. The crew was AC D.Doupnik, P J.Ross, N R.Rhoad, FE R.Pipes, BO W.Golbert, CCs E.Henrickson, and J.Grabanski. The aircraft was at cruising altitude over Eastern Canada when #3 engine had a complete loss of engine oil and #3 propeller went into an overspeed condition.

Attempts to feather the prop were unsuccessful. The #3 engine RPM was stabilized at 2000 RPM. The crew recognized that due to the lack of oil, the overheating of the engine and propeller could result in the #3 prop separating from the engine with extensive damage to the fuseloge or #4 engine. Navigator Rhoad positioned the aircraft 46 miles from Bagotville, Quebec where a Canadian Air Station was located. AC Doupnik determined that Bagotville was a suitable landing field and the weather was poor but above minimums.

AC Doupnik alerted the crew that #4 engine would continue to operate, to aid in the control of the aircraft, until #3 prop showed evidence of separating. Crew members were positioned to observe the nose section of #3 engine and were to report when #3 began sparking, glowing, or flames appeared.

At 10 miles from the runway, the crew reported that #3 began to glow white and burn. AC Doupnik ordered #4 propeller feathered. With #4 feathered, at 5 miles from touchdown, #3 prop separated from the aircraft and struck the #4 feathered prop. The engine fire procedures were performed on #3 without success. AC Doupnik completed the approach and landing on two engines with a ceiling of 600 feet, visibility two miles, blowing snow, runway braking action nil.

The crew evacuated the aircraft while the base fire department put out the fire. The separated prop landed in an open field close to Bagotville. This in-flight emergency resulted in no injury to a crew member nor loss of an aircraft. There was only material damage that was repaired or replaced. The aircraft and crew were returned to the Squadron because of the training, professionalism, and experience of this crew.

Recognition was made of this incident by awarding AC Darrell Doupnik the Air Medal, and P James Ross and N Richard Rhoad the Air Force Commendation Medal.

Another significant change in personnel, flight and mainten- took place in 1961 and the first half of 1962. Personnel left for KC-135s, others to new assignments, pilots upgraded to aircraft commanders, service commitments fulfilled and a hint of things to come. With the B-52 bomber becoming the main aircraft in the strike force, the slower and lower KC-97 was not the plane of the future.

The Squadron was still able to perform its mission and keep its combat capability during this period of training new personnel. Another change of Squadron Commander was made in July 1962. Charles L. Peterson replaced Walter P. Morton.

The 98th Air Refueling Squadron made its next and last SAC Rotational Movement to Lajes AB, Azores on September 21, 1962 for 120 days temporary duty. The Squadron deployed in three waves with an enroute, over night, stop at Harmon AB, Newfoundland. The mission was to provide in-flight refueling for B-47 aircraft returning to the United States from Europe.

The routine flying, refueling, navigation and pilot training was interrupted early one morning when SAC Headquarters initiated an alert which placed everyone in a very high readiness posture. The Cuban Missile Crisis had arrived. All routine schedules and flights were cancelled.

The Squadron was given the immediate mission, for part of its aircraft, to fly patrol-search missions over a large area of the Central Atlantic. Another part of the aircraft was placed on alert in the event the bomber force was launched. The aircraft on patrol were to fly at low altitude, identify ships and photograph all ships going West or had cargo on deck that resembled missiles. These missions were six hours long and fatiguing due to weather conditions and constantly scanning the ocean surface at low altitude.

A second air refueling squadron was deployed into Lajes within days after the crisis began. A task force was formed by the two squadrons, with Charles L. Peterson designated as Commander. Everyone was placed on alert status immediately, except for the patrol flights by the 98th ARS. The alert status ended after three weeks with a general celebration by everyone. The 98th ARS ended its temporary duty at Lajes right after the alert status was lifted. The other deployed air refueling squadron remained at Lajes for a normal tour. The 98th ARS returned to Lincoln AFB at the end of January 1963.

The operational life of the 98th Air Refueling Squadron began to ebb upon its return to Lincoln AFB. With increasing numbers of KC-135 and B-52 aircraft, the KC-97 and B-47 aircraft

were less dominate. Especially the KC-97 which could not duplicate the speed or altitude of the KC-135 or the bombers. A phase down began with the transfer of personnel and dispersal of aircraft to other bases or National Guard Squadrons. Joe Volden was given the task of preparing the aircraft for transfer. He remained in place until the last aircraft departed.

The Squadron flew its last flight from Lincoln AFB in KC-97 #723 on March 29, 1963. The flight was for 6 hours, with take off at 2005 hours. A night flight as usual. The personnel on board were IP D.Dolan, IP V.Huber, P S.Bramwell, IN G.Campbell, FE K.Bischoff, IBO L.Bose, BO O.Parrish, NEW T.Eyres, N R.Armstrong, and P R.Fleming.

The 98th Air Refueling Squadron was deactivated April 1, 1963 at Lincoln Air Force Base, Nebraska. Some personnel retired, others transferred to new bases or training schools, and some personnel were given duties with the 98th Bomb Wing pending reassignment. The last person from the Squadron to receive transfer orders was John M. Schumacher, Navigator, in October 1963.

The 98th Air Refueling Squadron, during its nine years, flew 10,000 refueling flights, delivered 50 million gallons of jet fuel in the air, and flew more than 64,000 hours, the equivalent of 16,192,000 miles. The 98th ARS never lost a man or an aircraft, never recorded an injury from an accident, and never recorded a disabling injury during maintenance work. A job well done by every person assigned to the unit.

"Woody Woodpecker" was retired when the Squadron deactivated, but the bird is still present at every meeting of the 98th Air Refueling Squadron Veterans Association.