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Foreword...

The Eleventh Air Force celebrates the 60th anniversary of the arrival of the first Army Air Corps unit in Alaska, the 18th Pursuit Squadron. The squadron arrived in February 1941, as part of an effort to provide a defense of Alaska after years of neglect. The first Army Air Corps personnel had landed on Merrill Field the previous August. They were the forerunners of what would later become the Eleventh Air Force.

The publication of this pamphlet also marks the 100th anniversary of the arrival of Lieutenant William "Billy" Mitchell in Alaska in August 1901 on a fact-finding mission for the U.S. Army Signal Corps. General Mitchell would later champion Alaska in publications and testimony before Congress as being one of the most strategic places in the world, "The Air Cross Roads of the World."

General Mitchell's championing of airpower and his pioneer vision of Alaska have been vindicated. The Eleventh Air Force has grown from its modest beginnings on the eve of America entry into World War II to a major player in the Pacific region, providing Top Cover and Global Engagement. It has moved not only from defending Alaska, but also providing forces for worldwide deployment.

This year will also mark the return of the Eleventh Air Force veterans who served and fought in the Aleutian Islands during World War II. Their reunion in Anchorage in October, with the theme of "Return to Our Roots," will probably be their last. They are from a passing generation of men and women who came of age during the Great Depression, fought in mankind's greatest and most destructive war and then came home to build America into the most powerful nation in the world.

John H. Cloe

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The advertisement displays a collage of various book covers. Visible titles include "The Chamber" (featuring a brown bear), "The Army in Alaska", "ANCHORAGE", "Welcome...", and "20 Years of the Alaska Wildlife Federation". The covers show diverse Alaskan themes: wildlife, industrial sites, landscapes, and cityscapes.

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Brig. Gen William "Billy" Mitchell in
a Curtis PW-8.

Inset: Gen. Mitchell during the
winter wearing snowshoes.

Photos courtesy Army Air Service.

ELEVENTH AIR FORCE HISTORY

by John H. Cloe



Old Alaska New Alaska

Many called Brig. Gen. William "Billy" Mitchell a "prophet before his time." Others believed him to be brash and irresponsible. All agreed that he championed the use of airpower in modern warfare. Above all General Mitchell was among the first to appreciate the strategic location of Alaska astride the "Air Crossroads of the World." His strong advocacy for the strategic importance of Alaska is a legacy that continues to resonate.

Mitchell's involvement with Alaska began in 1901, when Brig. Gen. Adolphus W. Greely, Chief, U.S. Army Signal Corps, sent the young lieutenant on a fact-finding trip to the remote, sparsely settled territory. Mitchell returned in early 1903 to supervise the construction of a 125-mile segment of the Washington-Alaska Military Cable and Telegraph System running more than 400 miles between Eagle and Valdez.

His Alaskan experience left a lasting impression as expressed in his book, "The Opening of Alaska," and other publications. He also predicted that Alaska would be invaded by Japan one day.

To prove his point, General Mitchell, as the Assistant Chief of the U.S. Army Air Service, conceived the idea of a long-distance, round-trip flight from Mitchel Field, New York to Nome. Captain St. Clair Streett led the flight of four DeHavilland DH-4s on the 9,000-mile journey during the summer of 1920. The Black Wolf Squadron's flight proved that Alaska could be linked by

air with the rest of the United States. It was the first military flight to Alaska, and it opened the territory to the development of aviation.

Carl Ben Eielson, who had been trained to fly by the Army Air Service, arrived soon afterwards and began flying out of Fairbanks.

Other military flights followed. The Douglas World Cruisers transited Alaska during the first around-the-world flight in 1924. Captain Ross G. Hoyt flew an experimental pursuit aircraft to Nome in 1929. Unfortunately, he was forced down in Canada with fuel problems on his return. Lieutenant Col. Henry "Hap" Arnold led a flight of 10 Martin YB-10 bombers on a round-trip flight to Fairbanks from Bolling Field, Washington, D.C. in 1934. Arnold went on to become the Chief of Staff of the Army Air Forces during World War II. Captain Hez McClelland flew a Douglas C-26 amphibian to Alaska on a fact-finding trip the following year.

By now both the Army and Navy were interested in developing bases in Alaska. Congress introduced the Wilcox Bill calling for the construction of a military air base in Alaska. General Mitchell testified on its behalf during the 1935 session, stating: "Alaska is the most central place in the world for aircraft, and that is true of Europe, Asia or North America." He went on to say: "I believe, in the future, he who holds Alaska will hold the world, and I believe think it is the most strategic place in the world."

The bill provided the authorization but no funding for an air base in Alaska. The territory remained defenseless except for a small Army post near Haines, Alaska. The nation was in the depths of a depression, and very little money could be spared for the military and Alaska.

In 1939, Congress appropriated \$4million dollars for a much-needed cold-weather test facility near Fairbanks. Preliminary site development work began that summer on what would become Ladd Field and later Fort Wainwright. The first Army Air Corps personnel to be assigned to Alaska, Major Dale Gaffney and 17 others, arrived at Fairbanks in April 1940 as the advance party of the Cold Weather Test Detachment for Ladd Field.

Construction on Elmendorf Field, the first major operational air base in Alaska, began June 8, 1940, in response to the growing Japanese threat in the Pacific and the need to provide for the air defense of the territory. The first Air Corps personnel to be assigned to Elmendorf Field, Maj. Everett S. Davis, Staff Sergeant Joseph A. Grady and Corporal Edward D. Smith, landed at Merrill Field on August 12, 1940. They were the forerunners of what would become the Eleventh Air Force.

Military Alaska

The year 1940 marked the beginning of a period that one Alaska economist and author, George Rogers, called "Military Alaska." It would last well into the Cold War years leading to statehood, and its economic and social impact would continue to resonate, eclipsed only by the discovery of oil. One contemporary author at the time remarked that while the "...Gold Rush gave Alaska its mystique, the military put it on the map." The arrival of the military in force during 1940 divides the old Alaska from the new Alaska.

The first air unit, the 18th Pursuit (later fighter) Squadron arrived at Elmendorf AFB on February 21, 1941. Commanded by Capt Norman D. Sillin, it was equipped with 20 Curtiss P-36 Hawk aircraft. Two Douglas B-18 Bolo bomber squadrons, the 36th Bombardment and the 73rd Bombardment squadrons followed the 18th Pursuit Squadron. Major William O. Eareckson, who was to achieve fame during the Aleutian Campaign, commanded the 36th.



P-36A, No. 55, Maj. Norman Sillin, Comdr. 18th Pursuit Squadron.
Photo courtesy The Howard D. Nelsen Collection.

Alaska at War

Following the December 7, 1941 Japanese attack on Pearl Harbor, the Army rushed reinforcements to Alaska and replaced the older aircraft with newer models. The 11th Fighter Squadron, commanded by Maj. Jack Chennault and equipped with Curtiss P-40Es Warhawks, arrived in January 1942 as did the 77th Bombardment Squadron under the command of Maj. Robert O. Cork. The 77th was equipped with the new and unproven Martin B-26 Marauder. The 73rd Bombardment Squadron received B-26s and the 18th Pursuit Squadron P-40s. The 36th Bombardment Squadron retained its B-18s until late May 1942, when it was re-equipped with Boeing B-17E Flying Fortresses.

To manage the buildup of forces, the Alaskan Air Force was activated January 15, 1942 under the command of Colonel Everett S. Davis. It was redesignated the Eleventh Air Force on February 5, 1942. Brigadier General William O. Butler arrived shortly afterwards to assume command.

For the first six months of the war, the Japanese went from one stunning victory after another. Then they became overconfident and launched a campaign to expand their empire in the Pacific farther eastward. The Japanese planned to seize New Guinea in the Southwest Pacific, Midway Island west of Hawaii and the western Aleutians Islands. They would then establish a defensive line and negotiate a peace treaty favorable to themselves.

The Japanese initiated the Midway-Aleutian operation by conducting a carrier strike against the U.S. Navy base at Dutch Harbor as a diversion to the main offensive against Midway Island. The raids, conducted June 2-3 from the aircraft carriers *Juno* and *Ryujo*, were the only major air attacks conducted against North American soil during World War II.

The attacks by dive and horizontal bombers and Zero fighters inflicted minimal damage. Eighty-six Army and Navy personnel were killed and 11 aircraft were destroyed. A number of buildings and fuel tanks were also demolished and a barracks ship, the *Northwestern*, was damaged. In return, 11th Fighter Squadron fighters based at Otter Point, an airfield built in secret near Dutch Harbor on the east end of Umnak Island, intercepted and shot down five Japanese aircraft.



Lt. Col. Jack Chennault, 1942
Photo courtesy Army Air Service.

A slightly damaged Zero fighter was later found on nearby Akutan Island. It was restored to flyable condition and flown against other American fighters to determine its strengths and weaknesses so that more effective tactics could be developed to counter it. Then Captain Ronald Reagan narrated a training film about it.

Following the Dutch Harbor attack, the Japanese landed forces on the western Aleutian Islands of Attu and Kiska. The landings caught the Americans by surprise, and posed a dilemma. For the first time since the War of 1812, a foreign military force occupied U.S. soil. Two choices faced America: contain the Japanese on the two islands or launch an offensive to drive the enemy out of the Aleutians. The political and military leaders chose the latter. The presence of the Japanese proved embarrassing.

The military decided to launch an air offensive followed by



*Main Camp Kiska Harbor, Japanese Installation.
Photo courtesy Don Cooley.*

the landing of forces on islands nearer to the Japanese. Additional reinforcements consisting of the 21st and 404th Bomber squadrons, equipped with Consolidated B-24 Liberators; the 406th Bomber Squadron, Lockheed A-29 Hudsons; the 54th Fighter Group with Bell P-39 Cobras; and the 54th Fighter Squadron with Lockheed P-38 Lightnings were sent to Alaska.

Since the major Japanese force was located on Kiska, most of the effort was concentrated against that island. Initially the missions were flown from Cape Field on Otter Point. However, the 1,200-mile round trip limited the effectiveness of the B-17s and B-24s and prevented the employment of the medium bombers and the fighters. On August 30, troops went ashore at Kuluk Bay, Adak Island, and within 10 days constructed an airfield that was located 250 miles from Kiska.

The first major attack from the new field was launched on September 14. From then on the number and intensity of the raids increased. A typical bombing mission in the Aleutians, however, seldom exceeded 10 bombers and a like number of fighters. Weather, rather than the Japanese, proved the greatest enemy.

The P-39s of the 54th Fighter Group proved unsuitable for the Aleutian conditions and the group was withdrawn in December 1942. This left one bomber group, the 28th, consisting of three heavy and three medium bomber squadrons, and one fighter group, the 343rd, composed of four squadrons. The latter included the 344th Fighter Squadron, which had been formed from the transfer of personnel from the other three squadrons. Two troop carrier squadrons, the 42nd and 54th, provided passenger and high-priority cargo support.

The Royal Canadian Air Force also contributed a significant force. A bomber reconnaissance squadron was sent to Nome and two P-40 squadrons, numbers 14 and 111 Fighter Squadrons were committed to the Aleutians. Three other squadrons were based on Annette Island in southeastern Alaska.

The 54th Fighter Squadron was the only one equipped with the Lockheed P-38 Lightning. The others flew the single-engine, limited-range P-40. Because of its long range, the twin-engine P-38 became the fighter of choice. As a result, the 54th suffered the loss of more than half of its original complement of 30 pilots.

On January 12, 1943, in preparation for a planned landing on Kiska, troops were landed at Constantine Harbor, Amchitka. Within a matter of weeks a fighter strip was carved out. The 18th and 54th Fighter squadrons deployed forward. They were joined by North American B-25 Mitchell medium bombers from the 73rd and 77th Bombardment squadrons. The airfield on Amchitka placed the Eleventh Air Force within 60 miles of Kiska.

Headquarters Eleventh Air Force was moved to Adak, and the island became the major base of operations for the remainder of the war.

The Battle of Attu

Due to a shortage in shipping and the limited availability of forces, Vice Admiral Thomas Kinkaid, the overall commander in the Aleutians, decided to bypass Kiska and land troops on lesser-defended Attu Island. It was the first example of "leap frog operations," the practice of bypassing strongly defended positions, which was to become common practice in the Pacific.



*APA - Attack Transport with U.S.S. Haywood off Attu. May 11, 1943.
Photo courtesy Army Air Service.*

In preparation for the assault planned for early May, Kinkaid ordered an all out air assault against the two islands. This, coupled with the end of winter and the improvement in weather, resulted in a significant increase in mission. A total of 1,175 sorties were flown and 771 tons of bombs were dropped during April 1943, breaking all records.

On May 11, men from the 7th Infantry Division landed on Attu and in a hard-fought battle resulting in 549 dead and 1,148 wounded with another 2,100 taken out of action for various other causes. It ended with a mass Japanese suicide charge against American positions on Engineer Ridge during the predawn hours of May 29. Of the approximately 2,500 Japanese defending the island, only 29 survived as prisoners of war. The rest either died in battle or committed suicide. The Battle of Attu is remember for the poor planning, inadequate clothing and equipment and, the terrible conditions under which men fought.

Because of the poor weather, air support was limited to 11 days during the battle. The Eleventh Air Force, however, was able to fly 904 sorties and drop 541 tons of bombs during May. Most of the effort was directed against Attu.

Kiska

The Eleventh Air Force next turned its full fury against Kiska. During June through August, it flew 1,775 sorties and dropped 1,405 tons of bombs on the island.



*A Japanese ship burning in Kiska Harbor.
Photo courtesy Army Air Service.*

When a combined force of 33,000 Canadian and U.S. troops landed on August 15, they found Kiska abandoned. The Japanese had managed to evacuate their garrison of 5,000 from the island on July 12 without being detected.

With the reoccupation of Kiska, the Aleutian Campaign ended. It was the only campaign of the war fought on North American soil. It had been primarily an air war. The Eleventh Air Force flew 297 missions and dropped 3,662 tons of bombs. One hundred and fourteen men were killed in action; another forty-two were reported missing in action and forty-six died as a result of accidents.

Thirty-five aircraft were lost to combat and another 150 to operational accidents. It was the highest American combat-to-operational loss ratio of the war. Weather was the prime culprit.

The Eleventh Air Force accounted for approximately 60 Japanese aircraft, one destroyer, one submarine and seven transport ships destroyed by air operations.

Following the occupation of Kiska, the Eleventh Air Force was drastically reduced to 404th Bomber Squadron flying B-24s and the 77th Bomber equipped with B-25s. Many of the support units departed for other duties. The Canadian air units were withdrawn. The four Eleventh Air Force fighter squadrons were retained to provide air defense of the western Aleutians Islands.

From a peak of 16,526 in August, the strength of the Eleventh Air Force declined to 14,975 by the end of 1943. By the end of the war, it had dropped to 6,849.

Missions to the Kurils

After helping to drive the Japanese from the Aleutians, the Eleventh Air Force was committed to flying bombing and reconnaissance missions against Japanese military installations in the northern Kurile Islands.

The first mission, against Japanese military bases on Paramushiro and Shumushu islands, was launched on July 10, 1943. Staging out of Alexai Field, Attu, eight B-25s from the 77th Bomber Squadron, under the command of Capt James L. Hudelson, flew a nine-and-a-half-hour, 1,600-mile round trip mission against Paramushiro. It was the first land-based air attack against the Japanese home islands of the war.

Another mission was flown eight days later by a larger force and a third on August 11. The Eleventh Air Force dispatched eight B-24s and 12 B-25s from Shemya and Attu on the final mission of the year, flown September 11. By now the Japanese had reinforced their defenses and were on the alert. Seventy-four crew members, three B-24s and seven B-25s failed to return. Twenty-two men were killed in action, one taken prisoner, and 51 interned in Russia. A third of the Eleventh Air Force's bomber capability had been wiped out.

After a five-month break, the Eleventh Air Force resumed the missions against the northern Kuriles on February 5, 1944. Six B-24s from the 404th Bomber Squadron and 16 P-38s from the 54th Fighter Squadron provided cover in relays for a Naval force following a ship bombardment on Japanese installations in the northern Kuril Islands.

With the naval strike against the northern Kuriles, the military implemented the highly classified Operation Wedlock, designed to divert the Japanese attention north and mislead them about U.S. strategy in the Pacific. The plan, which involved air strikes by Army and Navy bombers and U.S. Navy shore bombardment and submarine operations, worked. The Japanese



B-25, 77th Bomber Squadron. Photo courtesy Army Air Service.

increased their garrison in the northern Kurils from 8,000 in 1943 to 41,000 in 1944, and maintained more than 400 aircraft in the Kurils and Hokkaido area in anticipation that the Americans invading from Alaska.

Senior military planners had briefly contemplated an invasion of northern Japan from the Aleutians during the fall of 1943, but rejected the idea as too risky and impractical. Logistics and weather posed too many difficulties. The planners also considered basing Boeing B-29 Superfortresses on Amchitka and Shemya, but likewise rejected that idea. The military did go ahead with plans for expanding the bases in the western Aleutians, and a major construction program was begun on Shemya. Plans were put on the shelf for a possible invasion of Japan via the northern route in 1945.

*Bombing strike on the Kurils.
Photo courtesy National Archives.*

The Eleventh Air Force continued to fly missions against the Kurils until the end of the war. The 404th Bomber Squadron operated from Shemya with its B-24s. The 77th Bomber Squadron flew from Alexie Point on Attu with B-25s

The 404th Bomber Squadron flew 183 missions involving anywhere between one and 12 bombers with four being the average. The 77th Bomber Squadron flew 93 missions with a similar number of bombers. The 404th possessed on an average 12 B-24s and the 77th 22 B-25s. The two squadrons conducted some of the longest over-water flights of the war under the most adverse weather conditions; and, despite their limited numbers, they were able to tie down a significant number of Japanese, including 10 percent of its air force, which could have been employed to advantage elsewhere.

The two squadrons lost 74 crewmembers killed in action, 19 missing in action and 11 taken prisoner of which 3 died in captivity. Another 179 were interned in Russia. The missions to the Kurils were long and difficult. If an aircraft suffered battle damage or mechanical problems or the crew ran into weather difficulties, the only alternative was to land in Russian. Most flew to Petropavlovsk, the nearest sizable airbase near the Kurils. The Russians kept the planes and eventually released the crews, who were sworn to secrecy not to reveal where they had been. Russia and Japan had a neutrality pact at the time.

They also flew without fighter support. Although the Eleventh Air Force experimented with using the P-38 for long-range escort, the range and conditions proved too formidable for the older model P-38s flown by the 54th Fighter Squadron. The other three squadrons, the victims of military priorities, continued to fly the obsolete P-40. The squadrons finally began converting to



more capable P-38L Lightnings in early 1945. It had the range to reach targets in the northern Kurils with some assurance of success. By then the war was winding down and they were not used for that purpose. In the interim, the fighter squadrons trained, provided air defense in the western Aleutians, and occasionally intercepted and shot down bomb-carrying balloons the Japanese were attempting to drift across the Pacific to North America.

The Russians entered the war following the August 6 atomic bombing of Hiroshima. On August 18, the Russians seized the northern Kurils. The Eleventh Air Force flew its last mission of the war on August 24, when two B-24 crews attempted to take photographs of the Russian occupation and were turned back by weather. The war ended on September 2 with the signing of formal surrender documents in Tokyo Bay. On September 4, two B-24s flew the last mission over the Kurils. Russian fighters intercepted and forced them away, a foretaste of the Cold War that lay ahead.

The end of the war brought a major reduction in force and the closing of Aleutian bases. The wartime 28th Bomber Group was inactivated October 20, 1945. The Eleventh Air Force was redesignated the Alaskan Air Command on December 18, 1945. In keeping with an Air Force policy to keep the oldest and most illustrious units, the 57th Fighter Group was activated at Shemya AFB on August 15, 1946. The 343rd Fighter Group inactivated the same day and its personnel and equipment were transferred to the 57th. Shortly afterwards, the 57th Fighter Group exchanged the P-38 Lightnings it had inherited for the North American F-51H Mustang.

Wide Open on Top

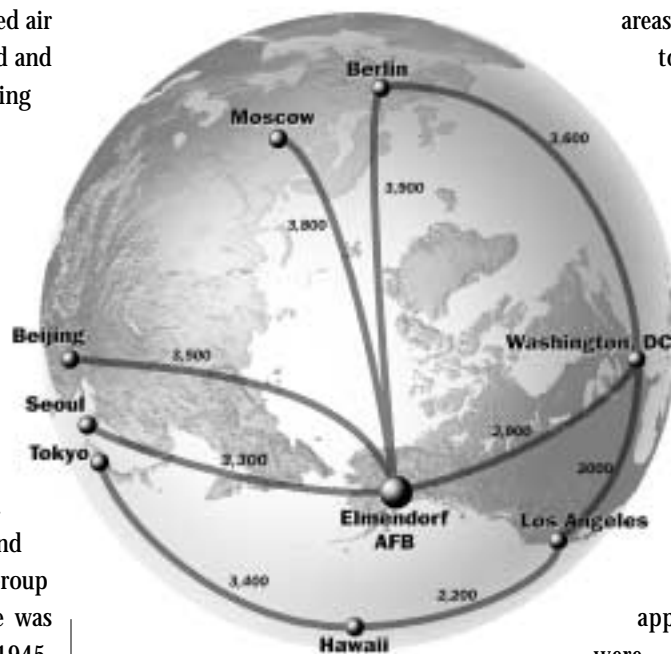
The emphasis shifted from bomber to air-defense operations against the emerging Soviet bomber threat. The Soviet Union, using reverse engineering, developed the TU-4 Bull from three Boeing B-29 Superfortress that had made emergency landings at Vladivostok in 1944. The TU-4 could reach Alaskan targets.

At the time, only the U.S. possessed the atomic bomb and the means for delivering it. National leaders did not view the Soviet Union as a threat to North America. Reconnaissance flights during the late 1940s indicated that the Soviets were not constructing bases from which the TU-4 could reach targets in the contiguous United States. Senior Army Air Forces leaders believed that the nation's best defense rested with the threat of its nuclear offensive capability.

They did not, however, completely ignore the need to develop a modern air-defense capability. The Air Defense Command was activated March 27, 1946, to develop an air defense system for the contiguous United States. The Alaskan Air Command was responsible for a similar system in Alaska.

In February 1946, Gen. Carl Spaatz, Chief of Staff, US Army

Air Forces, spoke of what would become known as the polar concept for air defense. He noted that "the areas essential to the polar



approaches" were North America and Alaska.

A quick look at the map showed the shortest bomber route distances to North America were across mainland Alaska and over the polar ice cap. It was only a matter of time before the Soviet Union would begin developing more capable follow on bombers to the TU-4 and a nuclear capability. United States intelligence analysis estimated the latter would occur by 1952.

General Spaatz visited Alaska during September 1947 to gain further knowledge about its capabilities. He and his party traveled to bases in interior Alaska and in the Aleutians. The Army Air Forces were looking at Alaska not only in view of a need to provide a better air defense, but also as a place to forward base its B-29s. The 28th Bomber Group had been reactivated on August 4, 1946 and equipped with B-29s. It deployed to Alaska from October 1946 to April 1947 to test the concept.

Alaska's strategic importance was not lost on other military leaders. Generals David Eisenhower, Henry Arnold and Curtis LeMay visited Alaska during this period as did the entire Joint Chiefs of Staff in September 1949. Their visit came at crucial time.

On September 3, 1949 an Air Weather Service WB-29 flying from Japan to Alaska picked up atomic particles in a paper filter. Lab tests revealed that the filter, which had been exposed at 18,000 feet for three hours, contained a significant radiation count of 50 per minute. Subsequent flights revealed counts of up to 1,000 per minute. President Truman announced on September 23, 1949, that the Soviet Union had exploded a nuclear device. The Cold War took on a new meaning

Alaska's limited defense capabilities received a further boost when the Boeing Company, at the Air Force's urging, announced in late 1949 that it was moving the production of its all jet B-47 Stratojet from Seattle, Wash., to the less vulnerable Wichita, Kansas. Governor Ernest Gruening, Alaska's territorial governor, protested. To him, the move represented a tacit admission that Alaska was open to attack.

Closing the Gap

The Alaskan Air Command had already taken steps to defend against a Soviet bomber attack. On September 1946, it created the Aleutian Sector headquartered at Adak AFB and the Yukon Sector, with headquarters at Ladd AFB. One month later, AAC moved its headquarters from Adak AFB to Elmendorf AFB.

The arrangement, however, lasted only a year. The command abolished the Aleutian Sector on July 1, 1947, and began withdrawing its forces from the islands. Since the anticipated bomber routes lay across mainland Alaska, the Aleutians were no longer relevant to air defense.

The Aleutian radar sites were dismantled and relocated to mainland sites. The units supporting Cape AFB, Umnak Island and Thronbrough AFB, Cold Bay, were inactivated January 1, 1950. The unit supporting Amchitka had been inactivated February 25, 1949. The Navy assumed responsibility for Adak on July 1, 1950, and turned it into an anti-submarine warfare base. The Alaskan Air Command, after deciding to close Shemya AFB, reversed itself, and kept the base open to support the Korean War as a refueling base. Later it became a base for collecting intelligence on Russian missile development.

Bomb Dump on Adak Island. Photo courtesy Army Air Service.



The 57th Fighter Group moved to Elmendorf AFB in March 1947, with its 64th, 65th and 66th Fighter squadrons. A fourth squadron, the 449th Fighter (All Weather) moved from Adak to Ladd AFB in March 1949. The squadron had been assigned to Adak in September 1947 and equipped with the Northrop F-61 Black Widow. It converted to the piston-engine North American F-82H Twin Mustang at Ladd AFB. The 57th Fighter Group converted to the jet-powered Lockheed F-80C Shooting Star in 1948.

The Alaskan Air Command divided Alaska into two air defense sectors, one headquartered at Elmendorf AFB and responsible for the southern half and one headquartered at Ladd AFB, responsible for the northern half of Alaska. Two direction centers, one on Elmendorf AFB and the other at Ladd AFB, provided command and control over the interim air defense system.

The late 1940s marked a period of limited military funding and major organizational changes. The Alaskan Command was established on January 1, 1947, as one of the first unified commands. An Army Air Forces general became its first commander in recognition that Alaska was an air theater of operations. United States Air Force generals continue to be the senior military commanders in Alaska, in recognition of the key role the Air Force plays in what has become recognized as an air theater of operations.

In addition to his other responsibilities, the Commander-in-Chief, Alaskan Command was responsible for the air defense of Alaska. He delegated this responsibility to the Commander, Alaskan Air Command.

As the result of the Armed Forces Unification Act of January 26, 1947, the United Air Force (USAF) achieved equal status with the Army and Navy on September 18, 1947. As elsewhere, it had significant impact on Alaska's military community.

The Alaska Air Command, as major Air Force command, reported directly to Headquarters USAF. Its commander, however, continued to report operationally to the Commander-in-Chief, Alaskan Command. Elmendorf Army Air Base became Elmendorf Air Force Base (AFB) on March 26, 1948, and AAC assumed responsibility for all Air Force installations and property from the Army during June-July 1948. The separation of services became final on March 3, 1951, when the Department of the Army transferred Elmendorf AFB to the Air Force. The Air Force inherited the old Fort Richardson and the immediate surrounding lands of the Fort Richardson military reservation.

Korea

The outbreak of the Korean War in June 1950 had a major impact on AAC. The war marked the end of the fiscal austerity of the post World War II era and the beginning of a major growth in Air Force forces and capabilities.

At the time, the AAC commander commanded a limited air defense force consisting of three squadrons of F-80Cs, a squadron of F-82s and five temporary radar sites at Elmendorf AFB, Ladd AFB, King Salmon, Nome and Gambell on St Lawrence Island. The latter also tracked nearby Russian shipping in the Bering Strait for intelligence purposes and operated 24 hours a day. The Army provided point air defense of Elmendorf AFB and Ladd AFB with 75, 90 and 120 millimeter anti-aircraft gun positions.



Last operational F-82 in Air Force assigned to 449FS, Ladd AFB. Photo courtesy United States Air Force.

With the outbreak of the war, AAC sited additional radars at Willow, Farewell and Bethel in the southern sector and Kotzebue, Galena and Clear in the northern sector. At best, it provided an interim air defense system until a permanent system could be constructed, a fact that Air Force planners realized in the face of the Soviet development of a nuclear bomb and the means for delivering it.

The World War II vintage radars that had come from the Aleutians provided limited local coverage and command and control was rudimentary. In view of the growing Soviet threat, the need to expand and modernize the air defense system became readily apparent. The Alaskan Air Command had already become involved in a number of studies leading to a permanent system of air defense radars.

Top Cover for America

In March 1946, the Army Chief of Staff and the Chief of Naval Operations appointed the Hoge Board, named after Maj. Gen. William Hoge, U.S. Army Corps of Engineers, to study Alaska's joint defense needs and make recommendations. It recommended 36 radar sites, 10 of which would be manned during peacetime and equipped with modern radars. The study, more of a concept, did not address funding.

The Alaskan Air Command, unaware of the Hoge Board's actions, also completed its own study. It called for 58 sites providing coverage for the entire territory including the Aleutian Islands.

On June 23, 1947, the Army Adjutant General ordered an air-defense study of Alaska. Lieutenant Colonel Harold J. Crumly, Army Air Force, two other officers and a civilian arrived in Alaska shortly afterwards. They filed a two-volume report in October 1947, after traveling around Alaska. The group recommended building 13 radars along anticipated bomber routes at an estimated cost \$24,501,790. The report also recommended another 13 radar sites along the coastal region as a follow on.

The Air Force, in the interim, had been studying the need for a radar system. After looking at a number of options, it settled on a system of 374 radar sites and 14 control centers in the contiguous United States and another 37 radar sites and 4 control centers in Alaska. General Spaatz approved the Supremacy Plan on November 21, 1947. The scheme of operations called for surveillance radars to detect incoming bombers and report to control centers who would then direct alert fighters to an intercept points under the control of ground control intercept radars.

Because of its high cost and fiscal austerity at the time, the Air Force had to scale the plan back to 75 radar sites and 10 control centers in the contiguous United States and 10 radar sites and 2 control centers in Alaska. Congress approved the so called Modified Plan in the spring 1949 and authorized funding in the fiscal year 1950 budget, which ran from July 1, 1949 to June 30, 1950.

Congressional appropriations included \$31,000,000 for Alaska, of which \$270,000 was advanced to begin site investigation. The command established early 1952 as the target date for the permanent system to become operational. By the end of 1951, the estimated cost had climbed to \$71,000,000 and the completion date extended to 1954.

Modified Control and Warning System

The Modified Plan opened the way for the largest construction program since World War II; and like that war, the Cold War construction had significant impact on the economy and social structure of Alaska. It provided employment in remote areas that would not have otherwise been available. It also facilitated the extension of modern communications to remote communities through the White Alice Communications System. The annual re-supply of the remote radar sites also provided an opportunity to ship goods to nearby villages.

The Alaskan Air Command developed a plan for locating the radar sites as far forward as possible along probable Soviet bomber approach routes where they could provide early warning and direction to fighter interceptors. It called for constructing a line of five coastal surveillance sites along the Bering Sea Coast, one interior ground-control and intercept site, and four direction-center sites. The system became known as the aircraft control and warning (AC&W) system.

The command awarded contracts in March 1950 for constructing the direction centers at Murphy Dome near Fairbanks and Fire Island across from Anchorage. Initially called master ground control intercept stations, they received first priority. They were equipped with CPS-6B search and height-finding radars, and were responsible for controlling air-defense operations in their respective sectors. They became operational in September 1951.

The next sites in order priority were direction centers at Campion and King Salmon and the ground control intercept site at Tatalina. The command awarded contracts for King Salmon, Campion and Tatalina during April-May 1950. King Salmon achieved operational capability in November 1951, Campion and Tatalina in April 1952. The three sites were initially equipped with AN/CPS-5 search radars.

Following the outbreak of the Korean War, AAC received additional funds for two ground-controlled intercept sites to cover radar gaps in the interior. The command selected two sites, both remote and accessible only by air.

Major General William Old, Commander, AAC, personally selected the site for Sparrevohn on June 3, 1951, and named it after his helicopter pilot, Capt. Frederick Sparrevohn, who flew him from Elemendorf AFB to the proposed site. Because of the high cost associated with using a contractor, the 813th Engineer Battalion received the job of building the radar site. The battalion arranged for a D-4 bulldozer to be air dropped on June 7, 1951. The engineers, who had arrived by helicopter, used it to carve out a runway.

A mobile AN/CPS-5, installed on the 3,400-foot mountain-top, became operational on December 13, 1951. Five days later, winds estimated at 100 miles per hour blew down the antenna, demonstrating the need for some form of protection. This was solved with familiar geodesic dome, the so-called white "golf ball," which became a common, identifying feature at all the radar sites.

As with Sparrevohn, a helicopter reconnaissance was used to select the Indian Mountain site. The 807th Engineer Aviation Battalion started construction on July 18, 1951. The unit began by upgrading an airstrip that once served a gold mine and building an eight-mile road to the top of Indian Mountain. The site became operational in November 1953 with an AN/FPS-3 search radar. Each site cost approximately \$1.5 million to build. Compared to the \$3-\$5 million dollars in contractor costs for the other sites, the two interior sites were a bargain.

Storms and labor problems delayed the construction of the five coastal surveillance sites. Contracts were awarded in June 1950, and construction began shortly afterwards. The sites featured spilt camps with the support camp located at the foot of mountain and the radar sited at the top. Tramways connected the two camps. Northeast Cape became operational in November 1952, Cape Lisburne in February 1953, Cape Romanzof and Tin City in April 1953, and Cape Newenham in April 1954. All were initially equipped with the AN/FPS-3 search radars.

Additional surveillance sites were later added. Kotzebue and Ohlson Mountain (near Homer) became operational in February 1958, Middleton Island in May 1958, Unalakleet in April 1958 and Bethel in July 1958. Fort Yukon became operational as a ground control intercept site in April 1958.

With the exception of Sparrevohn and Campion, all the sites bore local names. In order to avoid confusion with nearby Galena, and honor a deceased airman, AAC named Campion after Lt. Allan J. Campion. Lieutenant Campion, an F-94 radar operator, had been killed when his fighter crashed during an attempted landing at Galena in November 1950.



(Top)
Top Camp, Sparrevohn Mobil
AN/CPS-5 Search Radar, 1951.
Photo courtesy Army Air Service.

(Side)
Sparrevohn bottom and top
camps, 1961.
Photo courtesy USAF Airman
Gibson



While building the permanent system, AAC continued to use the interim system. It proved limited in capability as proven during exercises. The system suffered from gaps in coverage, old equipment and lack of trained personnel. The system was gradually phased out as the permanent radars came on line.

The Distant Early Warning Line

In addition to the AC&W system, the Distant Early Warning (DEW) Line was constructed across northern Canada and Alaska during the mid-1950s. A prototype DEW Line AN/FPS-19 search radar was installed at Barter Island in 1954 and tested. Construction of the DEW Line started shortly afterwards. The FPS-19 was installed at Point Lay, Wainwright, Point Barrow, Lonely, Oliktok, Flaxman Island and Barter Island. Gap filler AN/FPS-23 radars were sited at 15 other locations along the north coast of Alaska. The Alaska Sector of the DEW Line became operational in 1957.

Initially, the Alaskan Air Command was responsible for the operations and maintenance of the Alaskan Sector. However, it was later transferred to the Air Defense Command, which became responsible for the entire northern system. Radar surveillance data was passed to the Alaskan NORAD Regional Control Center. The Tactical Air Command assumed responsibility for the DEW Line when the Air Defense Command was inactivated in 1980.

White Alice

Tying the system together required a reliable communications system. Initially, high-frequency communications provided the links. However, it proved unreliable due to atmospheric disturbances. The Air Force looked for a better system to include a series of line-of-sight microwave repeaters. They proved too expensive. To find a more reliable and economic system, Maj. Gen. George R. Acheson, Commander, AAC, formed the Alaskan Communications Study Group. It completed its work in May 1954.

Their report recommended a system of long-range radio-repeater sites free from atmospheric disturbances. Bell Laboratories, AT&T, developed a new system, called troposphere scatter, which bounced radio signals off the troposphere. The Western Electric Company began work in 1955. It took three years to complete with 3,500 people working on the \$140 million project. Twenty-five radio repeater sites linked the far-flung radar sites together. More sites were added as the system expanded and new requirements were developed. These included a system of microwave repeater sites along Alaska's main roads and extending down the Alaska Highway in Canada.

The White Alice Communications System (WACS), as it became known featured large billboard-type antennas that dominated the landscape. It provided the only reliable long-range com-

munications in Alaska until the advent of satellite communications in the 1970s.

Cool Barge

Another effort involved developing a system of resupply for the widely separated and remote sites. Most were not located on a road network and could only be reached by waterways during summer months. Initially, the military handled the deliveries. The first major resupply effort began in 1951, when a fleet of vessels departed the Port of Seattle. By 1953, the annual effort had reached the point where it earned a name, Mona Lisa, later changed to Cool Barge.



*Cool Barge deliveries in the 1950's.
Photo courtesy United States Air Force.*

In 1958, the military turned the Cool Barge operations over to a contractor who used a system of seagoing vessels and barges to deliver the bulk of supplies during the ice-free months. Military and contracted airlift provided a year round capability for the delivery of critical cargo and personnel. Airlift also supplied all the needs of the sites, which could not be reached by surface means.

Cool Barge passed into history at the end of the 1995 season. By then, the number of personnel at the sites had been reduced to a handful, which required a fraction of the supplies. Their needs were taken care of with airlift. Sea and river barges were still used to deliver fuel and large cargo items.

Responding to a Soviet Bomber Threat

The construction of the AC&W, DEW line and WACS systems coincided with similar military expansion on the part of the Soviet Union. By the spring of 1952, the TU-4 was operating from airfields at Mys Shmidt and Provideniya on the Chukotsky Peninsula. A B-47 photo reconnaissance, authorized by President Truman and staged out of Eielson AFB, was flown over the Chukotsky Peninsula on October 15, 1952. It confirmed that the Soviets were developing Arctic staging bases on the peninsula from which their bombers could easily reach targets on the North American continent.

The piston engine powered TU-4 was replaced by the jet-powered TU-16 Badger and MYA-4 Bison and the turboprop engine powered TU-95 Bear in the mid-1950s. The newer bombers provided the Soviet Union with a greatly enhanced ability to deliver nuclear weapons over great distances.

U.S. Air Force modernization programs kept pace. The Alaskan Air Command replaced its F-80s with the Lockheed F-94 Starfire in 1951. The F-94 was essentially an adaptation of the T-33, the trainer version of the F-80, and a stopgap measure until a better all-weather interceptor could be fielded. It featured an air-borne radar and afterburner. The radar operator sat the back cockpit and guided the pilot to the target. Armament consisted of four 50-caliber machineguns. The F-94 proved unsatisfactory in Alaska service. The radar operator with Arctic gear on found the cockpit cramped. The aircraft was plagued with maintenance problems and experienced a high number of accidents.

Its replacement was the Northrop F-89C Scorpion, which began arriving September 21, 1953. All fighter-interceptor squadrons, including the 449th Fighter Interceptor Squadron, converted to F-89Cs and Ds by mid-1954. The Ladd AFB based squadron was the last fighter unit to fly the F-82. The F-89 was the first jet fighter to be designed specifically for all-weather operations.

The number of fighter interceptor squadrons increased to six with the arrival of the 433rd Fighter Interceptor Squadron on July 22, 1954, followed by the 18th Fighter Interceptor Squadron four days later. Both were equipped with F-89Ds.

In order to gain an advantage in time and distance, AAC began deploying its fighters to forward operating bases. Beginning in 1948, fighters were placed on air defense alert at King Salmon. Initially, fighters operated from Marks AFB at Nome. However, AAC deemed that base too close to the Soviet Union with not enough reaction time afforded by an interior base and elected to close it. The air defense alert shifted to Galena, and F-94s began operating from there on March 30, 1951.

Combat Alert Centers were also constructed at Elmendorf AFB and Eielson AFB. Fighters were maintained on air defense alert at Eielson AFB until October 1, 1982, in addition to those at Galena and King Salmon.

Along with the fighter upgrades, AAC installed more modern radars at the sites. The direction centers, now renamed control centers, and the ground-control intercept sites received AN/FPS-6 or -90 height finder and AN/FPS-93A search radars. The surveillance sites were equipped with AN/FPS-93A radars.

Initially, two aircraft control and warning (AC&W) groups, one at Elmendorf AFB and the other at Ladd AFB, provided command and control in their sectors. Two air divisions, the 10th and 11th, were activated November 1, 1950 to handle the increased size and complexity of the air defense mission.

The direction centers that had been established at Elmendorf AFB and Ladd AFB to provide command and control over the interim air-defense system gradually expanded and evolved into air defense control centers. The Elmendorf AFB center assumed the additional responsibility of being the AAC Combat Operations Center (COC) in the spring of 1950 for all of Alaska.



*Elmendorf Control Center, 1951.
Photo courtesy United States Air Force.*

Up until the Korean War, Alaska's air defense system, due to lack of manning, did not operate on a 24-hour basis except for exercises and during the Berlin Airlift crisis. It began sustained 24-hour operations on June 27, 1950. Air Force Reserve and National Guard personnel called to active duty helped alleviate the manpower shortage. The Alaskan Air Command's authorized strength also went from 13,869 at the end of 1949 to 16,909 by the end of 1950, and by the end of the Korean War; it had climbed to 21,457. The authorized strength hovered around that figure until 1957.

The 10th Air Division at Elmendorf AFB elected to separate the COC from the air direction center, which was housed in the World War II fighter control center. The underground facility, a familiar site on the road to Six Mile Lake on Elmendorf AFB later became known as the "Underground Hospital." The COC moved into a nearby temporary World War II structure. The center featured a large horizontal plotting board.

The arrangement proved unsuitable because of its makeshift arrangement, and the COC was moved into the Alaskan Air Command headquarters building in February 1953. Initially located on the second floor, the COC was relocated to larger basement quarters in December 1955. The CCO now featured a vertical plotting board. Funds were appropriated in 1957 to build a bigger facility.

Work was completed in early 1961, and the more sophisticated Alaskan NORAD Region Control Center (ANRCC, pronounced An-Rack) replaced the old AAC COC. From 1961 until 1983, the commander used it to exercise command and control over the Alaskan air defense system.

Another center located at Ladd AFB handled air defense operations in the northern sector. When Ladd was closed in 1960

and turned over to the Army on January 1, 1961, the ANRCC assumed responsibility for both sectors. The control center at Murphy Dome became an alternate for the ANRCC.

Initially, AAC used a labor-intensive system to track aircraft. Its attempts to obtain the computer-driven semiautomatic ground-environment (SAGE) system used in other NORAD regions was not successful. However, an AN/FYQ-9 Data Processing and Display System was installed which provided a semiautomatic capability. It became operational in 1965, and remained in operation until the Alaskan Region Operations Control Center (ROCC) came on line in 1983.

Alaska became part of NORAD (established on September 12, 1957) when the Alaskan NORAD Region (ANR) was activated on August 5, 1958. The Commander-in-Chief, Alaskan Command, had already been designated its commander on July 2, 1958. He retained the title until July 1, 1975, when the Alaskan Command was disestablished. The responsibility then passed to the Commander, Alaskan Air Command and later Eleventh Air Force. Staff personnel in AAC also performed similar duties in ANR.

In January 1957, the Joint Chiefs of Staff approved the extension of the DEW line into the Aleutians. Construction started shortly afterwards. The main site was at Cold Bay with auxiliary sites at Nikolski, Port Heiden, Port Moller, Cape Sarichef and Driftwood Bay. The sites were equipped with the FPS-19. Work was completed in early 1959, and the sites were turned over to AAC control on May 1, 1959. Unlike the northern sites, AAC retained responsibility for the operations and maintenance of the sites. Also, unlike the contractor manned northern sites, military personnel manned the Aleutian sites.

Two Nike Hercules air defense artillery battalions replaced anti-aircraft artillery guns during the late 1950s in providing point defense for the Anchorage-Elmendorf-Fort Richardson and Fairbanks-Eielson-Fort Wainwright areas. The five northern batteries became operational during 1959-1960 and were closed during 1970-1971. The three batteries in the Anchorage area became operational in 1959 and were closed in 1979. (The remnants of Site Summit can be seen overlooking Eagle River on Fort Richardson property. There is talk of turning it into a historic site. Site Bay at Goose Bay was turned over to state and now sits abandoned. Site Point was turned into Kinkaid Park. The Tony Knowles Coastal Trail ends near there.)

By 1957, AAC had reached the height of its strength with more than 200 fighter interceptors assigned to six squadrons. Early warning and fighter direction were provided by 18 aircraft control and warning and 12 DEW Line sites tied together by the White Alice Communications System. Its assigned strength was 20,687. The forces were organized into two air divisions providing "Top Cover for America."

Reductions

The Soviet Union launched the first satellite, Sputnik, that same year. Suddenly, the American public became aware that the Soviets had developed an intercontinental missile capability. The major threat changed from bombers to missiles. The year marked the beginning of a decline in air-defense forces

Steps had already been taken by AAC to reduce the number of its fighter interceptor squadrons from six to four by exchanging its F-89s for the delta wing Convair F-102A Delta Dagger. The supersonic, guided-missile equipped, single-seat F-102 outclassed the F-89 in speed, range and operational service ceiling. Additionally, obtaining the more sophisticated fighter interceptor meant that fewer of the older F-89s were required.

The first F-102 unit, the 317th Fighter Interceptor Squadron, began arriving at Elmendorf AFB August 15, 1957, followed by the 31st Fighter Interceptor Squadron. The 64th, 65th and 66th Fighter Interceptor squadrons departed with their F-89s. Originally, AAC's plans called for two squadrons at Ladd AFB, but the Air Force decided to reduce the number to one. As a result, the 18th and 433rd Fighter Interceptor Squadrons were reassigned elsewhere during the last half of 1957. The 449th Fighter Squadron remained and converted to the F-89J.

Reductions continued during the last half of the 1950s and early 1960s. The 31st Fighter Interceptor Squadron inactivated October 8, 1958, and the 449th Fighter Interceptor Squadron inactivated August 25, 1960. This left AAC with one fighter interceptor squadron, the 317th equipped with 43 Delta Daggers.

The 10th and 11th Air Divisions also inactivated August 25, 1960, and Headquarters AAC took over the management of the air defense system. The reductions included turning over Ladd AFB to the Army, which was officially accomplished January 1, 1961. The Army renamed the base Fort Wainwright after Gen. Jonathan M. Wainwright who had surrendered U.S. forces in Philippines during the early part of World War II and had spent the rest of the war in captivity.

Final reductions occurred May 15, 1963, when the radar sites at Bethel, Middleton Island and Ohlson Mountain near Homer discontinued operations. The Air Force decided that the sites, which guarded the southern approaches to Alaska, were not justified since a bomber attack from that direction appeared unlikely. By then, AAC strength had dropped to 12,082 and would continue to decline in the years ahead, reaching 9,989 by the end of 1970.

Supporting Others

Emphasis shifted to supporting other commands. They most notable included the Strategic Air Command and the Military Airlift Command. The involvement with SAC went back to shortly after World War II.

Strategic Air Command

SAC began deploying B-29s followed by the upgraded Boeing B-50 Superfortress and later the giant Convair B-36 Peacemaker to Alaska for exercises and to perform alert duty. The B-47s began alert duty in mid-1950s, as part of SAC's worldwide Reflex Alert Force. Eielson AFB with its long runway served as the host base for the majority of the deployments, although SAC maintained 15 alert B-47s at Elmendorf AFB.

Elmendorf AFB received some notoriety in the film "Fail Safe," that depicted the accidental launch of an alert bomber from the base against Moscow and the unsuccessful attempts to recover it. The bomber alert missions ended January 4, 1966, when the last B-47 departed Elmendorf AFB following an Air Force decision to phase out the bomber.

In addition, SAC used Eielson AFB as a forward deployment base for its refueling and strategic reconnaissance aircraft. It deployed Boeing KC-97s and later Boeing KC-135s to Eielson AFB. The deployments became known as the Alaska Tanker Task Force. They ended August 31, 1992, and the 168th Air Refueling Group, Alaska Air National Guard, assumed the mission.

The Strategic Air Command began using Ladd AFB as a base for its strategic reconnaissance aircraft before shifting operations to Eielson AFB. Initially, SAC used modified versions of bombers, flying first the RB-29 and then the RB-47. Later, during the late 1960s, SAC began using the RC-135, which came in several variants including the RC-135 Cobra Ball, which operated from Shemya AFB.

Eielson AFB served as the major SAC deployment base in Alaska. Initially, known as the Mile 26 satellite field to Ladd AFB, it was renamed Eielson AFB January 19, 1948, after Alaska pioneer Bush Pilot, Carl Ben Eielson. The runway at Ladd, restricted by an oxbow in the Chena River, proved too short for the large jet aircraft coming into the Air Force inventory at the time. The 8,000-foot runway at Eielson AFB, which replaced it, was the longest in the Air Force inventory at the time.

The Alaskan Air Command activated the 5010th Composite Wing June 4, 1949 to provide base support to the SAC units. SAC assigned the 6th Strategic Wing to Eielson AFB March 25, 1967, to manage the growing strategic reconnaissance and aerial refueling efforts.

Strategic reconnaissance operations near Alaska proved risky during the Cold War years. On April 18, 1955, two Russian MIG-15s shot down an Eielson AFB RB-47E off the Kamchatka Peninsula. There were no survivors. Russian MIG-15s also damaged a Navy Lockheed P2V Neptune the same year. The crew managed to make a crash landing on St. Lawrence Island and was rescued by local Natives. An RC-135 on a Rivet Amber mission disappeared June 5, 1969 with its 19-man crew while on a flight from Shemya AFB to Eielson AFB. Eielson AFB named its head-

quarters building, Amber Hall, after the crew. Another RC-135 crashed while landing on Shemya AFB March 15, 1981. Six of the 24-member crew perished.

With the end of the Cold War and the inactivation of SAC in June 1992, strategic reconnaissance deployments to Alaska ceased. The 6th Strategic Reconnaissance Wing was inactivated September 1, 1992.

Ice Islands

One of the more notable projects supported involved ice islands in the Arctic Ocean. A WB-29 radar operator first spotted a larger, floating ice mass in August 1946. It became known as Target A, and later T-1. Subsequent ice islands were spotted and named T-2 and T-3. Brigadier General Frank A. Armstrong, Commander of AAC, at the time of the siting of T-3 in June 1950, ordered a party be landed and a scientific camp established. Lieutenant Colonel Joseph O. Fletcher from the Air Weather Service was designated camp commander.

The party landed on the T-3, later to be known as Fletcher's Ice Island, on March 19, 1952. Additional personnel arrived and a scientific station was set up. They remained on the island for most of the year before abandoning it when it began drifting east out of range of AAC's support capabilities. This ended the first phase of the involvement.

During the 1957 International Geophysical Year, AAC sent another party to occupy another ice island, Ice Station Alpha. T-3 received the designation Ice Station Bravo. A team landed on Bravo in April 1957 and established a camp and maintained it until November 1958. Scientists conducted various studies in oceanography and other disciplines. Another team was landed on Ice Station Charlie, another ice island, in 1960, but had to leave after a short period because of the breakup of the island. The team shifted its operations to Ice Island Bravo, which was still being referred to by its old name, T-3. In September, AAC relinquished control of T-3 to the Navy, ending the Air Force's involvement with ice islands.



*Capt. Paul Green, Communications Officer, T-3, Ice Island 1950's.
Photo courtesy Alaska Air Command.*

Military Airlift Command

Alaska's strategic location again proved itself during the 1960s. The Military Airlift Command began using Elmendorf as an en route refueling stop on the North Pacific route to Southeast Asia in support of the war in Vietnam. The first Lockheed C-141 Star Lifter landed December 1, 1965. By 1969, the C-141s were making 1,000 to 1,200 landings per month. Military Airlift Command Lockheed C-5 Galaxy began stopping at Elmendorf in 1970.

Beginning July 1, 1966, the Military Airlift Command started using Elmendorf AFB as a refueling stop for its medical evacuation flights from Southeast Asia. Military and Department of Defense wives met the aircraft at all hours of the day to pass out refreshments and talk to the returning wounded.

The Military Airlift Command remained on Elmendorf AFB after the Vietnam War. In addition to providing the en route transient support to strategic airlift forces, it assumed the additional responsibilities for Alaska-based tactical airlift and search-and-rescue helicopters in 1975. The 616th Military Airlift Group was activated November 1, 1975. The 17th Tactical Airlift Squadron was reassigned to it from the 21st Composite Wing. The wing also lost the 5040th Helicopter Squadron, which was inactivated, and its Sikorski HH-3E Jolly Green Giant helicopters were assigned to MAC's 71st Aerospace Rescue and Recovery Squadron. The action combined the helicopters with the rescue squadron's HC-130s.

The Vietnam Era

The Alaskan Air Command experienced little growth during the Vietnam era. It did gain a C-130 squadron when the 17th Troop Carrier Squadron (now 517th Airlift Squadron) arrived from Dyess AFB, Texas June 15, 1964. The squadron was the only squadron in the Air Force equipped with the C-130D ski-wheel cargo aircraft. It supported two DEW Line sites on the Greenland Ice Cap and the remote radar sites in Alaska and conducted joint training with Army forces in Alaska. The support of the Greenland Ice Cap sites ended in July 1975.



*C-130D at DYE Site, Greenland Ice Cap.
Photo courtesy United States Air Force.*

Other than the arrival of the 17th Tactical Airlift, AAC continued to experience further reductions. The number of F-102s assigned to the 317th Fighter Interceptor Squadron was reduced to 29 and the combat alert center at Elmendorf AFB was closed in 1965. Air defense modernization programs and the rotational deployment of the Convair F-106 Delta Dart offset the reductions.

The latter had been prompted in part when a Soviet reconnaissance bomber over flew Nunivak Island and the west coast of Alaska March 15, 1963. Intentional or not, the violation of Alaskan airspace raised an uproar. The State Department lodged a complaint, the media took up the cause and it became front-page news. Alaska's political leaders voiced their displeasure about the impact that the force reductions were having on Alaska defenses.

The Department of Defense countered that Alaska's defenses were adequate. The Alaskan Air Command, after unsuccessfully trying to replace the F-102s with McDonnell-Douglas F-4C Phantom IIs, agreed to the rotational deployment of the F-106. The deployments, known as College Shoes, began in July 1963 and continued until June 1970.

In order to better manage its flying units and provide base support, AAC activated the 21st Composite Wing on 8 July 1966. Prior to that, the flying units had been parceled out to various organizations. The wing, as noted by the word composite, flew a variety of aircraft that included F-102s, T-33s, a T-39, C-123s, C-118s, C-130s, EC-54s, EB-57s, HC-21s and U-6s.

With the end of the decade, AAC underwent another major reduction in forces brought about by the Nixon Administration's efforts to reduce spending and balance the fiscal year 1970 budget. As a result, the Fire Island NORAD control center and the NORAD surveillance sites at Northeast Cape and Unalakleet and the Aleutian DEW Segment were closed during September and October 1969. King Salmon assumed the control center duties and the Cold Bay main DEW Line site was converted to a surveillance site.

In another economy move, AAC converted Campion from a control center to a ground-control intercept site and Kotzebue from a ground-control intercept site to a surveillance site in mid-1973. Murphy Dome assumed control-center responsibilities for the entire north sector.

In a final action of the 1969, the 317th Fighter Interceptor Squadron was inactivated December 31 leaving AAC without a fighter capability other than the College Shoes deployments. The situation, however, was short lived. On March 13, 1970, the Air Force assigned the 43rd Tactical Fighter Squadron to AAC. The squadron was equipped with the versatile F-4E Phantom II. It marked another turning point in AAC's history.

Growth of The Tactical Air Force

Lieutenant Colonel Tom Humphey led his squadron of 18 F-4Es to a landing on Elmendorf AFB June 23, 1970. The arrival of 43rd Tactical Fighter Squadron and its dual capable Phantom IIs gave AAC a tactical air capability. For the first time since 1955, AAC had the capability of providing support to ground forces.



*An F-4E of the 43 Tactical Fighter Squadron, May 1979.
Photo courtesy Alaskan Air Command.*

The Alaskan Air Command had used the F-82 to support the Army's requirements during the late 1940s. It was a make shift arrangement at best that employed an air-to-air fighter in a ground support role. When AAC asked for a jet replacement that could support Army needs, the Air Force elected to assign all the F-82s in its inventory to Alaska. It ordered AAC to convert 18 of the remaining 36 Twin Mustangs to ground support.

It was an idea that did not work. Most of fighters to be converted to F-82Hs arrived from the Far East in a bad state of repair. After spending countless hours, the maintenance personnel gave up on trying to bring them up to operational standards. The last F-82 was dropped from the AAC and Air Force inventory and departed in October 1953.

In view of the failed attempt, the Air Force decided to activate the 720th Fighter-Bomber Squadron and assign it to Eielson AFB. The squadron supported Army forces in Alaska from December 1953 with North American F-86F Saberjets until it was inactivation in August 1955. After that, AAC focused on its air-defense mission and the ground forces in Alaska had to rely on deployed units for support.

The arrival of the F-4Es changed AAC from a pure air-defense command to one that also could play a tactical role. Its capabilities were further enhanced with the activation of the 25th Tactical Air Support Squadron on July 8, 1971 and the 18th Tactical Fighter Squadron on October 1, 1977. The former, with its Cessna O-2As, provided AAC with a forward air controller support capability while the latter's F-4s were dedicated to supporting ground forces in Alaska.

Surveillance Advances

The 1970s also marked a turning point in AAC's air defense system. The sites built in the 1950s were aging and the replacement cost proved too expensive. The cost of operating the sites with military personnel was also rising at an unacceptable rate and proving to be an increasing hardship because of the unaccompanied one-year remote-tour requirement. Finally, the vacuum tube technology equipment had reached the point of obsolescence.

General John D. Ryan, Chief of Staff, USAF made a personal inspection during July 1973 of the system. The following year, the Air Staff released its Saber Yukon study, which recommended that the system be modernized. As a result, AAC was included in the Electronic Systems Division-managed program to replace the SAGE system with a joint USAF-Federal Aviation Administration joint use Region Operations Control Center/Joint Surveillance System (ROCC/JSS). The ROCC centralized air-defense management in one command and control system. Information was fed to it from the joint surveillance systems of radars.

The Alaskan Air Command initiated another program, Seek Igloo, to replace the site radars with minimally attended radars. The concept called for radar that could provide both height finding and search information and require only a few personnel to maintain it.

Lieutenant General Winfield Scott, Commander, AAC, and Senator Ted Stevens officiated at the groundbreaking ceremony for the Elmendorf ROCC on June 13, 1980. The contractor completed construction in 1982, and work began on installing the AN/FYQ-93 computer system and training personnel in its use. The Alaska NORAD Regional Control Center ceased operations on April 22, 1983. Interim command and control of the air-defense system shifted to Murphy Dome. The ROCC began 24-hour operations May 16, and achieved initial operational capability June 14 and fully operational capability on September 15, 1983.



*ROCC Radar Center.
Photo courtesy Alaskan Air Command.*

The Canadian Forces helped man the ROCC as part of a joint agreement. On September 18, 1986, Brig Gen. Ronald Bell, Canadian Forces, became the first full time Deputy Commander, ANR with responsibilities for day-to-day operations. The duties had formerly belonged to the Vice Commander, AAC as an added duty.

The ROCC or Top ROCC as it was referred to, eliminated the need for the large numbers of personnel at the sites. All military personnel were phased out by September 1983. The 13 aircraft control and warning squadrons were inactivated November 1, 1983, and the sites designated long-range radar sites. Civilian contractors took over the responsibility for operating and maintaining the sites. Contractors had already assumed partial responsibility in 1977 for site support functions as part of an Air Force effort to reduce remote tours.

Initial implementation of the Seek Igloo program began with the installation of the AN/FPS-117 Minimally Attended Radar at Kotzebue in the spring of 1984. It achieved operational capability June 9, 1984. Sparrevohn became operational June 29; Galena, July 26; Fort Yukon, August 14; Tin City, September 24; Indian Mountain, October 10; Cape Newenham, October 16; Tatalina, May 24, 1985; Cape Lisburne, July 3; Cold Bay, July ; and Cape Romanzof, July 14.

As denoted by the acronym MAR, the new radar required far less personnel than the old ones. Depending on the site location, it required from two to around 13 contract personnel to maintain it. Generally, those sites near communities required only two radar maintenance technicians while the remote sites with their airfields and infrastructure required more personnel.

The Air Force elected to site the FPS-117 at Galena and close nearby Campion. The radar site at Grant Point, Cold Bay, was also closed, the radar tower moved to the airfield. The radar planned for Murphy Dome was loaned to another Air Force activity to be used for a demonstration project. Murphy Dome used the old radars until it was returned.



*MAR site (an artist's conception).
Photo courtesy Alaskan Air Command.*

With the military gone and only few civilian contractors present, Murphy Dome could no longer provide an alternate command center. Lieutenant General Lynwood Clark, Commander, AAC, at the time, and his staff had anticipated the need for an alternative. General Clark, in 1982, decided to accept the free offer of surplus rail cars from the Alaska Railroad. The Air Force renovated the cars, installed personnel accommodations and communications in them. The rail-based alternate command post functioned until 1993, when its use was no longer deemed necessary.

One of the key factors behind the estimated \$226.3 million Seek Igloo program had been to reduce manpower and costs. In 1975, when the program began, it cost \$117 million in 1985 dollars to maintain and operate the sites with 1,500 military personnel. The base support contract in 1977 reduced the cost to \$80 million and the number of military personnel to 450 with 370 contract personnel providing logistic support. By the beginning of 1984, the annual cost had dropped to \$45 million and there were 370 contract personnel. By the end of 1985 the cost had dropped to \$15 million and the number of personnel to 140 contract personnel.

North Warning System

The North Warning System added a new dimension. It was part of a North American air defense upgrade agreement reached by President Ronald Reagan and Canadian Prime Minister Brian Mulroney on March 18, 1985. The agreement included replacing the obsolete DEW Line radars, improving the use of the E-3 airborne warning and control aircraft, and acquiring modern command, control and communications systems.

The North Warning System consisted of 13 AN/FPS-117 Long Range Radars, four of which were in Alaska, and 39 AN/FPS-124 Unattended Radars, three of which were in Alaska. The long-range radars were installed during 1989-1990 at Point Lay, Point Barrow, Oliktok and Barter Island. The last installation was at Barter Island, which became operational on November 15, 1990. The FPS-124s were installed at Wainwright, Lonely and Bullen Point in 1994. They achieved operational capability June 15, 1995.

The Alaska Radar System

In order to better manage the air defense system and to comply with an ordered headquarters reduction, the 531st Aircraft Control and Warning Group was activated November 15, 1977. Headquarters, AAC had managed the air defense system without any intermediate headquarters since the inactivation of the 10th and 11th Air Divisions in 1960. The 531st was redesignated the 11th Tactical Control Group on July 1, 1981, and upgraded to wing status on January 6, 1989, in anticipation that it would assume responsibility for the Alaska Radar System.

The Alaska Radar System was to have been part of a system

of an over-the-horizon backscatter radar (OTH-B) network protecting North America from an air attack. The system used a transmitter site to bounce radar signals off the troposphere and a receiver site to receive the returning signals. Unlike conventional radar, which was limited to line of site, the OTH-B could acquire radar return signals over great distances. The Alaska Radar System was designed to cover the North Pacific and Bering Sea regions. Other systems were designed to cover the Atlantic, Pacific and Gulf of Mexico regions.

The Air Force conducted a site survey during the mid-1980s, and the AAC public affairs office announced July 30, 1987, that Gulkana had been selected as the transmitter site and Tok as the receiver site. Elmendorf AFB was to be the location of the operations building. Negotiations for land rights in the Copper River Valley regions where the sites were to go took until January 1989 to complete. Construction of the transmitter power plant began shortly afterward. The end of the Cold War and rising cost of the OTH-B system prompted the cancellation of the program in 1991. The completed transmitter power plant and site was turned over to a joint Air Force-Navy agency for use in the High Frequency Active Aurora Research Program to explore atmospheric aurora conditions.

In keeping with the force modernization, significant improvements were made in data automation and the use of personal computers proliferated.

The implementation of the Alaskan Command and Control System Military Automated Network, an Alaskan-unique system, revolutionized command and control during the 1980s. It evolved into the Command Tactical Information Network (CTIS) during the early 1990s. The system allowed information to be viewed and exchanged electronically via computer terminals. However, since it was a non-standard system, it gave way in mid-1995 to the standard systems being developed by the Air Force.

Top Cover for *North America*

On April 11, 1987, Maj. Peter Keith-Murray, Canadian Forces, proposed during a Canadian Forces Dinning Out on Elmendorf AFB that the Alaskan Air Command and Alaskan NORAD Region motto "Top Cover For America," be changed to "Top Cover for North America." He felt it would recognize Canada's significant involvement in Alaska's air defenses and the expanded responsibilities of the Alaskan NORAD Region. Lieutenant General David Nichols, Commander, Alaskan Air Command, and Alaskan NORAD Region, accepted the recommendation and the motto was changed.

"Top Cover for America" had been adopted by the Alaskan Air Command in 1969. Originally, it had belonged to Elmendorf AFB. A board of five judges had selected it in September 1952 from nearly 200 entries. The winner, Master Sergeant Douglas B.

Hills, 1931st Airways and Air Communications Service Group, submitted the winning entry.

Privatizing Communications

The 1970s also brought dramatic changes in communications. The Air Force had inherited the Alaska Communication System, or ACS, from the Army in 1962. The system, which Brig. Gen. Billy Mitchell had help build as a young lieutenant, provided land-line communications for military and civilians. The Air Force almost immediately began steps turn the system over to the private sector. At the time, the system employed 323 military and 657 civilian personnel. It remained under military control until January 18, 1971, when it was formally transferred to RCA for \$129 million. RCA agreed to invest another \$128 million in capital improvements and formed Alaskan Communications, or Alascom.

Following the purchase of ACS, the Air Force next turned its attention to selling WACS. This was accomplished on July 1, 1976, when Alascom agreed to lease the system from the Air Force with the option to purchase the parts it needed and turn the rest back to the Air Force. In turn, Alascom agreed to replace the tropo system with satellite communications and lease the services to the Air Force. The final sales agreement was consummated August 25, 1983, and Alascom paid the Air Force \$9,104,084.00 for the parts it needed, mostly microwave sites along the road network. By then, all the tropo sites had been replaced with satellite communications terminals and the sites were turned back to the Air Force for disposal. The agreement ended federal ownership of communications in Alaska.

Those who had worked on the development of CTIS believed it superior to the Air Force system that replaced it because of its integrated capabilities to support all levels of command.

By then, the use of more powerful personal computers had proliferated and electronic mail and the internet had not only become common, but a necessity. The Eleventh Air Force had entered the electronic age.

A Time of Change

The late 1970s and 1980s represented a period of organizational changes. The Alaskan Air Command gained a second fighter squadron when the 18th Tactical Fighter Squadron was activated October 1, 1977, and assigned to the 21st Composite Wing.

On October 1, 1981, AAC activated the 343rd Composite Wing at Eielson AFB and inactivated the 5010th Combat Support Group. The action marked the emergence of Eielson AFB as a tactical base. Its location near Fort Wainwright and the large military reservation proved fortunate. The command assigned the 18th Tactical Fighter Squadron to it on January 1, 1982, and equipped it with the Fairchild Republic A-10A Thunderbolt II. The squadron received the last production run of this attack aircraft,

which had been designed solely for ground support based on lessons learned during the Vietnam War. The 25th Tactical Air Support Squadron was also assigned to the 343rd Composite Wing, and exchanged its O-2s for Rockwell International OV-10As Broncos in 1986. The wing was changed to a tactical fighter wing on June 8, 1984.

Another era in history ended on March 8, 1988, when the last of the venerable T-33s departed. The trainer version of the F-80 Shooting Star had been assigned to AAC since 1948, making it the longest serving military aircraft in Alaska.

One of the singular events affecting AAC was the disestablishment of the Alaskan Command July 1, 1975. It came about because of the post Vietnam War emphasis on headquarters and headquarters manning reduction. A Blue Ribbon Defense Panel had recommended in 1970 that ALCOM be abolished. The Alaskan Sea Frontier, the Navy component of ALCOM, was abolished in June 1971; and United States Army, Alaska, the Army component, suffered the same fate in July 1974.



*ALCOM disestablishment ceremonies, June 30, 1975.
Photo courtesy Alaskan Air Command.*

The Department of Defense saw no reason to maintain ALCOM as a unified command reporting directly to the Joint Chiefs of Staff. Alaska's Congressional delegation and news media greeted the news with concern. They were offset somewhat by the decision to upgrade the Commander, Alaskan Air Command's position from a major general to a lieutenant general and make him the senior military officer in Alaska. Additionally, provisions were made to create a joint task force, which could be formed in the event of hostilities or emergencies. The task force was activated for the first time on April 7, 1989, in response to the Exxon Valdez oil spill.

The system did not work well. In creating the joint task force concept, the Department of Defense divided the defense responsibilities. The joint task force, known as Joint Task Force-Alaska, was responsible for the defense of mainland Alaska while the Pacific Command was responsible for the Aleutian Islands. The situation was further complicated by the fact that the Commander,

Joint Task Force-Alaska reported the U.S. Readiness Command in Florida. It was reminiscent of the same split command arrangement that had hampered operations during the Aleutian Campaign, which had led to creation of the original Alaskan Command in 1947.

During the late 1970s, the Commander-in-Chief, Pacific Command, began expressing reservations about the command arrangement and the need to defend the Aleutian Islands. The Pacific Command began conducting a series of exercises in the area and initiated a proposal that Alaska's military be subordinated to it. Alaska's political and civil leaders, who felt that the abolishment of the original Alaskan Command had been a mistake, greeted the proposal with skepticism.

Lieutenant General Bruce K. Brown, Commander, Alaskan Air Command and Joint Task-Force-Alaska, began an effort in late 1984 to convince prominent Alaskans that the creation of unified command system was in the best interest of Alaska. His successor, Lt. Gen. David Nichols continued the effort.

Shortly after assuming command, Lt. Gen. Thomas G. McInerney succeeded in convincing Alaska's Congressional delegation and civilian leadership that it would be in the best interest of Alaska and the nation that the Alaskan Command be reestablished as a sub-unified command under the Pacific Command. General Raymond Reeves, a former Commander, Alaskan Command, living in Anchorage lent his support.

The Alaskan Command was again established July 7, 1989 under the Pacific Command. The next year, on August 9, the Alaskan Air Command was redesignated the Eleventh Air Force during ceremonies attended by Eleventh Air Force World War II veterans. The alignment of the Alaskan Command under the Pacific Command and the Eleventh Air Force under the Pacific Air Forces brought about profound changes. Emphasis shifted to the Pacific and worldwide contingency support, and Alaska gained increased recognition because of its strategic location and the training opportunities it offered. It began a period of growth for the Eleventh Air Force.

The growth began when Secretary of the Air Force Donald Rice announced at the August 9 ceremony that the 18th Fighter Squadron at Eielson AFB would convert from the A-10 to the General Dynamics F-16C Fighting Falcon. Subsequently, the Air Force activated a second squadron, the 11th Tactical Air Support Squadron at Eielson AFB August 8, 1991 and equipped it with OA-10s, a forward air control version of the A-10. The 25th Tactical Air Support Squadron had been inactivated earlier.

Eielson AFB now had two fighter squadrons. Elmendorf AFB gained a third fighter squadron May 29, 1991, when the 90th Fighter Squadron was reassigned from Clark Air Base in the Philippines and equipped with the F-15E Strike Eagle.

The early 1990s saw more organizational changes and the

growth of forces in the wake of the Cold War. The 343rd Tactical Fighter Wing became the 343rd Wing July 1, 1991; the 21st Tactical Fighter Wing became the 21st Wing September 23, 1991; and in a final reorganization act of the year, the 21st Wing was inactivated December 19, and the 3rd Tactical Fighter Wing was redesignated the 3rd Wing and assigned to Elmendorf AFB without personnel and equipment the same day. The action was done at the direction of Gen. Merrill McPeak, Chief of Staff, U.S. Air Force, who wanted to keep the oldest and most illustrious units in the Air Force active in the face of major reductions.

Also, as a result of General McPeak's desires, the 343rd Wing was inactivated and the 354th Fighter Wing was activated in its place August 20, 1993.

While much of the rest of the Air Force lost forces and personnel, the Eleventh Air Force gained. In keeping with General McPeak's one-base, one-boss concept, tenant units were reassigned to the host wings. The 517th Airlift Squadron was reassigned to the 3rd Wing from the Military Airlift Command on April 1, 1992. The wing also gained the Boeing E-3 Sentry equipped 962nd Airborne Warning and Control Squadron from the Air Combat Command on 1 October 1992.

The growth was reflected in the number of aircraft assigned to the Eleventh Air Force. At the end of 1990, there were 40 F-15Cs and 29 A-10As assigned to the Eleventh Air Force for a total of 69 aircraft. By the end of 1993, that number had increased to 102,

which included 40 F-15Cs, 20 F-15Es, 26 F-16Cs, 7 OA-10As, 11 C-130Hs, 3 E-3s and 5 C-12Fs.

Hunting the Bear

The fighter pilots who performed alert at the Galena and King Salmon forward operating bases, honed their skills in the 1950s during exercises and alert drills. A sense of realism was added in March 1958, when radar operators along the western coast detected an unknown aircraft entering Alaskan airspace on their radar screens. The flights became routine, and on December 5, 1961, two F-102s out of Galena made the first intercept of a Soviet aircraft, a TU-16 Badger. Intercepts became fairly regular during the 1960s and 1970s, although not on a frequent basis.

It was not until the 1980s, that the number of intercepts of Soviet aircraft began to climb dramatically. The change came about by the force modernization programs and Soviet deployment of the TU-95 Bear H in 1984. The Soviets began flying training missions over the Arctic regions with the air launched cruise missile carrier. Captains Robert Markert and James Austin, 43rd Tactical Fighter Squadron, made the first intercept of the Bear H on April 5, 1985.

The interception over the Porlar Basin north of Alaska was made possible in part by the assignment of the MacDonnell Douglas F-15A Eagle in 1982. The first F-15s arrived on March 1, 1982. By October 4 of that year, the Eagles had replaced the F-4Es on alert at the forward operating bases. The last Phantoms departed November 16, 1982, ending another era in AAC's history. The F-15As were upgraded to "C" models during 1986-87.

Further increases in force structure were made when the 54th Tactical Fighter Squadron was activated May 8, 1987. It joined the 43rd Tactical Fighter Squadron as the second F-15 unit assigned to the 21st Tactical Fighter Wing.

On July 1, 1986, the 962nd Airborne Warning and Control System Squadron (AWACS) activated at Elmendorf AFB to operate two Boeing E-3 Sentry aircraft on permanent rotational duty to Alaska. Prior to that, AAC depended on temporary deployments of the E-3 to assist in its air defense mission. The modern radar system, the F-15s and the E-3 resulted in a greater capability to protect the air sovereignty of North America.

About 10 intercepts annually were normal during the 1970s. The numbers increased to more than 20 a year during the 1980s with a record of 31 intercepted flights achieved in 1987. The ROCC, new radars, the assignment



of E-3 to Alaska in 1986, coupled with the longer ranged F-15Cs, and an increase in KC-135 support allowed for intercepts at greater range and longer duration.

However, with the end of the Cold War, the number of intercepts declined. The last one occurred on November 5, 1994.

Soviet/Russian Aircraft Flight Intercepts 1961-2000

1961 . . .1	1981 . .12
1962 . . .0	1982 . . .8
1963 . . .3	1983 . . .8
1964 . . .0	1984 . . .9
1965 . . .1	1985 . .18
1966 . . .9	1986 . .18
1967 . . .6	1987 . .33
1968 . .11	1988 . .29
1969 . . .1	1989 . .25
1970 . . .0	1990 . .29
1971 . . .0	1991 . .15
1972 . . .1	1992 . . .5
1973 . . .2	1993 . . .3
1974 . . .8	1994 . . .2
1975 . . .5	1995 . . .0
1976 . .12	1996 . . .0
1977 . . .8	1997 . . .0
1978 . . .8	1998 . . .0
1979 . .18	1999 . . .0
1980 . . .8	2000 . . .0

Contact with Russia

The end of the Cold war also resulted in the establishment of a military-to-military contact program with the Russians and the exchanging of visits and joint participation in exercises. For Alaska, it began August 6, 1989, when two MIG-29 Fulcrums fighters and a support AN-225 transport landed at Elmendorf AFB for refueling while en route to an airshow in Canada. It was a first time since World War II that a Russian aircraft in military markings had landed at an Alaskan base. The transient of Russian military aircraft through Alaska became a common occurrence.

Lieutenant General Joseph Ralston led a group from the Alaska Air National Guard to the Russian military base at Tiksi, Siberia during April 1992 to participate in a join search-and-res-

cue exercise, nicknamed SAREX 93. It culminated several years of planning and led to the routine conduct of other SAREXs on a rotating basis in Alaska, Canada and Russia.

General Ralston, who assumed command of the Eleventh Air Force from Lt. Gen. Thomas G. McNerney in July 1992, represented a new breed of young Air Force officers. He was also the first commander of the Alaskan Air Command and the Eleventh Air Force to achieve four-star rank. He went on to command the Air Combat Command before becoming Vice Chairman, Joint Chiefs of Staff and later Commander-in-Chief, European Command.

After the Cold War

The Cold War ended the need for full time alert forces at Galena and King Salmon. The last F-15 on alert at Galena departed July 3, 1993, followed by the ending of alert duty at King Salmon on April, 29, 1994. The two forward operating bases were placed in a contractor-maintained standby mode for use during contingencies and exercises and as divert bases. Elmendorf AFB became the alert base.

Shemya AFB was also partially closed. On May 19, 1993, General Ralston and members of the Eareckson family presided over renaming the base Eareckson Air Station in honor of Col. William O. Eareckson who had commanded bomber operations during the Aleutian Campaign. The last military personnel departed in 1995 and a contractor assumed responsibility for maintaining and operating Eareckson Air Station. The last Cobra Ball RC-135s had departed earlier. The Cobra Dane phase array radar was retained.

Other organizational changes occurred in the wake of the Cold War. The 11th Tactical Control Wing was redesignated the 11th Air Control Wing on January 27, 1992, and assigned the responsibility for all the remote Air Force locations in Alaska, which at the time consisted of three forward bases, Eareckson Air Station, Galena and King Salmon, and 20 remote radar sites. The wing was inactivated July 1, 1994, following the contracting of the support functions at the three forward bases. The 611th Air Support Group, activated the same day along with the 611th Air Operations Group, assumed the responsibilities.

Prior to its inactivation, the 11th Air Control Wing, under the command of Col. Harry J. Keiling Jr., had begun a massive cleanup of debris and hazardous materials at the sites, costing around \$10 million annually. It was part of a Department of Defense effort to correct past wrongs done to the environment.

Another milestone in the environmental restoration program was reached in October 1997, when the Air Force approved a request to combine operations and environmental restoration funding in an Alaska-unique program dubbed Clean Sweep. The \$75 million program involved the systematic cleanup of 29 active

and inactive radar and communications sites and the forward operating bases. It included dismantling unneeded facilities, clearing away debris, cleaning up hazardous materials and restoring the land back to its original natural condition.

The Eleventh Air Force also embarked on a program to historically document its installations and cultural resources. The project involved preparing historical and archeological surveys. It also conducted wildlife and natural-resource surveys on lands that it owned.

Top Cover and Global Engagement

By the mid-1990, the turmoil of organizational changes had ended and the Eleventh Air Force had expanded its mission. The motto, "Top Cover for North America," had now been expanded to "Top Cover and Global Engagement." It reflected the Eleventh Air Force's ability to deploy its forces worldwide.

Global Engagement

Deployments from Alaska had been rare occurrences up until the early 1980s. The trend began changing in the early 1980s. The 18th Tactical Fighter Squadron sent 8 F-4Es to South Korea to participate in exercise Team Spirit during March 1980. The squadron remained for a short period after the end of the exercise because of the Iran Hostage crisis. It marked the first time that an

Alaska-based fighter squadron had deployed to a foreign country.

Deployments to other nations were made occasionally during the 1980s and early 1990s. It was not until the mid-1990s that the numbers began climbing dramatically following an Air Force Chief of Staff decision to commit Alaska-based forces to peace keeping and contingency operations.

In a historic first, the 54th Fighter Squadron deployed six F-15Cs on April 8, 1995 to Incirlik AB, Turkey in support of Provide Comfort, a humanitarian mission that ensured that the Iraqis would not fly air strikes against the Kurdish enclave in northern Iraq. Other deployments continued on a routine basis, involving not only the fighter squadrons but also the 517th Airlift Squadron and the 962nd Airborne Air Control Squadron.

By 2000, more than 35 deployments were being made annually ranging from a C-130 humanitarian airlift of supplies to Magadan in Siberia to the deployment of a F-15 squadron in support of Operation Allied Force in April 1999, a NATO operation designed to restore stability to the Yugoslavian province of Kosovo. The 54th Fighter Squadron also achieved an operational first by deploying to Europe over the Polar Region.

This deployment underscored Alaska's strategic importance, a fact further confirmed when the Air Force designated the 3rd Wing as one of the 10 Air Expeditionary Force wings. It was the only wing in the Pacific region to receive the designation.

F-15C, 19 Fighter Squadron, 3rd Wing, Northern Edge 1996. Photo courtesy United States Air Force.





962AACS E-38 fl.
Photo courtesy Alaskan Air Command.

the Red Flag and Cope Thunder concept. The two training exercises had been developed based on lessons learned in Vietnam. They featured realistic scenarios that pitted friendly forces against adversaries employing tactics that were likely to be encountered in combat.

It received a significant boost when the Pacific Air Forces decided to move its Cope Thunder training exercises to Alaska from the Philippines. A site survey team visited

Cope Thunder and other Exercises

The 1990s also saw the development of an extensive range and training airspace complex in Alaska that was the culmination of an extensive environmental review and comment process. The expansion had its beginnings with the arrival of the F-4Es in 1970. To support the air-to-ground training needs, AAC had developed the Blair Lakes bombing range during the early 1970s and the Yukon electronic warfare range in the early 1980s.

These provided the foundation for the range and air space expansion program of the 1990s. On April 10, 1997, Secretary of Air Force Sheila E. Widnall signed the Record of Decision on the final Environmental Impact Statement, *Alaska Military Operations Areas*, expanding Alaska's joint training area into 1.5 million acres of land and 67,000 square miles of air space.

The range and air space improvement program, plus the Alaska military base infrastructure provided a premier joint training location. Additionally, Alaska furnished an environment where the Army, Navy, Marines and Air Force could train together. The ranges and air space were in easy flying range of carrier-based aircraft.

While joint training had been done on a routine basis through large exercises and smaller training activities since the 1940s, there had never been an attempt to create a permanent infrastructure and institutionalize it on a routine basis until the 1980s.

The first effort was made in the mid-1980s when Lt. Gen. David Nichols began the Midnight Sun series exercises based on

Elmendorf AFB and Eielson AFB in 1990 to determine their ability to support Cope Thunder. The next year saw Cope Thunder North being conducted in interior Alaska. Other Cope Thunders followed.

Cope Thunder 98-4, also known as Cooperative Cope Thunder," was the largest one conducted and typified the growth in the series. Conducted in July 1998, it involved 106 aircraft and 1,200 personnel. It was the first Cope Thunder to include ground units. The Navy SEALs and two Army units participated. The exercise scenario centered on air power supporting humanitarian relief and rescue operations.

Overcoming Tragedy

The 1990s were also marked by tragedy. The fiery crash on September 22, 1995 of an E-3B assigned to the 962nd Airborne Air Control Squadron took the lives of 24 U.S. and Canadian airmen. The plane, call sign Yukla 27 after the Athabaskan word for Eagle, struck a flock of Canadian Geese on take off from Elmendorf AFB. The 3rd Wing held a memorial service on September 27, attended by a host of dignitaries and a capacity crowd, and dedicated a memorial in front of its headquarters the following September in remembrance of the Yukla crew.

Tragedy struck again on July 26, 1998, when Lt. Gen. David J. McCloud, Commander, Eleventh Air Force, died that Sunday morning when his Russian-built YAK-54 aerobatic aircraft crashed on Fort Richardson. Two years later, through the efforts of his



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friend and protégée, Brig. Gen. Scott Gration, a memorial was dedicated in his honor in front the 3rd Wing headquarters building. It featured a P-38, which a group of volunteers had recovered from Attu Island and restored. General McCloud had been instrumental in gaining Air Force approval to recover the former 54th Fighter Squadron fighter.

General McCloud, as with those who came before him, believed in Alaska and

its potential. He envisioned a new dimension to the traditional strategic importance and joint training opportunities offered by Alaska. He sought to make the state “the epicenter of experimentation for new military tactics, communications, sensors and weaponry.”

Into the New Millennium

Lieutenant General Thomas R. Case assumed command of the Eleventh Air Force on October 19, 1998 in the wake of General McCloud’s death. He continued to build on the legacy of his predecessors by stressing Alaska’s strategic importance, its force structure, joint training opportunities, established military-to-military contact program, civil-military relationships, large training areas and range complexes, joint construction projects, increased force structure, and close working relationship with the Reserve components.

General Case also initiated a program for government-to-government relations with Alaska Natives as part of a Department of Defense effort aimed at establishing better relations with America’s first inhabitants. Many of the Eleventh Air Force’s sites and bases are located near Alaska Native communities, and the Air Force activities such as Clean Sweep and the environmental restoration program affect them. General Case sought to provide guidance that recognized and considered the history, unique laws, tribal rights and resources.

Lieutenant General Norton A. Schwartz became the 46th commander of the Eleventh Air Force on September 26, 2000. He also assumed command to the Alaskan Command and the Alaskan NORAD Region. His assumption of command came as the Eleventh Air Force entered the new millennium with all its promises. It also marked the 60th anniversary of the year that Major Everett Davis landed his B-10 on Merrill Field, beginning a history that stretched from World War II through the Cold War to the fulfillment of General Mitchell’s prophesy. ✿

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ARS Point Lonely site.

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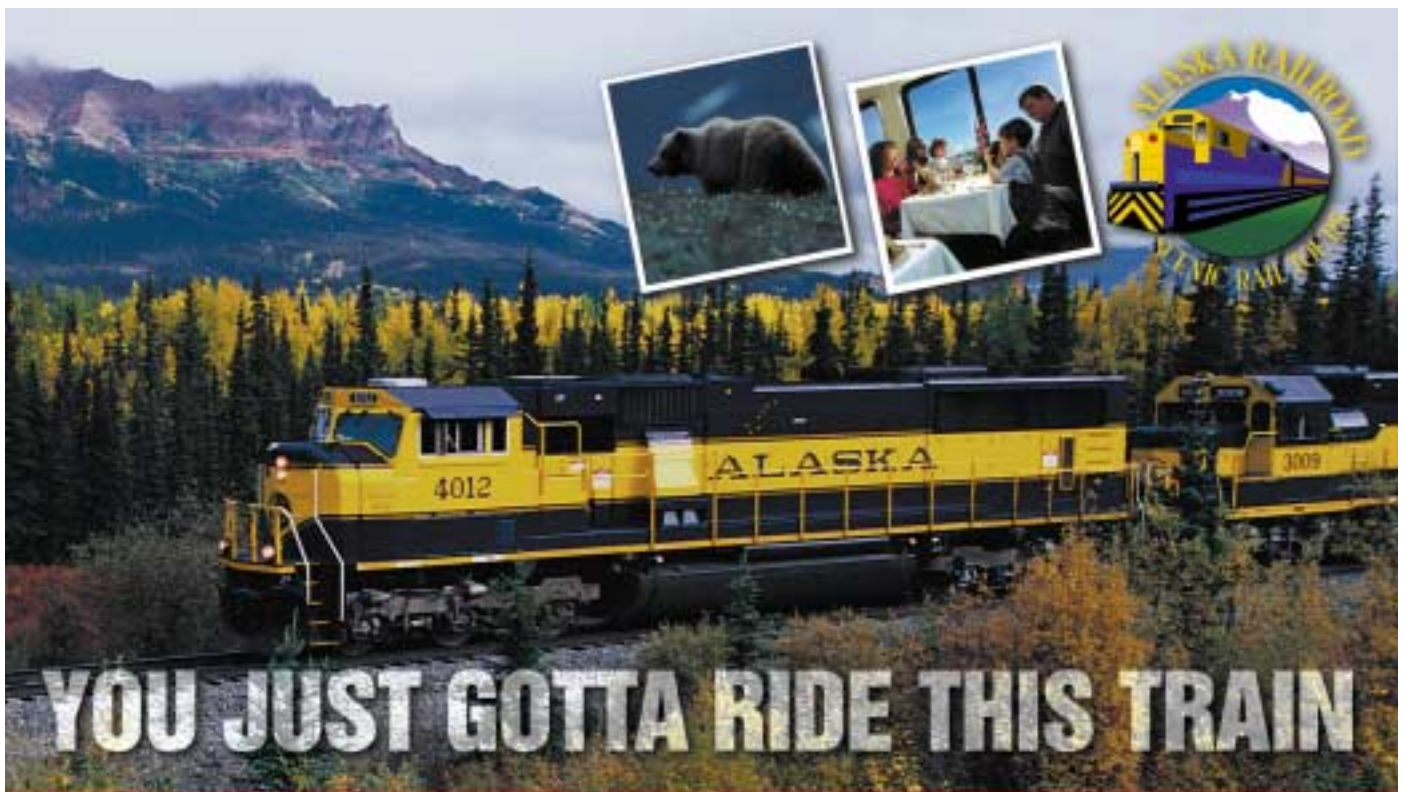
C130 refueling and cargo operations.

North Slope water/wastewater systems.

ELEVENTH AIR FORCE ALASKAN AIR COMMAND COMMANDERS

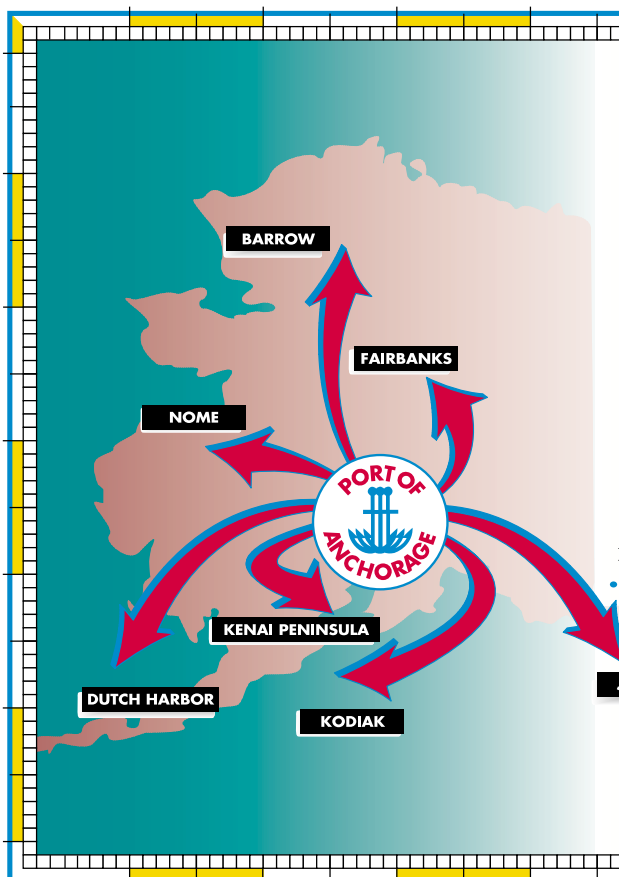
Lt Col Everett S. Davis*	15 Jan-16 Feb 1942
Col Lionel H. Dunlap*	17 Feb-7 Mar 1942
Maj Gen William O. Butler	8 Mar 1942-10 Sep 1943
Brig Gen Robert V. Ignico*	11-12 Sep 1943
Maj Gen Davenport Johnson	13 Sep 1943-3 May 1945
Brig Gen Isaiah Davies*	4 May-21 Jun 1945
Maj Gen John B. Brook	22 Jun-17 Dec 1945
Brig Gen Edmond C. Lynch**	18 Dec 1945-30 Sep 1946
Maj Gen Joseph H. Atkinson	1 Oct 1946-25 Feb 1949
Brig Gen Frank A. Armstrong, Jr.	26 Feb 1949-26 Dec 1950
Maj Gen William D. Old	27 Dec 1950-14 Oct 1952
Brig Gen W. R. Agee***	27 Oct 1952-25 Feb 1953
Maj Gen George R. Acheson	26 Feb 1953-1 Feb 1956
Brig Gen T. Alan Bennett*	2 Feb 1956-23 Feb 1956
Lt Gen Joseph A. Atkinson@	24 Feb-16 Jul 1956
Maj Gen Frank A. Armstrong, Jr.	17 Jul -23 Oct 1956
Maj Gen James H. Davies	24 Oct 1956-27 Jun 1957
Lt Gen Frank A. Armstrong, Jr.@	28 Jun-Aug 1957
Brig Gen Kenneth H. Gibson	19 Aug 1957-13 Aug 1958
Maj Gen C.F. Necrason	14 Aug 1958-19 Jul 1961
Brig Gen Jack A. Gibbs*	20 Jul-25 Jul 1961
Maj Gen Wendell W. Bowman	26 Jul 1961-8 Aug 1963
Col Alfred Walton*	9-14 Aug 1963
Maj Gen James C. Jensen	15 Aug 1963-14 Nov 1966
Maj Gen Thomas E. Moore	15 Nov 1966-24 Jul 1969
Maj Gen Joseph A. Cunningham	25 Jul 1969-31 Jul 1972
Maj Gen Donavon F. Smith	1 Aug 1972-5 Jun 1973
Col John A. Nelson*	6-17 Jun 1973
Maj Gen Charles W. Carson, Jr.	18 Jun 1973-2 Mar 1974
Col David T. Stockman*	3 Mar-18 Mar 1974
Maj Gen Jack K. Gamble	19 Mar 1974-30 Jun 1975
Lt Gen James E. Hill#	1 Jul 1975-14 Oct 1976
Lt Gen M.L. Boswell	15 Oct 1976-26 Jun 1978
Lt Gen Winfield W. Scott, Jr.	27 Jun 1978-30 Mar 1981
Lt Gen Lynwood E. Clark	31 Mar 1981-25 Aug 1983
Lt Gen Bruce K. Brown	26 Aug 1983-27 Sep 1985
Lt Gen David L. Nichols	27 Sep 1985-23 Maj 1988
Lt Gen Thomas G. McInerney##	23 May 1988-13 Jul 1992
Lt Gen Joseph W. Ralston	13 Jul 1992-29 Jun 1994
Lt Gen Lawrence E. Boese	29 Jun 1994-21 Aug 1995
Lt Gen Patrick K. Gamble	21 Aug 1995-21 Nov 1997
Col Timothy Brady*	21 Nov 1997-18 Dec 1997
Lt Gen David McCloud###	18 Dec 1997-26 Jul 98
Brig Gen Tommy Crawford*	26 Jul 98-19 Oct 98
Lt Gen Thomas Case	19 Oct 98-26 Sep 00
Lt Gen Norton A. Schwartz	26 Sep 00-

*Interim commanders; **11th Air Force redesignated Alaskan Air Command 18 Dec 1945; ***Acting commander from 15 Oct and then commander on 27 Oct ; @ Served as Commander-in-Chief, Alaskan Command and Commander, Alaskan Air Command; #Served as last Commander-in-Chief, Alaskan Command, assumed command of Alaskan Air Command upon disestablishment of Alaskan Command 1 Jul 1975, when commander's position was upgraded to lieutenant general; ##Assumed command of Alaskan Command when reestablished 7 Jul 1989, served as last Commander, Alaskan Air Command, became Commander, 11th Air Force when Alaskan Air Command was redesignated 11th Air Force, 9 August 1990. General McCloud was killed in a private aircraft accident 26 July. General Crawford, Commander, 354th Fighter Wing served as acting commander until arrival of General Case.



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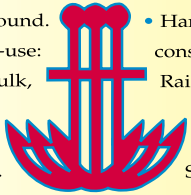
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