

21ST SPACE WING

HERITAGE OF HONOR





The 21st Space Wing is an extraordinary wing with a distinctive history exceeding six decades of service to our nation and the free world. This pamphlet illustrates that history-and the men, women, locations, and equipment that have performed their varied missions so marvelously through the years. Enjoy this glimpse into our great heritage, for it serves as the foundation for our future.

Brigadier General Duane W. Deal
Commander, 21st Space Wing
15 May 2002 - Present

Foreword

The 21st Space Wing activated on 15 May 1992 in Colorado Springs, Colorado. However, the lineage and honors of the 21st date back to the epic events of World War Two. The wing and group which flew under the numerical designation "21st" achieved a distinguished operational record while deployed to such exotic locales as Hawaii, Iwo Jima, Saipan, Guam, France, Japan, Greenland, and Alaska. Moreover, flights and detachments of the old "21st" conducted exercises in Libya, Germany, Korea, the Caribbean, and South America. Clearly, the history of the "21st" is international in scope.

Today, the mission of the 21st Space Wing remains international. With forty three units, spread over twenty locations in five countries, the 21st Space Wing remains the most geographically diverse wing in the United States Air Force. The wing is also one of the very largest organizationally. Our wing has emerged as a forefront global leader in space and our responsibility increases as missions are added or expanded.

I offer this edition of our heritage pamphlet out of respect for the past, current, and future members of the 21st in the hope that the brief material presented herein may in some way illuminate or inspire them to ever greater endeavor. Truly, ours is a heritage of honor.

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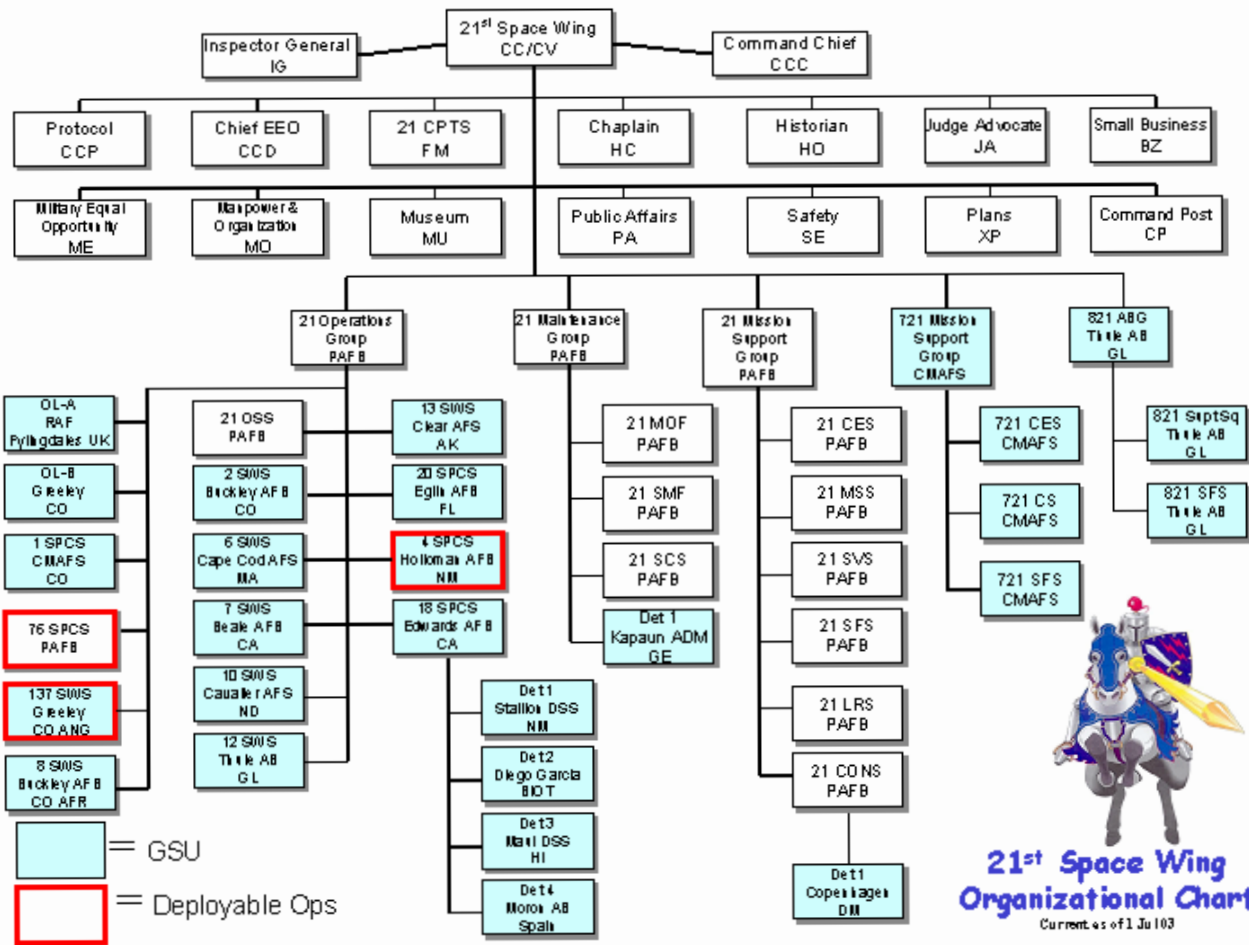
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21st Space Wing Organizational Chart
Current as of 1 Jul 03

21st Space Wing

Mission:

Provide combat capabilities through missile warning, space control, and expeditionary forces of globally based units.

Vision:

Total and combined force professionals providing unsurpassed missile warning, space control, and expeditionary forces to combatant commanders worldwide.

Core Values:

**Integrity First, Service Before Self,
and Excellence In all We Do**

Watchwords:

Vigilance & Dominance

The Air Force's most widespread and diverse wing, with 15 weapon systems, at 43 units, in 20 locations, in 5 countries; responsible for providing missile warning & space control to unified commanders and combat forces worldwide; host support for units including HQs of AFSPC, USNORTHCOM, NORAD, 50 SW, & the 302 AW; operates Cheyenne Mountain AFS, Thule AB, Clear AFS, Cape Cod AFS, and Cavalier AFS.



21st Space Wing Units

21st Operations Group, Peterson AFB, CO

Operating Location A, 21 OG, RAF Fylingdales, United Kingdom

Operating Location B, Greely ANGB, CO

1st Space Control Squadron, Cheyenne Mountain AFS, CO

2d Space Warning Squadron, Buckley AFB, CO

4th Space Control Squadron, Holloman AFB, NM

6th Space Warning Squadron, Cape Cod AFS, MA

7th Space Warning Squadron, Beale AFB, CA

10th Space Warning Squadron, Cavalier AFS, ND

12th Space Warning Squadron, Thule AB, Greenland

13th Space Warning Squadron, Clear AFS, AK

18th Space Control Squadron, Edwards AFB, CA

Det 1, 18th Space Control Squadron, Stallion DSS,
Socorro, NM

Det 2, 18th Space a Control Squadron, Diego Garcia,
British Indian Ocean Territory

Det 3, 18th Space Control Squadron, Maui DSS, HI

Det 4, 18th Space Control Squadron, Moron AS, Spain

20th Space Control Squadron, Eglin AFB, FL

21st Operations Support Squadron, Peterson AFB, CO

76th Space Control Squadron, Peterson AFB, CO

821st Air Base Group, Thule AB, Greenland

821st Support Squadron, Thule AB, Greenland

821st Security Forces Squadron, Thule AB, Greenland

21st Maintenance Group, Peterson AFB, CO

Det 1, Kapaun AFS, Germany

21st Maintenance Operations Flight, Peterson AFB, CO

21st Space Communications Squadron, Peterson AFB, CO

21st Space Management Flight, Peterson AFB, CO

21st Mission Support Group, Peterson AFB, CO

Det 1, Copenhagen, Denmark

21st Contracting Squadron, Peterson AFB, CO

21st Civil Engineer Squadron, Peterson AFB, CO

21st Logistics Readiness Squadron, Peterson AFB, CO

21st Mission Support Squadron, Peterson AFB, CO

21st Security Forces Squadron, Peterson AFB, CO

21st Services Squadron, Peterson AFB, CO

721st Mission Support Group, Cheyenne Mountain AFS, CO

721st Civil Engineer Squadron, Cheyenne Mountain AFS, CO

721st Communications Squadron, Cheyenne Mountain AFS, CO

721st Security Forces Squadron, Cheyenne Mountain AFS, CO

NOTE: 21st Comptroller Squadron is assigned to the Wing Staff

Introduction

Throughout history military formations have looked upon their heritage with pride and with the certain conviction that a record of distinction can contribute to the esprit de corps of an operational unit. The 21st Space Wing activated on 15 May 1992; however, the wing's actual lineage and honors date back to 1942. The 21st Space Wing's lengthy heritage is due to Air Force policy established in the 1950s. Expressed simply, the Air Force began attaching the lineage and honors of distinguished World War Two Army air groups to active Air Force wings which bore the same numerical designations. Through this policy the Air Force sought to recognize and preserve the traditions of the valiant air groups which had paved the way for the birth of the United States Air Force in 1947. This explains why the 21st Bombardment Group and the 21st Fighter Group are part of the heritage of the 21st Space Wing.

The numerical designation "21st" became attached to our newly activating space wing as a result of the dramatic Air Force re-structuring which began in 1991 shortly after the victorious conclusion of Operation DESERT STORM. The Air Force Chief of Staff attempted to preserve the heritage of distinguished fighter units, which were inactivating, by attaching their numerical designations to any activating units. The 21st Tactical Fighter Wing inactivated on 2 February 1992; consequently, when our new space wing activated on 15 May 1992, we received "21st" as our numerical designation. Additionally, we inherited the proud lineage and honors borne previously by the 21st Tactical Fighter Wing.

During our sixty-one years of tradition, the 21st has assumed several different missions and has employed multiple weapon systems in its effort to hold the "high ground." Today we hold the high ground space, the infinite frontier.

21st Bombardment Group 1 February 1942 - 10 Oct

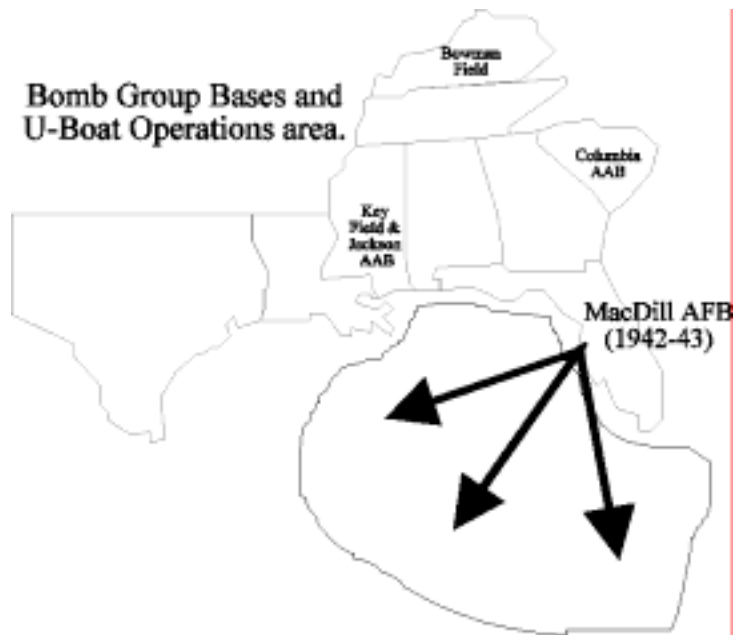


**A B-25 of the 21st Bombardment
Group
hunts for German U-Boats in the
Gulf of Mexico,
summer of 1942**

The 21st Bombardment Group

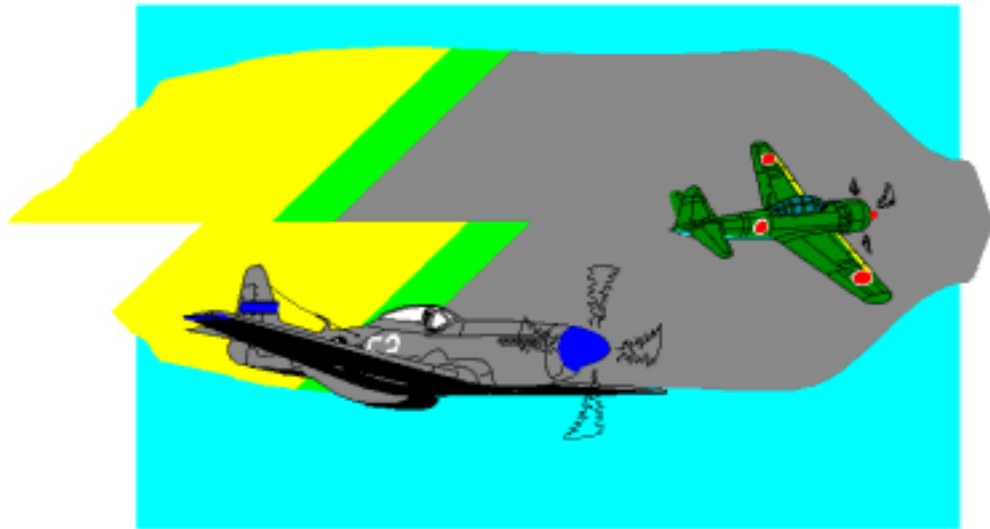
The history of the 21st began with the activation of the 21st Bombardment Group (Medium) at Bowman Field, Kentucky, on 1 February 1942. Thereafter, from February 1942 until October 1943, the group relocated successively to Jackson Army Air Base (AAB), Mississippi, Columbia AAB, South Carolina, Key Field, Mississippi, and MacDill Field, Florida.

The 21st initially trained on B-25 bombers then converted to B-26s. The group largely served as an operational training unit assigned to Third Air Force; however, while at MacDill Field, from June 1942 to October 1943, the 21st additionally carried out anti-submarine patrols over the Caribbean Sea. For this action the group received the Anti-Submarine 1941-1945 campaign streamer. The 21st inactivated on 10 October 1943.



**21st Fighter Group
21 April 1944 - 10 October 1946**

**21st Fighter Group
21 April 1944-
10 October 1946**



**7 April 1945, the 21st Fighter Group
flies its first bomber escort mission and
claims eight enemy fighter destroyed.**

**7 April 1945,
the 21st Fighter Group flies its first bomber escort mission
and claims eight enemy fighters destroyed.**

The 21st Fighter Group

The 21st did not have to wait long to write a further chapter in the history of warfare. Another unit in the lineage of the 21st Space Wing, the 21st Fighter Group (FG), activated on 21 April 1944 at Wheeler Air Field in what was then the territory of Hawaii. Assigned to VII Fighter Command, the group consisted of the 46th, 72d, and 531st Fighter Squadrons.

Over the next two months, the group trained on its first aircraft type, the P-39Q Airacobra. The 21st provided air defense over the Hawaiian Islands from July 1944, then began upgrading into the P-38J/L Lightning in September. By the end of October, rumors filled the air that the group soon would upgrade airframes again, this time to the P-51 Mustang. This change in aircraft heralded a new mission for the 21 FG.

True to rumor, leading echelons began deploying by ship to the island of Iwo Jima in the western Pacific in February 1945. Before the end of the month, the 21st began flying patrols over the critical island base in support of ground operations.

The final group echelon arrived at Iwo Jima on March 25. Early the next morning, elements of the 21st were attacked in their encampment by Japanese soldiers. Assisted by a patrol of American Marines, 21st personnel counter-attacked and in the tent-by-tent fighting killed 250 of the enemy. Fourteen group personnel were killed and 50, including 21 FG commander Colonel Kenneth Powell, were wounded.

The first long-range aerial mission of the 21st Fighter Group against the mainland of Japan began on 7 April 1945, when the group's Mustangs escorted a formation of B-29 bombers against the fortified and well-defended Nakajima aircraft factory near Tokyo. This mission marked the first time fighters had escorted bombers over Japan. Moreover, this mission has been credited as having been the longest over-water fighter escort sortie to date. Over the following weeks, the 21st escorted American B-29s over enemy airfields and industrial targets and engaged rival Japanese fighter aircraft.

The 531st Squadron achieved another first for the 21 FG in June 1945 by initiating aerial rocket strike sorties against select enemy targets which included ships and a radio station.

In the meantime, the groups' aircraft continued to duel in the air and two "aces" soon emerged: Major Harry Crim and Captain Willis Matthews, both of the 531st Fighter Squadron. Aircrews of the 21st also strafed the airfields which the Japanese used for their increasingly dangerous kamikaze attacks.

The 21 FG flew its last combat mission 14 August 1945, about two weeks before the official Japanese capitulation on 2 September. The group received the Distinguished Unit Citation on 13 November 1945 specifically for its outstanding conduct during the earlier raid on Nakajima. However, the 21st had played a laudable part throughout the final stages of the war in the Pacific.

After the war, the group transferred from Iwo Jima, first to Saipan, then finally to Guam. The original 21 FG inactivated on 10 October 1946

Combat Operations in the Pacific in World War II



Colonel Charles E. Taylor
Commander, 21st Fighter Group
10 June 1945 - 14 October 1945





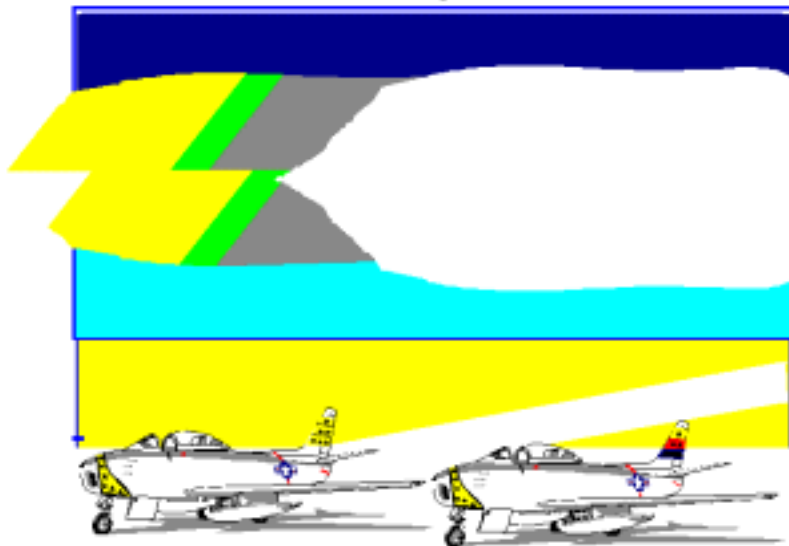
**21st Fighter Group at Iwo Jima
(Mount Suribachi in the background)**



**Flight Line, Iwo Jima, Field No. 2,
Spring 1945**

**21st Fighter-Bomber Wing
1 January 1953 - 8 February 1958**

**21st Fighter-Bomber Wing
1 January 1953 -
8 February 1958**



**Operation Boxkite
10 April - 17 May 1954
proved the 21st Fighter-
Bomber Wing's readiness.**

**Operation BOXKITE
10 April - 17 May 1955
proved the 21st Fighter-Bomber Wing's readiness**

The 21st Fighter-Bomber Wing

The United States Air Force was established in 1947, the year following the inactivation of the old 21st Fighter Group. The new standard organizational unit became the “wing” instead of the previous organizational standard, the “group.” As a matter of official policy, the Air Force began preserving the lineage and honors of the distinguished air groups of World War Two by granting their numerical designations to wings activating in the post-war period. Thus, when the 21st took to the air again to defend the high ground the wing assumed the lineage and honors of the 21st Fighter Group which had earned signal fame in the Pacific. The new unit, the 21st Fighter-Bomber Wing, activated on 1 January 1953 as a component of Ninth Air Force, Tactical Air Command, at George AFB, California. The wing comprised three fighter-bomber squadrons: the 72d, 416th, and 531st. The 72d and 531st previously had been components of the 21st Fighter Group.

During its first six months, the 21st Fighter-Bomber Wing upgraded from the F-51 to the F-86F “Sabrejet,” which had become famous for its prowess in the Korean War. Throughout 1953 and into the first months of 1954, the 21st participated in a series of tactical exercises through which the unit obtained operational readiness.

The wing conducted the first of these exercises in Alaska in September and October of 1953 when the flying squadrons, in tandem, rotated through a special two-week arctic indoctrination program at Eielson AFB. Next, the 21st sent six of its F-86s to participate in Project Willtour, an 11,000 mile goodwill and training tour of twelve Central, Caribbean, and South American countries. The wing continued its exercises in Operation BOXKITE, held throughout April and into May of 1954 at North Field, South Carolina. BOXKITE tested a new operational concept: the ability of a tactical wing to deploy to a forward base and sustain combat operations over a thirty-day period. In response, the 21st flew 3,000 sorties.

BOXKITE was the last significant stateside exercise, for on 22 June 1954, the Secretary of the Air Force announced that the 21st would be relocating to Chambley, France, as part of Twelfth Air Force and the North Atlantic Treaty Organization (NATO) which had taken a defensive stance against the Warsaw Pact headed by the Soviet Union. Chambley Air Base was located about ten miles west of the French city of Metz, and just south of the road leading to Verdun near France’s strategic northeastern border with Luxembourg, Belgium, and Germany.

The wing’s deployment from George AFB, California, to France had to be carried out in stages. Four echelons of wing personnel variously traveled by train, ship, and air to reach their destination between November 1954 and January 1955. The air squadrons stopped to refuel across the United States and in Labrador, Greenland, Iceland, and Scotland in route. Unfortunately, the new base could not be opened officially until June 1956 because engineers had to upgrade the modest facilities at Chambley.

During the interim period, the three flying components of the 21st Fighter-Bomber Wing, the 72d, 416th and 531st Fighter-Bomber Squadrons, staged out of alternate airfields in the French countryside. The squadrons carried out close air support training missions with the Army, then took first place at the United States Air Forces in Europe (USAFE) “Gunnery Meet” at Wheelus Field in Libya, North Africa. The fighter-bombers next participated in the atomic warfare exercise “Carte Blanche,” and went on to take an overall second place in the Nellis AFB, Nevada “Gunnery Meet” in 1956. Moreover, they won the USAFE “Award for Tactical Proficiency” for the January-June period of 1957.

While at Chambley, the 21st received approval for its unit emblem which the 21st Space Wing wears today. Our motto, “Strength and Preparedness,” originally was in Latin - “Fortitudo et Preparatio.” Sadly, the unit received news in October 1957 that the wing would be inactivated on 8 February 1958, and that its assets would be dispersed among existing USAFE units.

Colonel Robert N. Baker, commander, praised the hardworking enlisted force in his farewell address, and lamented the passing of his cherished unit: “I hope that some day I may once again see the flag of the 21st unfurled to take its rightful place among the Air Force units.”



Brigadier General Robert R. Rowland
Commander, 21st Fighter-Bomber Wing
27 April 1953 - 28 June 1956





Loading .50 caliber ammunition and a 500 pound general purpose bomb for training mission.



**F-86F-30,
21st Fighter-Bomber Wing Commander's Aircraft,
Tail Number 52-5222 in 1957.**

**Original Emblem of
the 416th Fighter-Bomber Squadron,
21st Fighter-Bomber Wing**

The Wing's First Knight of the Sky



The 21st Tactical Fighter Wing

Team 21 activated once more as the 21st Tactical Fighter Wing on 1 July 1958, assigned to Fifth Air Force in the Far East. Colonel Frank J. Collins, who later would become a famous astronaut, commanded for the first few weeks while the 21st set-up at Misawa Air Base, Japan. The 21st mission included defending the air space of northern Japan against Soviet intruders and planning for strategic bombardment in the event a new war broke out with North Korea (known as contingency plan "Quick Strike").

Component units of the 21st included the 416th and 531st Fighter Squadrons, the 21st Armament and Electronics Squadron, the 21st Field Maintenance Squadron, and the 21st Tactical Hospital. Initially, the 416th carried out the war-fighting missions in the F-84G Thunderjet, a single-seat fighter-bomber. The Thunderjet was the first fighter equipped to deliver non-conventional ordnance as well as the first capable of refueling in-flight.

Meanwhile, the 531st prepared to upgrade to the F-100D Supersabre, the world's first supersonic aircraft. Once combat ready in April 1959, the 531st assumed the wing's war-fighting missions while the 416th converted to the Supersabre in turn. Remarkably, the 416th achieved full operational status in August 1959.

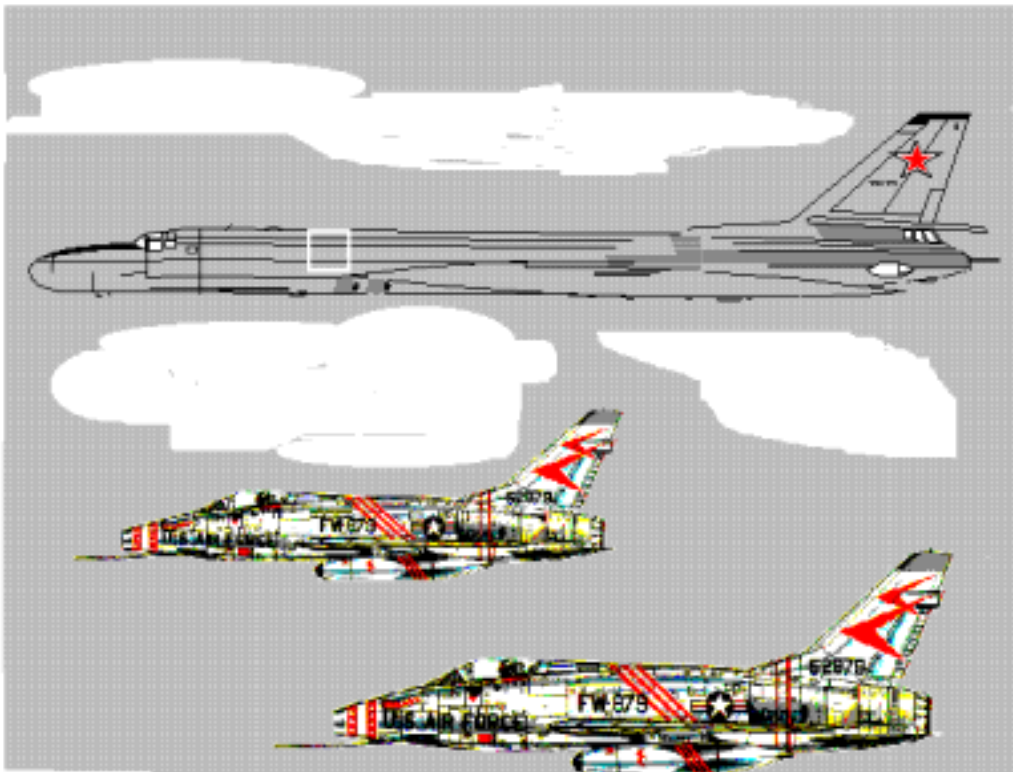
Cooperation between the wing's units paid off in Fifth Air Force's Tactical Evaluation and Operational Readiness Inspection held in August and September of 1959. The 21st garnered an "Excellent" rating and carried off the best bomb score average in the history of Fifth Air Force.

Operational readiness and high marks in training translated directly into the field. 21st aircraft intercepted Soviet Badger and Bison bombers on a regular basis, taking home, in the words of Intelligence analysts, "some of the best photographs ever taken of the Badger." In October 1959, First Lieutenant Charles L. Ferguson of the 531st received credit for making the first M-4 Bison intercept in the Far East and probably the world.

The 21st Tactical Fighter Wing also flew beyond the base at Misawa. In addition to routine alert commitments and deployments to Korea, two F-100s from the 531st made the first American jet aircraft transpolar flight, flying from Weathersfield, England, to Eielson AB, Alaska, on 7 August 1959.

Once more, however, the accomplishments of the 21st came to a temporary halt, this time for six years. The U.S. government placed a ceiling on the number of fighter wings allowed in the Air Force inventory. Consequently, Fifth Air Force undertook an extensive reorganization. The 21st Tactical Fighter Wing inactivated on 18 June 1960 and its assets were transferred to the 39th Air Division at Misawa.

**21st Tactical Fighter Wing
1 July 1958-
18 June 1960**



**1 October 1959, 2 F-100Ds from
from the 21TFW intercept a Soviet
Bison bomber, first Soviet bomber
intercepted anywhere in the world.**



Colonel Dean Davenport
Commander, 21st Tactical Fighter Wing
28 September 1958 - 18 June 1960





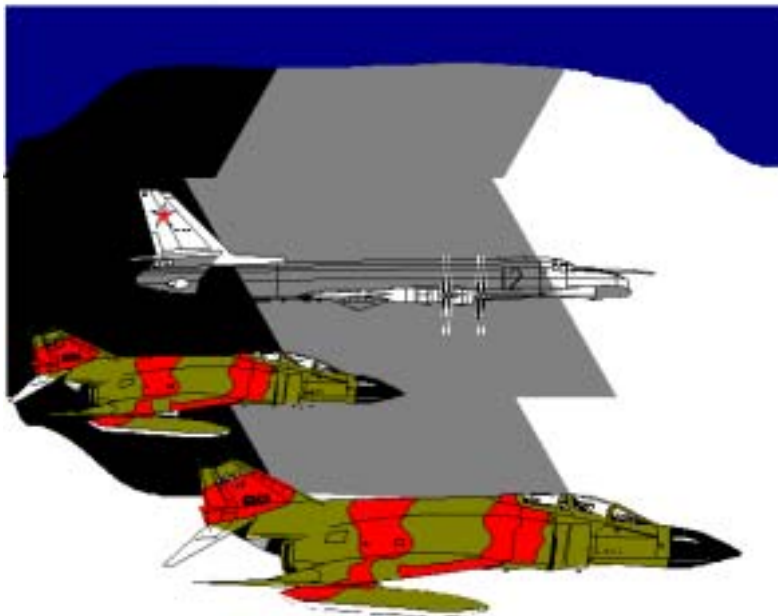
**F-100D, Tail Number 56-3345,
416th Tactical Fighter Squadron,
21st Tactical Fighter Wing,
Misawa AB, Japan, 1960**



**F-100F, Tail Number 58-1227,
416th Tactical Fighter Squadron,
21st Tactical Fighter Wing,
North Pole Flight, August 1959**

**21st Composite Wing
8 July 1966 - 1 October 1979**

**21st Composite Wing
8 July 1966 - 1 October 1979**



**During the Cold War, the 21st
intercepted hundreds of Soviet
aircraft and escorted them
away from North America.**

The 21st Composite Wing

The 21st activated again as the 21st Composite Wing (CW) on 8 July 1966 at Elmendorf AFB, Alaska, and was assigned to Alaskan Air Command (AAC). AAC itself was a component of the Continental Air Defense Command (CONAD), which had been formed in 1954, and the Alaska Region Command of the North American Air Defense Command (NORAD) which had been formed in 1957. The 21st activated as an intermediate headquarters that could tie together and manage several missions critical to Alaskan Air Command.

Components of the 21 CW carried out the wing's three primary missions: air defense (317th Fighter-Interceptor Squadron), airlift (17th Troop Carrier Squadron, known from 1967 as the 17th Tactical Airlift Squadron), and search and rescue (21st Operations Squadron). The 21st Operations Squadron (OSS), utilized H-21 helicopters for search and rescue work and employed C-47, C-54, and C-118 aircraft to assist with the mission of airlift. The 17th Troop Carrier/Tactical Airlift Squadron provided logistical airlift (with its C-130 Hercules aircraft). The 17th supported the various U.S. Army and AAC aircraft control and warning sites, and permanently stationed two C-130s on skis at Sondrestrom AFB, Greenland, in support of the Distant Early Warning Line sites (DEW).

The 317th Fighter-Interceptor Squadron (FIS) carried out the mission of air defense for the wing. The 317th kept two of its F-102A Delta Dagger aircraft on alert at each of the following locations: Elmendorf and Eielson Air Force Bases, and King Salmon and Galena Airports. The 317th was one of the premier squadrons of its day, being the only unit to have won the prestigious Hughes Achievement Trophy (given for the best fighter unit with an active air defense mission) three times during its operational service.

The F-102s, unfortunately, were technologically outdated, a fact that made long-range interception of Soviet intruders into Alaskan airspace by 317th crews increasingly difficult. AAC recognized the limitations of this aerial platform and repeatedly tried to secure the more advanced F-4 for air defense. The war in Viet Nam, however, had first call for the F-4. For a few years, therefore, Air Defense Command (ADC) dispatched F-106s from other states on a rotational basis to Alaska to help correct this mission limitation.

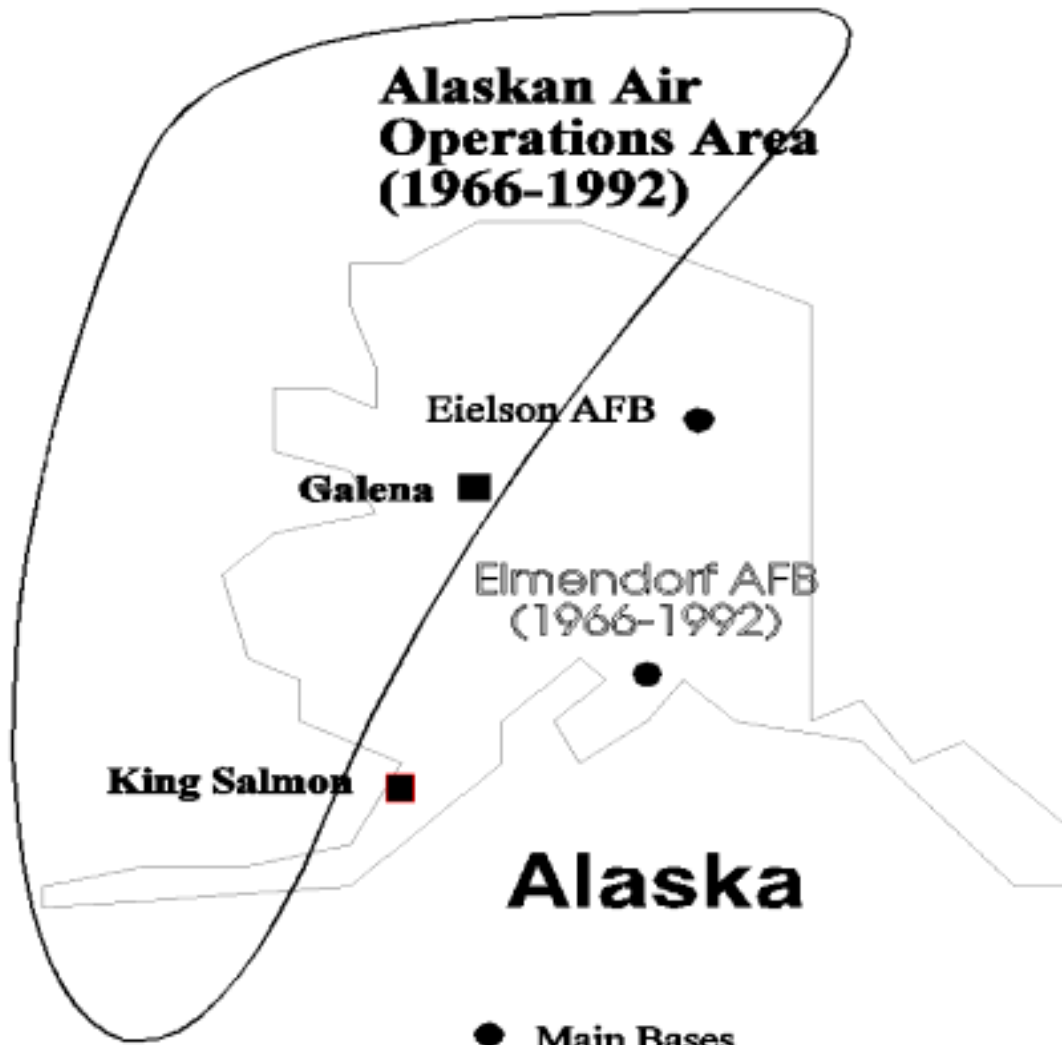
The situation came to a head late in 1969 when the Air Force announced the inactivation of the 317th due to the squadron's aging F-102s and the need to respond to budget cuts imposed by the cost of the war in Southeast Asia. Nevertheless, the Air Force compensated the 21st by assigning the 43d Tactical Fighter Squadron, which flew F-4Es, to the wing on 13 March 1970. The 43d departed MacDill AFB, Florida and arrived at Elmendorf on 23 June 1970. Consequently, the rotational F-106 deployments from the lower continental states ceased soon after the 43d assumed mission responsibilities at Elmendorf, Eielson, Galena and King Salmon on 1 August.

Unfortunately, the winter of 1970-1971 was severe in Alaska, causing numerous mechanical failures in the F-4s which had been accustomed to Florida's warm climate. At times, the wing's operational air defense assets dwindled from eighteen aircraft to only one or two. Moreover, the 43d assumed close air support as well as air defense responsibilities, two missions which stretched the squadron's capabilities. In response, Air Staff sent the 43d an additional six aircraft in May 1971.

Despite these initial handicaps, the 21 CW quickly proved itself a leader in the fighter community, conducting alerts, intercepts and exercises throughout the 1970s. In July 1972 the wing dispatched a detachment to Operation COOL SHOOT, a live missile firing exercise, held at Tyndall AFB, Florida. Air Force Headquarters awarded the 43d the coveted Hughes Achievement Trophy in December. Meanwhile, the 21 CW continued to intercept Soviet intruders into Alaskan airspace.

Exercises in 1976 included JACK FROST (later known as BRIM FROST), and a Tactical Air Command (TAC) Weapons System Evaluation Program at Eglin AFB, Florida. At the William Tell fighter weapons competition held in October-November 1976 at Tyndall, the wing won "Best F-4 Crew", "Best Maintenance Crew," the Apple Splitter Award for the most drones destroyed, the Top Gun Award, and only narrowly missed overall first place due to a sudden mission abort. The 43d again won the Hughes Achievement Trophy in 1977. Training deployments included the Canadian Maple Flag in September 1978 and Red Flag in April 1979.

Organizational changes also underscored the 1970s. Due to a realignment of airlift and rescue forces under the Military Airlift Command (MAC), the wing divested its helicopters and C-130s in 1975. Overall, however, the wing expanded, gaining two air base squadrons and several other responsibilities. The 21 CW picked up a new fighter unit on 1 October 1977 when the 18th Tactical Fighter Squadron (F-4Es) activated. Subsequently, the 43d maintained its air defense mission while the 18th adopted the role of close air support. Both units shared air defense alert duties in Alaska. Additionally, from November 1977 to April 1979, the 21 CW controlled all thirteen of Alaska's air control and warning sites. Then, in May 1979, Colonel Michael E. Nelson, 21st Composite Wing commander, initiated a study that concluded that his unit should be streamlined into a normal tactical fighter wing. AAC accepted his study and subsequently redesignated the 21st as the 21st Tactical Fighter Wing on 1 October 1979.



- Main Bases
- Alert Facilities



**F-102s fly near Mt McKinley, Alaska,
317th Fighter Interceptor Squadron,
21st Composite Wing**



**F-4s flying patrol over Alaska,
43d Tactical Fighter Squadron, 21st Composite Wing**

**21st Tactical Fighter Wing
1 October 1979 - 2 February 1992**



**As the Cold War thawed, the Soviet threat decreased.
21 TFW F-15s escorted the first Soviet MiG-29s
to visit North America in 1989**

The 21st Tactical Fighter Wing

Colonel Nelson continued as commander, helping to transition the wing into its new fighter role. The mixed bag of aircraft from the old Composite Wing dispersed, leaving 40 F-4Es, 12 T-33s, and a C-12 at Elmendorf AFB, Alaska. The F-4s were distributed between the wing's two flying components, the 18th and 43d Tactical Fighter Squadrons, while the T-33 trainers and the C-12 merged into the 5021st Tactical Operations Squadron.

The F-4s of the streamlined wing soon deployed to Chong Ju Air Base, Republic of Korea for Exercise "TEAM SPIRIT." During March 1980 the wing participated in dissimilar air combat training (DACT) and conducted combat air patrol, air interdiction and composite force tactics. TEAM SPIRIT proved to be the last exercise for the 21st's F-4s.

Later that year the Air Force released plans to replace the F-4Es stationed in Alaska with F-15A fighters, which were slated to go to the 43d Tactical Fighter Squadron, and A-10 close air support aircraft, which were earmarked for the 18th Tactical Fighter Squadron. In fact, the arrival of the A-10s heralded the reassignment of the 18th from the 21st to the 343d Composite Wing at Eielson AFB, Alaska.

The first F-15 arrived at Elmendorf in March, and the last of the new aircraft were in place by October. Thanks to special bomb-delivery air-to-surface training carried out in the T-33s, the 21st Tactical Fighter Wing became the first flying unit to reach initial operating capability (IOC) in the F-15 without the assistance of the aircraft manufacturer or a sister flying unit. The 21st made its first intercept of a Soviet intruder, a Tu-95 Bear C, when a pair of F-15s sortied from alert at King Salmon Airport on 24 November 1982.

Over the next four years, the F-15s undertook several deployments and exercises such as "BRIM FROST," a U.S. Readiness Command biennial Arctic exercise, and "TEAM SPIRIT" held in Japan and the Republic of Korea in 1985. The 21st conducted joint training exercises along the northern continental frontier with the Canadians. All the while, the wing intercepted Soviet bomber, transport, and maritime reconnaissance aircraft flying over the Arctic Ocean and Bering Sea.

This creditable service continued throughout the late 1980s from the William Tell Air-to-Air Weapons meets to COMBAT ARCHER to DACT training to the Air Force's "live-fire" Weapon System Evaluation Programs. During one exercise at the remote site known as Deadhorse, Alaska, three F-15s became the first Alaskan-based single-seat fighters to circle the North Pole. The 21st received newer aircraft, its first F-15Cs and Ds, in May 1987.

The wing hosted multiple distinguished visitors in 1989. President George Bush stopped at Elmendorf in route to Japan for the state funeral of Japanese Emperor Hirohito and addressed a crowd of over 7,000 in Hangar Five. Ironically, this was the same hangar in which President Richard Nixon had greeted Hirohito eighteen years previously when the emperor had made his first official state visit outside his native land.

Later that year, the wing expanded into the escort rather than only the intercept business. Two Soviet MiG-29 "Fulcrum" aircraft, which were traveling to their first air show in North America, officially visited the 21st at Elmendorf, not only to refuel, but as a gesture of goodwill. This event marked the first time the MiG-29 fighters landed on the continent, and the 21st's aircraft were there to escort them in, help them refuel, and play host.

The final upgrade of the 21st fighter inventory came with the addition of the 90th Tactical Fighter Squadron and the famous F-15E "Strike Eagle" in May 1991. The wing scarcely had completed pilot training on the new fighter-bomber when word of the Air Force Restructuring Program hit the Alaskan theater. The Air Force directed each base to have one wing and one commander; consequently, the wings of Alaskan Air Command consolidated aircraft, personnel and resources under one wing, the 3rd at Elmendorf. Although out of the business of flying, the 21st soon transitioned into the cutting edge of military operations - space.



Colonel Stuart L. Alton
Commander, 21st Tactical Fighter Wing
17 October 1986 - 22 August 1988





Two-seat F-15 lands at Elmendorf AFB, Alaska



**Intercept of Soviet Tu-95 Bear
by F-15As of the 43d Tactical Fighter Squadron
south of Shemya Island, 29 November 1982**

**21st Space Wing
15 May 1992 - Present**



**DSP has kept watch over our nation and allies
since the early 1970s.**



Two-seat F-15 lands at Elmendorf AFB, Alaska



**Intercept of Soviet Tu-95 Bear
by F-15As of the 43d Tactical Fighter Squadron
south of Shemya Island, 29 November 1982**

The 21st Space Wing

Provides early warning of strategic and theater ballistic missile attacks and foreign space launches. Detects tracks and catalogs more than 9,500 manmade objects in space, from those in near-Earth orbit to objects up to 22,300 miles above the earth's surface. Explores counterspace warfighting technologies in the field. Hosts HQ NORAD, HQ NORTHCOM, HQ Air Force Space Command and the 302nd Airlift Wing. Operates and supports Cheyenne Mountain AFS, Colorado; Thule Air Base, Greenland; Cape Cod AFS, MA, Cavalier AFS, ND, and Clear AFS, Alaska. Provides community support to the 50th Space Wing, Schriever AFB, Colorado, and to the Colorado Springs and Denver areas.

The 21st activated again, redesignated as the 21st Space Wing, at Peterson AFB on 15 May 1992. The new unit, which acquired the mission, assets and personnel of the former 1st Space Wing and 3d Space Support Wing (both previously located at Peterson AFB), assumed the primary mission of missile warning. The missile warning network had operated under the direction of Air Defense Command (later Aerospace Defense Command) and Strategic Air Command since the early 1960s. The network then passed under the aegis of Air Force Space Command when that command activated in September 1982. The 21st Space Wing, which assumed the lineage and honors of the old 21st dating back to World War Two, soon would become the Air Force's premier operational unit in the arena of space.

Central to the entire mission of missile warning is the Defense Satellite Program (DSP). DSP is a constellation of geosynchronous satellites equipped with infrared detectors to help locate and identify ballistic missile and nuclear testing activities around the world. DSP warning centers entered the world scene in the early 1970s. The first, at Woomera AS, Australia, was closely followed by the first stateside center at Buckley Air National Guard (ANG) Base in Denver, Colorado. The survivability of DSP was enhanced when the mobile ground system (MGS) activated at Holloman AFB, New Mexico in 1983. The importance of DSP was further underscored after the Gulf War in 1991 when Air Force Space Command and the 21st Space Wing activated the 11th Space Warning Squadron, Schriever AFB, Colorado (then Falcon AFB) for the specific purpose of providing theater tactical ballistic missile warning.

Several other systems are associated with the missile warning network currently operated by the 21st Space Wing. The oldest, the Ballistic Missile Early Warning System (BMEWS), came on line at Clear AFS, Alaska, Thule AB, Greenland and Fylingdales, England in the early 1960s. The Air Force replaced the BMEWS at Thule with the Solid State Phased Array Radar (SSPAR) in 1987, followed by similarly upgrading Fylingdales in 1992, and Clear in 2001. The Phased Array Warning System (PAVE PAWS) replaced the old AN/FSS-7 submarine-launched ballistic missile network along the coastal United States from 1980-1987 at Cape Cod AFS, Massachusetts, Beale AFB, California, Robins AFB, Georgia, and Eldorado AS, Texas. The Air Force inherited the AN/FPQ-16 Perimeter Acquisition Radar Characterization System (PARCS), located at Cavalier AFS, North Dakota, from the United States Army in 1976. Today, Cavalier serves as a part of the Sea Launched Ballistic Missile warning network covering the Hudson Bay and central Arctic region.

If missile warning had remained the only primary mission of the 21st Space Wing, the wing still would have been one of the largest in the Air Force. However, in April 1995, the 721st Space Group (afterward renamed the 721st Support Group and the 721st Mission Support Group in 2002) and the 73d Space Surveillance Group merged with the 21st Space Wing. From that point, the 21st became the largest wing in the United States Air Force with units deployed literally throughout the world. With the 73d came a new primary mission, that of space surveillance.

Several systems were associated with the space surveillance mission. The oldest of these was the AN/FPS-17 radar installed at Pirinlik AS, Turkey, in 1955. The Air Force next added the AN/FPS-79 in 1962. Over the years, station personnel observed missile test and space launch activities, including Sputnik and Vostok.

Other systems supported the space surveillance mission. For example, the AN/FPS-85 radar at Eglin AFB, Florida, became dedicated to space surveillance in 1988. Previously, the radar had supported the missile warning system, and had established a long record of service going back to 1969. Indeed, the AN/FPS-85 had been the Air Force's first electronically steered radar.

The 21st Space Wing also inherited the Ground-Based Electro-Optical Deep Space Surveillance System (GEODSS). GEODSS sites began opening in May 1982, first at Socorro, New Mexico, then at Maui, Hawaii, Cheojong-San, Republic of Korea (soon to close in 1990), and finally at Diego Garcia, British Indian Ocean Territory, in 1987. These advanced electro-optical telescopic cameras ultimately replaced the older Baker Nunn cameras in the arena of space tracking, and allowed deep-space surveillance and space-object identification. Consequently, the last of the American-operated Baker Nunn sites at San Vito AB, Italy, closed in July 1990.

Deep Space Tracking System and Low Altitude Space Surveillance Systems (DSTS/LASS) provided additional global coverage of space activities for the Air Force beginning in the 1989-1991 period at Verona AS, New York, Misawa AB, Japan, Osan AB, Republic of Korea, and at RAF Feltwell and RAF Edzell in the United Kingdom. The Air Force began developing a mobile version of these space surveillance systems in 1992.

The wing additionally operated the command and control network used to relay missile warning and surveillance information from sites dispersed around the world to HQ AFSPC, USSPACECOM, and NORAD. Air Force Space Command had identified the need for a mobile and hence more survivable command and control unit in 1989, a system which first would be called RAPIER, and which later would become known as the Mobile Command and Control Center (MCCC). The 721st Mobile Command and Control Squadron operated the MCCC after its activation in 1994.

The April 1995 merger which established the 21st as one of the largest wing in the United States Air Force did not signal the end of reorganization. By autumn, the wing had inactivated the 8th Space Warning Squadron at Eldorado AS and the 9th Space Warning Squadron at Robins AFB (both PAVE PAWS radars being placed into caretaker status), the 1st Space

Surveillance Squadron and its LASS radar at Verona AS, and the AN/FPS-17 radar of the 18th Space Surveillance Squadron at Pirinclik.

Reorganization continued into 1996. The 4th Space Warning Squadron inactivated at Holloman AFB, the MGS mobile vans transferring to the 137th Space Warning Squadron of the Colorado Air National Guard. Further, the 17th Space Surveillance Squadron inactivated at RAF Edzell, part of its system transferring to RAF Feltwell.

Despite these losses, the 21st remained the largest wing in the Air Force. Recognizing the need for a second operational group to handle the prolific number of worldwide sites, the Air Force activated the 821st Space Group on 31 May 1996 at Buckley Air National Guard Base in Denver, Colorado, and assigned the unit to the 21st Space Wing. Additionally, the 3d Command and Control Squadron (3 CACS) activated at Offutt AFB, Nebraska to act as the alternate missile warning center for Air Force Space Command and U.S. Space Command (USSPACECOM).

In 1997, the 21st inactivated the 19th Space Surveillance Squadron, thereby closing a long association with Turkey. Detachment 1, 3rd Space Surveillance Squadron, also inactivated in Korea. However, the wing added a new location in Europe when Detachment 4, 18th Space Surveillance Squadron, activated at Moron AB, Spain. This year saw the end of the wing's flying mission when the 84th Airlift Flight transferred to Air Mobility Command.

Further downsizing transpired in 1998. The 21st Medical Group transferred to the 10th Medical Group at the United States Air Force Academy. The 2nd Command and Control Squadron was reassigned to 14th Air Force and the 821st Logistics Squadron inactivated. Given these losses, the 21st became only the second largest wing in the United States Air Force; however, the wing remained the most geographically dispersed.

The wing became slightly smaller in 1999 when the 3 CACS and 5th Space Warning Squadrons inactivated, and the 721st Mobile Command and Control Squadron transferred to 20th Air Force. These losses were partially offset when the 76th Space Operations Squadron joined the wing in 2000, subsequently becoming the 76th Space Control Squadron in January 2001.

The events of 11 September 2001 challenged America to respond to terrorism worldwide. President George W. Bush ordered strikes against Al-Qaeda and the Taliban in Afghanistan in October, and followed-up with an assault on Saddam Hussein's regime in Iraq in March and April 2003. The wing deployed personnel overseas and tightened security at GSUs and Peterson AFB throughout these tumultuous times.

Meanwhile, the wing continued to reorganize. The 821st Space Group inactivated at Buckley in September 2001 along with the 821st Medical Squadron, the 821st Security Forces Squadron and the 821st Support Squadron. Other 821st components, the 3rd Space Communications Squadron and the 11th Space Warning Squadron, had already been reassigned to the 21 OG in May. Headquarters AFSPC redesigned the 1st Command and Control Squadron as the 1st Space Control Squadron that October.

The year 2002 brought even more striking changes. The 5th Space Surveillance Squadron inactivated in January, and the 3rd Space Surveillance Squadron followed suit in February. The 821st Air Base Group activated at Thule AB, Greenland, in May, in conjunction with components, the 821st Security Forces Squadron and the 821st Support Squadron. The 11th Space Warning Squadron inactivated in September.

A dramatic wing organization occurred in autumn 2002 under the new Air Force Chief of Staff Logistics Review and the concept of the "combat wing." The Air Force planned to restructure wings from 1 October 2002 to 30 September 2003. Intended to focus on core capabilities, the review directed several organizational changes that directly affected logistical and support groups. Consequently, the 21st and 721st Support Groups became Mission Support Groups. The logistical plans, supply and transportation functions were merged into the 21st Logistics Readiness Squadron and assigned to the 21st Mission Support Group, along with the 21st Contracting Squadron. The new 21st Maintenance Group comprised the 21st Space Communications Squadron (formerly the 21st Communications Squadron), 21st Space Management Flight and the 21st Maintenance Operations Flight (previously the 21st Logistical Support Squadron).

By April 2003, the 21st Space Wing remained committed and ready to engage in the struggle against international terrorism.

**Brigadier General Gerald F. Perryman
Commander, 21st Space Wing
10 January 1995 - 6 January 1996**



The 21st Space Wing grew significantly under General Perryman. Subsequently promoted to Major General and assumed command of 14th Air Force.



**13th Space Warning Squadron
Clear Air Force Station, Alaska**



**19th Space Surveillance Squadron
Pirinlik Air Force Station, Turkey
Unit inactivated in 1997**



**9th Space Warning Squadron
PAVE PAWS, Robins AFB, Georgia
Unit inactivated in 1995**



**12th Space Warning Squadron
Thule AB, Greenland
SSPAR**



**Det 3, 18 SPSS
Maui DSS
GEODDS Site**



**Mobile Ground System Vans of the 4 SWS
Transferred to 137 SWS (Colorado ANG unit) in 1997**



**20th Space Surveillance Squadron
Eglin AFB, Florida
AN/FPS-85**



**5th Space Surveillance Squadron
RAF Feltwell, UK
DSTS and LASS Systems**

Appendix A



The 21st Space Wing Emblem

Description: On a shield of azure, a broad sword argent, shaded silver, hilt and pommel or, shaded yellow, outlined of the field, between four red lightning streaks proper, two and two, bendwise.

Significance: The blue shield represents the vast blue sky-the 21st's area of operations. The upraised sword indicates the strength and readiness of our wing to perform its mission, whether in peace or war. The lightning is symbolic of the heavens beyond, our stormy power and protective Lord. The Air Force blue, red and yellow signify the three fighter squadrons of the 21st Fighter-Bomber Wing. Approved by HQ USAF 23 July 1957. (The words on the scroll, "Strength and Preparedness," are derived from the original Latin scroll of "Fortitudo et Preparatio" from the 21st Fighter-Bomber Wing).

The Legend of Iron Mike

Traditionally, military formations have chosen mascots as symbols of corporate pride. A mascot personifies the collective values of a unit and serves as a focus of morale. In 1996, the 21st Space Wing selected a mascot called "Iron Mike," and promoted him to Captain of the Team 21 "Guards." "Iron Mike" leads the wing charge during the annual Guardian Challenge Competition held at Vandenberg AFB, California, where Team 21 goes head-to-head with other Air Force Space Command units from around the world.

The legend of "Iron Mike" began in 1966 when the 317th Fighter Interceptor Squadron at Elmendorf AFB, Alaska, adopted a five-foot, five-inch, 45 pound suit of armor complete with helmet, sword, and shield as its mascot. The 317th was assigned to the 21st Composite Wing (CW), a lineal forerunner of the 21st Space Wing. Almost immediately, the 21 CW accepted "Iron Mike" as a symbol of the wing's fighting spirit.

The prized suit of armor traveled between the squadrons of the 21st from 1966 through 1969. Sometimes squadrons lent "Mike" voluntarily, while at other times intrepid bands of wing personnel "liberated" the armored warrior from a sister unit. In between these tongue-in-cheek misadventures, "Iron Mike," like a true knight errant, guarded against Cold War aggression over the far reaches of North America, and quested as far east as Greenland, and as far south as California. "Mike" even followed the forces of freedom to Viet Nam for his baptism under fire.

"Iron Mike" remained associated with the 21 CW until 31 December 1969, when the 317th inactivated. Unfortunately, the squadron dispatched the mascot to the Air Force Museum at Wright-Patterson AFB, Ohio, without clearance from the headquarters of the 21st Composite Wing. Despite appeals from the wing to have "Mike" returned, the cherished mascot remained at the museum where it stands to the present day.

Iron Mike



Artist's conception of "Iron Mike," the warrior Spirit of the 21 SW

Appendix C

The Commanders

21st Bombardment Group

| | |
|-------------------------------------|-----------------------|
| Colonel Robert D. Knapp | 9 Feb 42 - 26 Apr 42 |
| Colonel William L. Lee | 26 Apr 42 - 13 Aug 42 |
| Lieutenant Colonel John F. Batjer | 13 Aug 42 - 5 Oct 42 |
| Colonel Carl R. Storrie | 5 Oct 42 - 7 Nov 42 |
| Colonel Guy L. McNeil | 7 Nov 42 - 19 Apr 42 |
| Colonel Don Z. Zimmerman | 19 Apr 42 - 6 Jun 43 |
| Lieutenant Colonel L. F. Brownfield | 6 Jun 43 - 6 Jul 43 |
| Colonel Richard T. Coiner, Jr. | 6 Jul 43 - 10 Oct 43 |

21st Fighter Group

| | |
|---------------------------------------|-----------------------|
| Colonel Kenneth R. Powell | 21 Apr 44 - 10 Jun 45 |
| Colonel Charles E. Taylor | 10 Jun 45 - 15 Oct 45 |
| Lieutenant Colonel Charles E. Parsons | 15 Oct 45 - 25 Nov 45 |
| Colonel William Eades | 25 Nov 45 - 21 Feb 46 |
| Colonel Lester S. Harris | 21 Feb 46 - 10 Oct 46 |

21st Fighter-Bomber Wing

| | |
|---------------------------|-----------------------|
| Colonel James B. Buck | 1 Jan 53 - 27 Apr 53 |
| Colonel Robert R. Rowland | 27 Apr 53 - 29 Jun 56 |
| Colonel Robert N. Baker | 29 Jun 56 - 8 Feb 58 |

21st Tactical Fighter Wing

| | |
|------------------------------|-----------------------|
| Colonel Frank J. Collins | 1 Jul 58 - 21 Apr 59 |
| Colonel William W. Ingenhutt | 21 Apr 59 - 28 Sep 59 |
| Colonel Dean Davenport | 28 Sep 59 - 18 Jun 60 |

21st Composite Wing

| | |
|---------------------------------|-----------------------|
| Colonel Donald H. Lynch | 8 Jul 66 - 30 Jun 68 |
| Colonel Charles W. Johnson, Jr. | 30 Jun 68 - 23 Sep 69 |
| Colonel Kenneth D. Dunaway | 23 Sep 69 - 15 Jan 70 |
| Colonel John A. Nelson | 15 Jan 70 - 1 Sep 70 |
| Colonel Kenneth D. Dunaway | 1 Sep 70 - 23 Jul 71 |
| Colonel James R. Larkins | 23 Jul 71 - 9 Aug 71 |
| Colonel James R. Brickel | 9 Aug 71 - 12 Jul 72 |
| Colonel David T. Stockman | 12 Jul 72 - 4 Jun 73 |
| Colonel Charles F. Loyd | 4 Jun 73 - 1 Jul 74 |
| Colonel Fredrick C. Eaton | 1 Jul 74 - 1 Jul 75 |
| Colonel Edward L. Tixier | 1 Jul 75 - 29 Apr 77 |
| Colonel John T. Wotring | 29 Apr 77 - 16 Apr 79 |
| Colonel Michael A. Nelson | 16 Apr 79 - 1 Oct 79 |

21st Tactical Fighter Wing

| | |
|--------------------------------------|-----------------------|
| Colonel Michael A. Nelson | 1 Oct 79 - 20 Feb 81 |
| Colonel Jerry D. Cobb | 20 Feb 81 - 15 Apr 82 |
| Colonel Robert W. Hibarger (Interim) | 15 Apr 82 - 22 Apr 82 |
| Colonel Evan J. Griffith, Jr. | 22 Apr 82 - 16 Apr 84 |
| Colonel Wilfred K. Abbott | 16 Apr 84 - 10 Jul 84 |
| Colonel Pat R. Paxton | 10 Jul 84 - 19 Mar 85 |

| | |
|-----------------------------------|-----------------------|
| Colonel William R. Povilus | 19 Mar 85 - 17 Oct 86 |
| Colonel Stuart L. Alton | 17 Oct 86 - 23 Aug 88 |
| Colonel Harold S. Storer, Jr. | 23 Aug 88 - 20 Mar 90 |
| Colonel Donald J. Creighton | 20 Mar 89 - 26 Sep 91 |
| Colonel Rodney P. Kelly (Interim) | 26 Sep 91 - 20 Dec 91 |
| Colonel Donald J. Creighton | 20 Dec 91 - 2 Feb 92 |

21st Space Wing

| | |
|---|-----------------------|
| Brigadier General Ronald D. Gray | 15 May 92 - 31 Aug 93 |
| Brigadier General Donald G. Cook | 31 Aug 93 - 10 Jan 95 |
| Brigadier General Gerald F. Perryman | 10 Jan 95 - 7 Jun 96 |
| Brigadier General Franklin J. Blaisdell | 7 Jun 96 - 19 Jun 98 |
| Brigadier General Jerry M. Drennan | 19 Jun 98 - 28 Aug 00 |
| Brigadier General C. Robert Kehler | 28 Aug 00 - 15 May 02 |
| Brigadier General Duane W. Deal | 15 May 02 - present |

APPENDIX D

DUTY STATIONS

21st Bombardment Group

| | |
|-------------------------------------|-----------------------|
| Bowman Field, Kentucky | 1 Feb 42 - 8 Feb 42 |
| Jackson Army Air Base, Mississippi | 8 Feb 42 - 21 Apr 42 |
| Columbia Army Air Base, S. Carolina | 21 Apr 42 - 24 May 42 |
| Key Field, Mississippi | 24 May 42 - 27 Jun 42 |
| MacDill Field, Florida | 27 Jun 42 - 10 Oct 42 |

21st Fighter Group

| | |
|--|-----------------------|
| Wheeler Field, Hawaii | 21 Apr 44 - 13 Oct 44 |
| Mokuleia, Field, Hawaii | 13 Oct 44 - 2 Mar 45 |
| Central Field (Airfield No. 2), Iwo Jima | 26 Mar 45 - 16 Jul 45 |
| South Field, Iwo Jima | 16 Jul 45 - 1 Dec 45 |
| Isley Field, Saipan | 1 Dec 45 - 15 Apr 46 |
| Northwest Field, Guam | 15 Apr 46 - 10 Oct 46 |

21st Fighter-Bomber Wing

| | |
|------------------------|----------------------|
| George AFB, California | 1 Jan 53 - 13 Dec 54 |
| Chambley AB, France | 13 Dec 54 - 8 Feb 58 |

21st Tactical Fighter Wing

| | |
|------------------|-----------------------|
| Misawa AB, Japan | 1 July 58 - 18 Jun 60 |
|------------------|-----------------------|

21st Composite Wing

| | |
|-----------------------|---------------------|
| Elmendorf AFB, Alaska | 8 Jul 66 - 1 Oct 79 |
|-----------------------|---------------------|

21st Tactical Fighter Wing

| | |
|-----------------------|---------------------|
| Elmendorf AFB, Alaska | 1 Oct 79 - 2 Feb 92 |
|-----------------------|---------------------|

21st Space Wing

| | |
|------------------------|---------------------|
| Peterson AFB, Colorado | 15 May 92 - Present |
|------------------------|---------------------|

Appendix E

Campaign Streamers and Decorations

| | | |
|--|--|-----------------------|
| <i>21st Bombardment Group</i> | | |
| Campaign Streamer | | |
| Antisubmarine, American Theater | | 7 Dec 41 - 2 Sep 45 |
| <i>21st Fighter Group</i> | | |
| Campaign Streamer | | |
| Air Offensive, Japan | | 17 Apr 42 - 2 Sep 45 |
| Decorations | | |
| Distinguished Unit Citation, Japan | | 7 Apr 45 |
| <i>21st Fighter-Bomber Wing</i> | | |
| | | None |
| <i>21st Tactical Fighter Wing</i> | | |
| | | None |
| <i>21st Composite Wing</i> | | |
| Decorations | | |
| Air Force Outstanding Unit Award | | 8 Jul 66 - 1 May 67 |
| Air Force Outstanding Unit Award | | 2 May 67 - 1 Jan 68 |
| Air Force Outstanding Unit Award | | 2 Jan 68 - 31 Dec 68 |
| Air Force Outstanding Unit Award | | 1 Jan 69 - 31 Dec 69 |
| Air Force Outstanding Unit Award | | 1 Jan 70 - 31 Dec 70 |
| Air Force Outstanding Unit Award | | 1 Jan 71 - 31 Dec 71 |
| Air Force Outstanding Unit Award | | 1 Jan 72 - 31 Dec 72 |
| Air Force Outstanding Unit Award | | 1 Jan 74 - 31 Dec 74 |
| Air Force Outstanding Unit Award | | 1 Jan 75 - 31 Dec 75 |
| Air Force Outstanding Unit Award | | 1 Jan 78 - 31 Dec 78 |
| <i>21st Tactical Fighter Wing</i> | | |
| Decorations | | |
| Air Force Outstanding Unit Award | | 1 Jan 80 - 31 Dec 80 |
| Air Force Outstanding Unit Award | | 1 Jul 82 - 30 Jun 83 |
| Air Force Outstanding Unit Award | | 1 Oct 85 - 31 Dec 86 |
| Air Force Outstanding Unit Award | | 1 Jan 87 - 31 Dec 88 |
| <i>21st Space Wing</i> | | |
| Decorations | | |
| Air Force Outstanding Unit Award | | 1 Oct 92 - 30 Sep 94 |
| Air Force Outstanding Unit Award | | 1 Oct 95 - 30 Sep 97 |
| Air Force Outstanding Unit Award | | 1 Oct 97 - 30 Sep 99 |
| Air Force Outstanding Unit Award | | 1 Jan 98 - 31 Dec 98* |

* The wing won the General Thomas S. Moorman, Jr. Trophy, an award which automatically confers an Air Force Outstanding Unit Award as well; hence, the overlap in Air Force Outstanding Unit dates.

Appendix F
Weapon Systems

| Designation | Common Name | Manufacturer | Type |
|-----------------------------------|--------------------|---------------------|------------------|
| 21st Fighter Group | | | |
| P-39Q | Airacobra | Bell | Fighter |
| P-38J/L | Lightning | Lockheed | Fighter |
| C-47A | Skytrain | Douglas | Cargo Transport |
| AT-6 | Texan | North American | Trainer |
| RA-24A | Dauntless | Douglas | Scout Bomber |
| P-51D | Mustang | North American | Fighter |
| P-47N | Thunderbolt | Republic | Fighter |
| 21st Fighter-Bomber Wing | | | |
| AT-6A | Texan | North American | Trainer |
| C-47A | Skytrain | Douglas | Cargo Transport |
| P-51D | Mustang | North American | Fighter |
| A-26C | Invader | Douglas | Attack Bomber |
| T-33A | Shooting Star | Lockheed | Jet Trainer |
| F-86E | Sabrejet | North American | Fighter |
| 21st Tactical Fighter Wing | | | |
| F-84G | Thunderjet | Republic | Tactical Fighter |
| T-33A | Shooting Star | Lockheed | Jet Trainer |
| F-100D/F | Supersabre | North American | Fighter |

Weapon Systems (cont)

| Designation | Common Name | Manufacturer | Type |
|-----------------------------------|--------------------|---------------------|--|
| 21st Composite Wing | | | |
| F-102A/TF-102A | Delta Dagger | Convair | Jet Fighter |
| T-33A | Shooting Star | Lockheed | Jet Trainer |
| T-39 | Sabreliner | Lockheed | Transport |
| EB-57E | Intruder | Martin | Electronic Warfare |
| C-12 | King Air | Beechcraft | Liaison |
| C-130D/C-130D-6 | Hercules | Lockheed | Transport Aircraft |
| C-118A/EC-118/VC-118 | Liftmaster | Douglas | Cargo Transport, Electronic Counter- measures, VIP |
| C-123B | Provider | Fairchild Hiller | Cargo Transport |
| C-124A | Globemaster | Douglas | Cargo Transport |
| EC-54D | Skymaster | Douglas | Electronic Warfare |
| HH-3/CH-3 | Jolly Green Giant | Sikorsky | Air Rescue Helicopter |
| CH-21B | Workhorse | Boeing Vertol | Helicopter |
| 21st Tactical Fighter Wing | | | |
| T-33A | Shooting Star | Lockheed | Jet Trainer |
| F-4E | Phantom II | McDonnell-Douglas | Fighter |
| F-15A/C/D/E | Eagle | McDonnell-Douglas | Fighter |
| A-10A | Thunderbolt II | Republic | Close Air Support |

Weapon Systems (cont)

| Designation | System Type | Location | Mission |
|---|---|---|--|
| 21st Space Wing | | | |
| AN\FPS-123 | Solid-State Phased Array Radar (SSPAR) | Thule AB, Greenland | Missile Warning/ Space Surveillance |
| AN\FPS-50 | Detection Radar | Clear AFS, AK* | Missile Warning/ Space Surveillance |
| AN\FPS-92 | Tracking Radar | Clear AFS, AK | Missile Warning/ Space Surveillance |
| AN\FPQ-16 | Perimeter Acquisition Radar Characterization System (PARCS) | Cavalier AFS, ND Cape Cod AFS, MA | Missile Warning/ Space Surveillance |
| AN\FPS-115 | PAVE Phased Array Warning System (PAVE PAWS) | Cape Cod AFB, MA Beale AFB, CA Robins AFB, GA* Eldorado AFS, TX* | Submarine Launched Ballistic Missile Warning/Space Surveillance |
| AN\FPS-85 | Phased Array Radar | Eglin AFB, FL | Space Surveillance |
| AN\FPS-17 | Detection Radar | Pirinclik AB, Turkey* | Space Surveillance |
| AN\FPS-79 | Tracking Radar | Pirinclik AB, Turkey* | Space Surveillance |
| Ground-based Electro-Optical Deep Space Surveillance (GEODSS) | Electro-Optical Imaging | Socorro, NM Diego Garcia, BIOT Maui, HI | Deep Space Surveillance/Space Object Identification |

Weapon Systems (cont)

| | | | |
|------------------------------------|---|--|---|
| Transportable Optical System | Electro-Optical Imaging | Moron AB, Spain | Deep Space Surveillance/Space Object Identification |
| Defense Support Program Satellites | Geosynchronous satellite with infrared detector | Various Ground Stations Worldwide | ICBM/Space Launch Early Warning/ |
| AN/MSQ-118 & AN/MSQ-120 | Mobile Processing Capability for DSP | 137 SWS Colorado Air National Guard, Greeley, CO | Nuclear Detonation Detection ICBM/Space Launch Early Warning/ Nuclear Detonation Detection |
| C-21A | Learjet | Gates-Lear | Liaison Transport Aircraft** |

* Unit/Equipment Inactivated

** 84th Airlift Flight transferred from 21st Space Wing to Air Mobility Command (AMC) in 1997

Appendix G

History of Peterson AFB

Peterson AFB traces its roots to the Colorado Springs Army Air Base, established on 6 May 1942 at the Colorado Springs Municipal Airport, which has been in operation since 1926. The base carried out photo reconnaissance training under the auspices of the Photo Reconnaissance Operational Training Unit (PROTU). On 22 June 1942, Colorado Springs Army Air Base was assigned to the 2d Air Force, headquartered at Fort George Wright, Washington.

Then, after only a few weeks, a tragedy occurred that would indelibly affect the base. On 8 August 1942, First Lieutenant Edward J. Peterson, Operations Officer for the 14th Photo Reconnaissance Squadron and a native of Colorado, crashed while attempting to take off from the airfield when the left engine of his twin engine F4 (a reconnaissance variant of the P-38 Lightning) failed. A base fire department crew rescued Lt Peterson from the burning wreckage. Unfortunately, Lt Peterson sustained significant burns and died at Penrose hospital that afternoon, thereby becoming the first Coloradan killed in a flying accident at the airfield. Consequently, on 13 December 1942, officials changed the name of the Colorado Springs Army Air Base to Peterson Army Air Base in honor of the fallen airman.

The base assumed a new mission in the spring of 1943, that of heavy bomber combat crew training. The 214th Combat Crew Training School conducted the training, utilizing the B-24 Liberator. From 5 March to 1 October 1943, "Peterson Field," as the base was commonly called, was assigned to the 3d Air Force, headquartered at Greenville Army Air Base, South Carolina. Control of Peterson Field later reverted to the 2d Air Force. In June 1944, the mission at the base once again changed, this time to fighter pilot training. The 72d Fighter Wing, assigned to the base, employed P-40 Warhawks to carry out this mission.

In April 1945, Peterson Field was assigned to Continental Air Forces. The location of the Army Air Forces Instructors School at the base signaled another mission change. A short time later, on 31 December 1945, the Army inactivated the base, turning the property over to the City of Colorado Springs.

The legacy of Peterson Field and the military presence in Colorado Springs took a significant turn in September 1947, following the birth of the United States Air Force. Soon after its inception, the fledgling service twice reactivated the base from 29 September 1947 to 15 January 1948 and again from 22 September 1948 into 1949. During the latter period, the base served as an airfield for Headquarters, 15th Air Force which had been temporarily located in Colorado Springs. Peterson Field inactivated again when the 15th Air Force moved to March Air Force Base in 1949.

The Air Force activated Peterson Field once more following the January 1951 establishment of Air Defense Command at Ent AFB, located in downtown Colorado Springs. The 4600th Air Base Group activated simultaneously on 1 January 1951 and provided support for the newly established command. In 1958, the 4600th achieved wing status and was designated as the 4600th Air Base Wing. Subsequently, on 1 April 1975, the Air Force redesignated the wing as the 46th Aerospace Defense Wing. One year later, on 1 March 1976, Peterson Field was renamed Peterson Air Force Base.

Strategic Air Command assumed control of the base on 1 October 1979. Then, on 1 September 1982, USAF officials activated Air Force Space Command at Peterson, followed by the activation of the 1st Space Wing on 1 January 1983. Peterson Air Force Base became the hub of Air Force space activity when the 1st Space Wing assumed host unit responsibility following the inactivation of the 46th Aerospace Defense Wing on 1 April 1983. The 1st Space Wing then transferred host unit responsibility to the 3d Space Support Wing, which activated on 15 October 1986. Finally, on 15 May 1992, these two wings inactivated and their personnel and equipment transferred to the 21st Space Wing, which activated on 15 May 1992.

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