

21ST SPACE WING HERITAGE OF HONOR



AIRMAN'S CREED



Colonel Douglas A. Schiess
Commander, 21st Space Wing
12 June 2015 - Present

I am an American Airman.

I am a Warrior.

I have answered my Nation's call.

I am an American Airman.

My mission is to Fly, Fight, and Win.

I am faithful to a Proud Heritage,
A Tradition of Honor,
And a Legacy of Valor.

I am an American Airman.

Guardian of Freedom and Justice,
My Nation's Sword and Shield,
Its Sentry and Avenger.

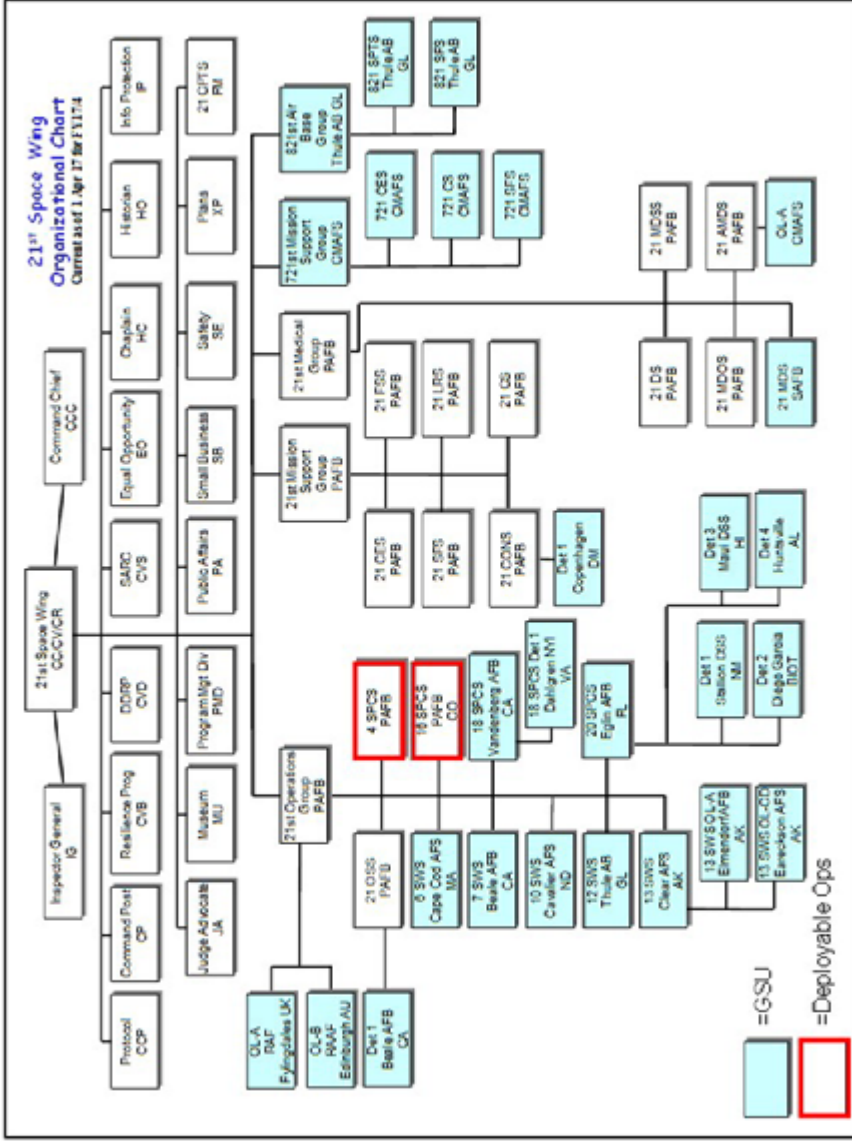
I defend my Country with my Life.

I am an American Airman.

Wingman, Leader, Warrior.

I will never leave an Airman behind,

I will never falter,
And I will not fail.



21st Space Wing

Mission
Execute global capabilities to defend the homeland and secure space for our nation and allies

Vision
Unrivaled space superiority--
Driving excellence and innovation Today and Tomorrow

Priorities
Win Today's Fight
Posture for Tomorrow's Fight
Take Care of Our People
Strengthen Partnerships: Service, Joint, Allied & Community
Pursue Innovation and Effective Stewardship of Resources
Promote a Culture of Dignity and Respect

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. 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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June 2017 Edition

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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.

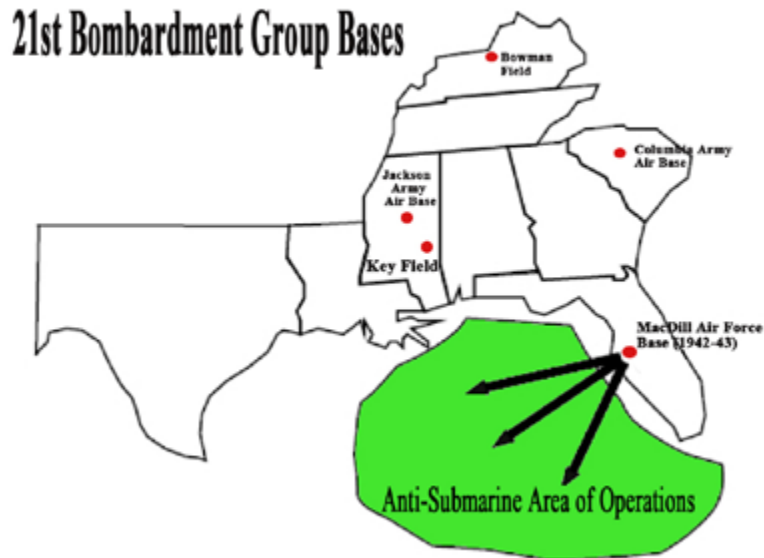
The numerical designation "21st" became attached to our newly activating space wing as a result of the dramatic Air Force re-structuring which began in 1991 shortly after the victorious conclusion of Operation DESERT STORM. The Air Force Chief of Staff attempted to preserve the heritage of distinguished fighter units, which were inactivating, by attaching their numerical designations to any activating units. The 21st Tactical Fighter Wing inactivated on 19 December 1991; 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.



21st Bombardment Group 1 February 1942 - 10 Oct 1943

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.



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

21st Fighter Group 21 April 1944 - 10 October 1946

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.

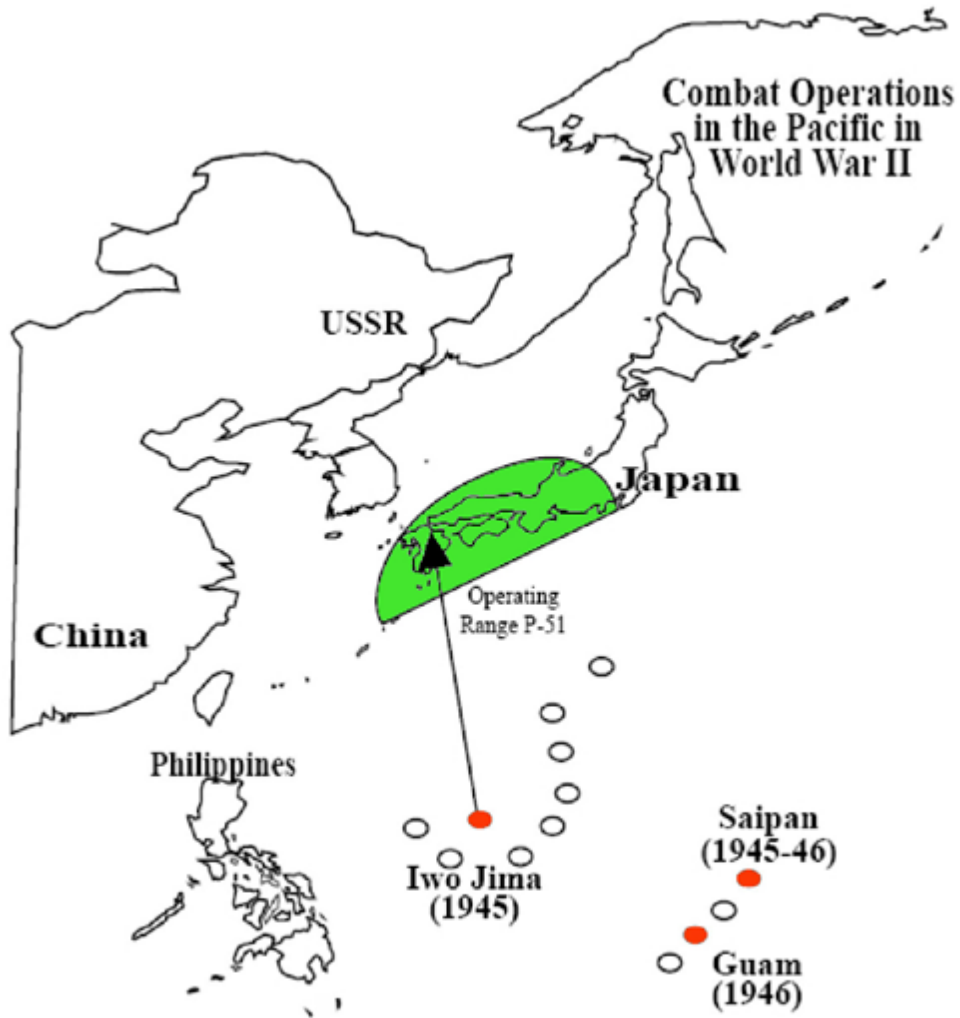
In the meantime, the groups' aircraft continued to duel in the air and two "aces" soon emerged: Major Harry Crim and Captain Willis Matthews, both of the 531st Fighter Squadron. Aircrews of the 21st also strafed the airfields which the Japanese used for their increasingly dangerous *kamikaze* attacks.

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.



The 21st Fighter Group flew its first bomber escort mission and destroyed eight enemy aircraft on 7 April 1945

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

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 Luxemburg, 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.



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

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."

**Air Operations
with NATO
(1954 - 1958)**



**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



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

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 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”).

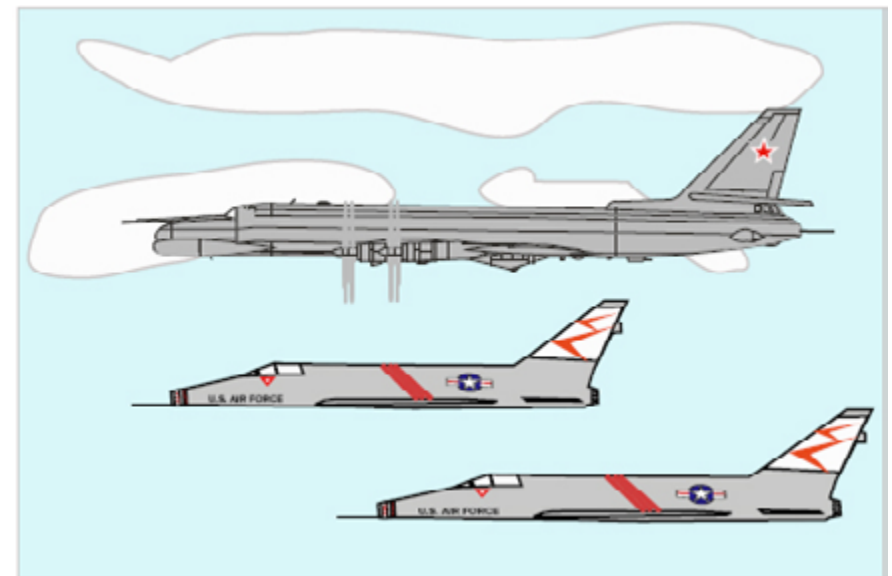
Component units of the 21st included the 416th and 531st Fighter Squadrons, the 21st Armament and Electronics Squadron, the 21st Field Maintenance Squadron, and the 21st Tactical Hospital. Initially, the 416th carried out the war-fighting missions in the F-84G Thunderjet, a single-seat fighter-bomber.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

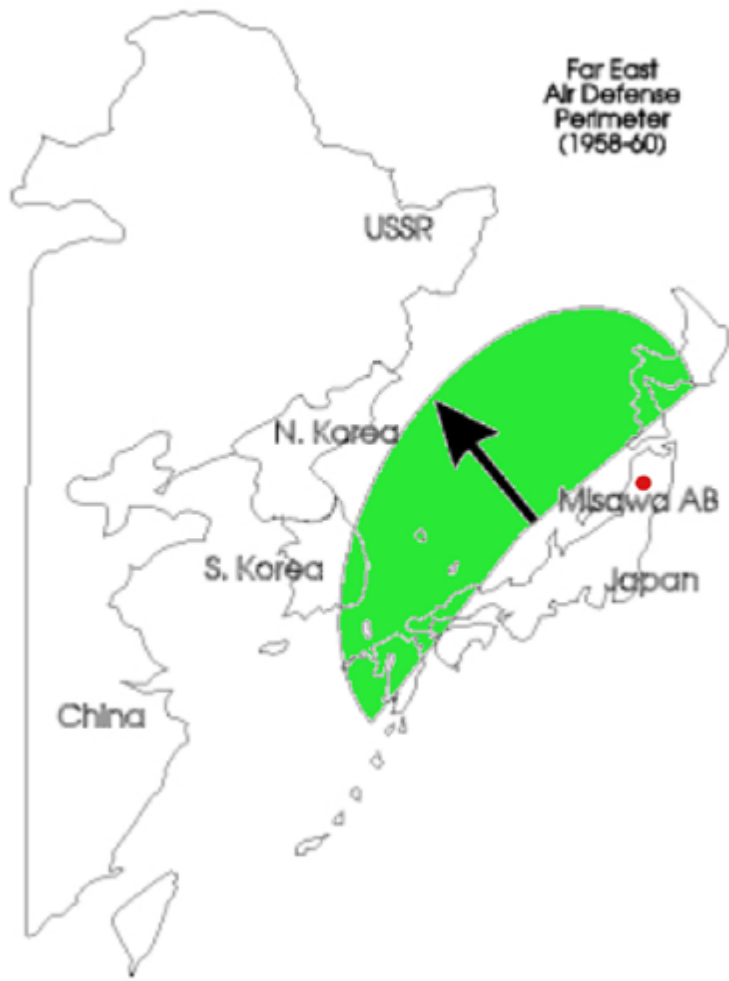
The 21st Tactical Fighter Wing also flew beyond the base at Misawa. In addition to routine alert commitments and deployments to Korea, two F-100s from the 531st made the first American jet aircraft transpolar flight, flying from Weathersfield, England, to Eielson AB, Alaska, on 7 August 1959.

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.



**1 October 1959, two F-100Ds from the 21 TFW
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



21st Composite Wing 8 July 1966 - 1 October 1979

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.

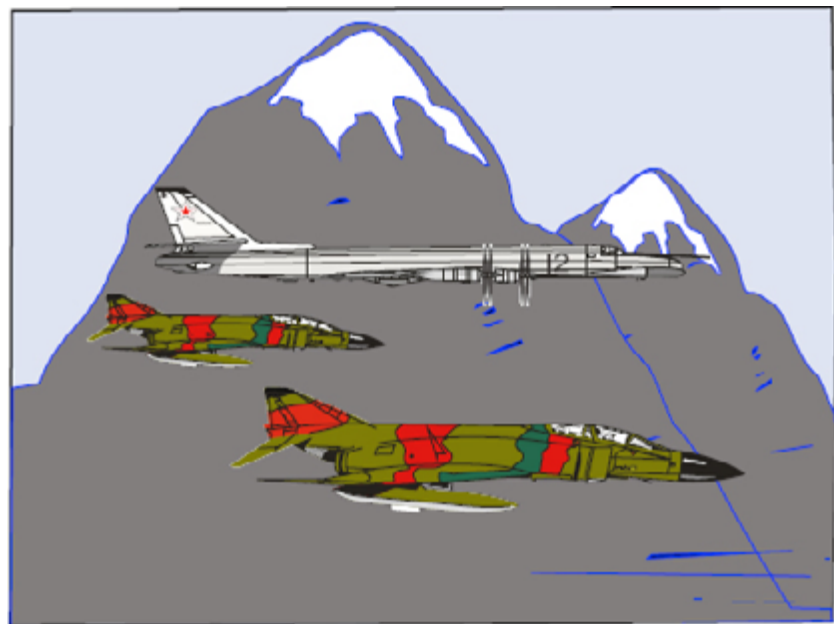


**F-100D, Tail Number 56-3345,
416th Tactical Fighter Squadron,
21st Tactical Fighter Wing,
Misawa AB, Japan, 1960**



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

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 43rd assumed mission responsibilities at Elmendorf, Eielson, Galena and King Salmon on 1 August.



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

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 43rd assumed close air support as well as air defense responsibilities, two missions which stretched the squadron's capabilities. In response, Air Staff sent the 43rd 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 43rd 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 BRIMFROST), 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 43rd 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 43rd 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 A. 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.



**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

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.

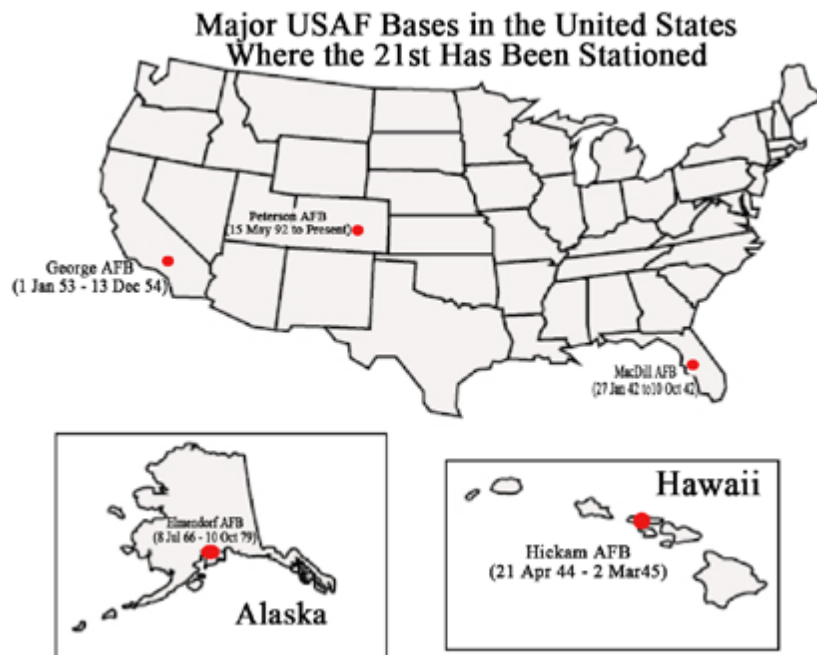


**As the Cold War thawed, the Soviet threat decreased.
21 TFW F-15s escorted the first Soviet MiG-29s
to visit North America in 1989**

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 43rd Tactical Fighter Squadron
south of Shemya Island, 29 November 1982**



**DSP kept watch over our nation and allies
since the early 1970s.
The 21st Space Wing was associated with DSP from
15 May 1992 to 19 August 2004**

Activation of the 21st Space Wing 15 May 1992



Gen Donald J. Kutyna (left), commander, Air Force Space Command, inactivated the 1st Space Wing and 3rd Space Support Wing on 15 May 1992. In attendance: 1st Space Wing commander Col Thomas J. Scanlan, Jr. (right foreground), and 3rd Space Support Wing commander Col Gerald M. Bergeman (right background). General Kutyna presented both wings with Air Force Outstanding Unit Awards. Brig Gen Ronald D. Gray (center background) prepared to take command of the 21st Space Wing during the subsequent activation ceremony.

The Air Force activated the 21st Space Wing at Peterson AFB on 15 May 1992. Since activation, the 21st Space Wing has become the largest military space wing in the world. Three Air Force units contributed to the activation of the 21st Space Wing: the 1st Space Wing (1 SW), the 3rd Space Support Wing (3 SSW) and the 21st Tactical Fighter Wing. The 1 SW (Air Force Space Command), which operated and managed ground and space-based sensors, was activated on 1 January 1983. The 3 SW (Air Force Space Command), which acted as host base for Peterson and Cheyenne Mountain Air Force Bases (now Cheyenne Mountain Air Force Station), had been activated on 15 October 1986.

The 21st Tactical Fighter Wing, from which the 21 SW derived its actual heritage, had been inactivated on 19 December 1991 at Elmendorf Air Force Base, Alaska. Upon activation, the 21 SW absorbed the personnel and equipment of the inactivated 1 SW and 3 SSW. In accordance with Air Force policy, the 21 SW received the lineage and honors of the 21st Tactical Fighter Wing (1979-1992), the 21st Composite Wing (1966-1979), the 21st Tactical Fighter Wing (1958-1960), and the 21st Fighter Bomber Wing (1953-1958).

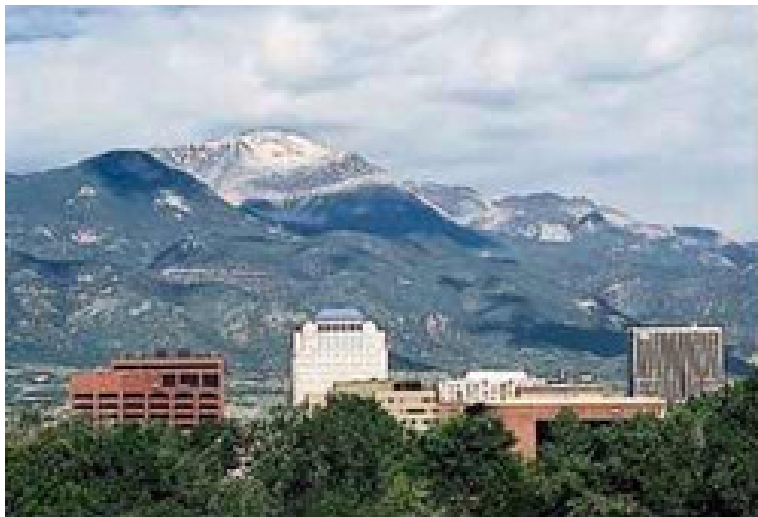
In addition, Air Staff permitted the 21 SW to display honors bestowed on the 21st Fighter Group (1944-1946) and the 21st Bombardment Group (1942-1943). HQ USAF decided to grant the new space wing the lineage and honors of these distinguished flying units in order to preserve essential Air Force heritage. For example, during a four-month period over Japan in 1945, the 21st Fighter Group scored over 60 confirmed aerial victories and had two aces, Major Harry Crimm and Captain Willis Matthews.

Air Staff merged the operational units of the 1 SW and the support components of the 3 SSW to create the 21 SW in accordance with the “objective wing” concept established in the Department of the Air Force “White Paper” of September 1991. Stated simply, Air Staff directed the merger of wings at selected multi-wing bases in order to streamline and create one wing whose commander had control of both operational and support functions; in other words, “one base, one boss.”

The 21st Space Wing

1992-2017

The 21st Space Wing (21 SW) activated on 15 May 1992 under the banner of Air Force Space Command. The wing received the numerical designation “21st” for a definite reason. Under the aegis of the Department of the Air Force “White Paper” of September 1991, Air Staff directed the merger of wings at selected multi-wing bases in order to streamline and create one wing whose commander had control of both operational and support functions; in other words, “one base, one boss.” The 1st Space Wing and the 3rd Space Support Wing had been stationed at Peterson Air Force Base since, respectively, 1983 and 1986. If the equipment and personnel of these wings were to be consolidated, a new numerical designation would have to result. Air Staff, as a consequence of its policy to preserve the lineage and honors of distinguished flying units, chose the numerical designation “21st” to represent the new space wing.



Colorado Springs. Home of Headquarters 21st Space Wing

The 21st Space Wing carried out the primary mission of “missile warning” from 15 May 1992. The Defense Satellite Program (DSP), a constellation of geosynchronous satellites equipped with infrared detectors to help locate and identify ballistic missile and nuclear testing activities around the world, was central to this mission. The wing operated DSP sites through the 5th Space Warning Squadron (5 SWS) located at Woomera Air Station (AS), Australia, and through the 2 SWS located at Buckley Air National Guard (ANG) Base in Denver, Colorado. The 4 SWS operated mobile satellite communications known as the Mobile Ground Station (MGS) at Holloman Air Force Base (AFB), New Mexico. The 4th transferred its mission to the Colorado Air National Guard at Greeley, Colorado in 1997. The 11 SWS activated on 1 October 1994 at Schriever AFB, Colorado (then Falcon AFB) to operate the Attack and Launch Early Reporting to Theater (ALERT) system which aimed at enhancing the missile warning mission while deployed in-theater.



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



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

Upon activation on 15 May 1992, the 21st inherited the three Ballistic Missile Early Warning System (BMEWS) radars which were operated by the 13th Space Warning Squadron at Clear AFS, Alaska, by the 12th Space Warning Squadron at Thule AB, Greenland, and by the Royal Air Force (RAF) at Fylingdales, England (owned and operated by the RAF, but with an American Air Force liaison officer). Since these sites had provided missile warning since the 1960s, the Air Force planned to upgrade them to the more capable Solid State Phased Array Radar (SSPAR) system. While the first upgrade already had occurred at Thule in 1987, the 21st Space Wing itself carried out the other two transitions at RAF Fylingdales in 1992, and at Clear AFS in 2001.

The 21 SW also inherited two other systems that assisted in the mission of missile warning: the Phased Array Warning System (PAVE PAWS) radars and the AN/FPQ-16 Perimeter Acquisition Radar Characterization System (PARCS). The PAVE PAWS system had replaced an earlier ballistic missile warning network in the 1980s at Cape Cod AFS, Massachusetts, Beale AFB, California, Eldorado Air Station (AS), Texas, and Robins AFB, Georgia. These sites were operated by, respectively, the 6th, 7th, 8th, and 9th Space Warning Squadrons (SWS).

The PARCS system, situated at Cavalier AFS, North Dakota and operated by the 10th Space Warning Squadron, served as part of the Sea Launched Ballistic Missile warning network covering the central Arctic region. Due to budgetary considerations and a reduction of threats due to the wind-down of the Cold War, however, the squadrons associated with the radars at Robins (9 SWS) and Eldorado (8 SWS) inactivated in July 1995.



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

If missile warning had remained the only primary mission, the 21 SW still would have been one of the largest wings in the Air Force. However, in April 1995, the 721st Space Group (afterward renamed the 721st Support Group and again as the 721st Mission Support Group in 2002) and the 73rd Space Group merged with the 21st Space Wing. The 73rd brought a second primary mission to the wing, that of “space control.” From this point until 1998 after which the 21 SW slipped to second place, the wing remained the largest in the Air Force, peaking at forty-five squadrons. The 21st had units stationed literally throughout the world.

Several systems were associated with the space control mission. The AN/FPS-79 radar operated at Pirinlik AS, Turkey from 1962 until the wing's closure of the air station in 1999. The AN/FPS-79, operated by the 19th Space Surveillance Squadron (19 SPSS), and the earlier legacy system that had served at Pirinlik since 1955 had observed numerous missile test and space launch activities, including Sputnik, Vostok, and the events surrounding OPERATION DESERT STORM. On the other side of the Atlantic, the AN/FPS-85 system operated by the 20 SPSS at Eglin AFB, Florida had been the Air Force's first electronically steered radar and had been assigned to space surveillance since 1988.



**19th Space Surveillance Squadron
Pirinlik Air Force Station, Turkey
Unit inactivated in 1999**

The 21st also inherited the Ground-Based Electro-Optical Deep Space Surveillance System (GEODSS) sites at Socorro, New Mexico, Diego Garcia, British Indian Ocean Territory, and Maui, Hawaii. These sites were operated, respectively, by Detachments 1, 2, and 3. New advanced electro-optical telescopic cameras replaced the older Baker-Nunn cameras in the arena of space tracking, and allowed deep-space surveillance and space-object identification.

Further augmentation of the space surveillance network led to the installation of the Transportable Optical System (TOS) operated by Detachment 4 at Moron AB, Spain. This system attained full operating capability in September 1998 and from April 1999 became known as the Moron Optical Surveillance System (MOSS). Two systems would eventually reinforce MOSS at Moron; the El Raven telescope in November 2005, and the RO4 high-volume superior resolution camera in June 2006.



The 5th Space Surveillance Squadron, RAF Feltwell, United Kingdom inactivated in January 2002



Two passive radar systems, the Deep Space Tracking System (DSTS) and Low Altitude Space Surveillance System (LASS) provided additional global coverage as part of the space control mission. Antennas operated by the 3 SPSS at Misawa AB, Japan and by the 5 SPSS at RAF Feltwell, England, were associated with DSTS. Antennas operated by the 4 SPSS at Lackland AFB, by Detachment 1 at Osan AB, Republic of Korea, by the 1 SPSS at Griffiss AFB, New York, and by the 17 SPSS at RAF Edzell, Scotland, were associated with LASS. Due to increased capabilities and coverage in other systems, however, planners determined that the passive side of the mission was no longer critical. Consequently, the squadrons associated with Griffiss and Edzell inactivated, respectively, in 1995 and 1996, as did Det 1 in 1997. Finally, in January 2002, the 5 SPSS inactivated at RAF Feltwell, followed by the 3 SPSS at Misawa AB in February 2002. Collectively, these actions shut down the last of the old passive radar systems.

Several units participated in command and control (CAC) and supported both primary missions. The wing relayed missile warning and space surveillance information from sites dispersed throughout the world via the 721st Mobile Command and Control Squadron which operated the Mobile Command and Control Center. The 1 CACS, based at Cheyenne Mountain AFS, Colorado, tasked the worldwide space surveillance network and maintained the space catalog. The 2 CACS, operating out of Schriever AFB, supported the passive space surveillance network. The 3 CACS, based at Omaha, Nebraska served as the alternate missile warning center. Each of these would inactivate or realign over the next years.

The 721st inactivated in 1998, but activated again with a new designation in support of United States Strategic Command. The 2 CACS transferred to 14th Air Force in 1998, after the passive space surveillance units began drawing down. Thanks to a new capability, "missile warning remoting," the Cheyenne Mountain Operations Center was able to monitor the primary and alternate nodes for processing and correlating missile warning data, thereby eliminating the need for a fully manned alternate warning center. As a consequence, the 3 CACS inactivated in 1999. Finally, the 1 CACS realigned under the Air and Space Operations Center in June 2008.

The 21st continued to add and subtract units organizationally during the last half of the 1990s. The 821st Space Group (SG) activated at Buckley ANGB in 1996 to assist the 21st Operations Group which had acquired an enormous number of units and weapons systems. Specifically, the 821 SG took over the DSP component of the mission. Gradually, DSP would consolidate at Buckley and transition into a follow-on capability known as the Space-Based Infra-Red System (SBIRS). As a result, the 5th Space Warning Squadron, which had drawing down since 1997, inactivated at Woomera, Australia in 1999. A further reduction occurred for the 21 OG when the 84th Airlift Flight transferred to Air Mobility Command in 1997. This transfer ended the wing's long association with flying which stretched, through its heritage units, back to 1942.



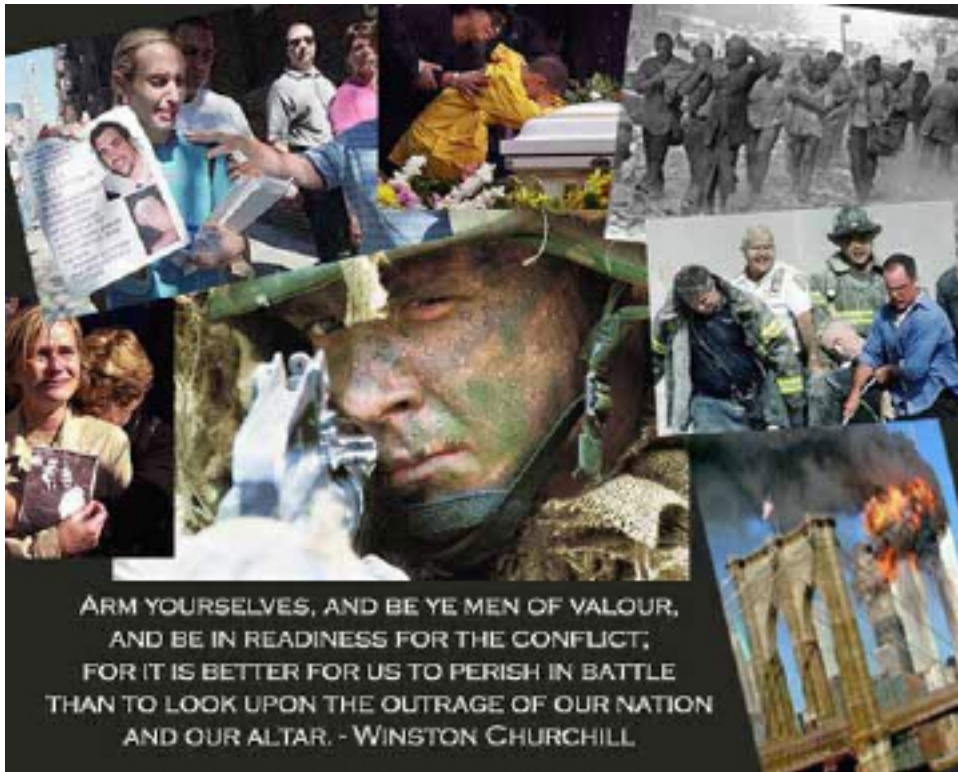
Brig Gen Gerald F. Perryman was wing commander from January 1995 to June 1996 and went on to command 14th Air Force. The wing's size at this time peaked at 45 squadrons, making it one of the largest in the Air Force as well as the most geographically dispersed across the world.

Lastly, in order to realize planned administrative and financial efficiencies, the 21st Medical Group inactivated and was reassigned to the USAF Academy as the 10th Medical Group in 1998. In retrospect, the 1990s were the heroic days of wing organization and reorganization. During this period, the 21st had become the world's premier military space unit in terms of size, proficiency, and number of weapons systems. Nevertheless, a high tempo of reorganization would continue through 2005.

The turn of the millennium in 2000 heralded new changes and challenges, but the potential computer Armageddon known as "Y2K" turned out to be a non-event and there were no adverse operational impacts to the wing. Another catastrophic event, however, did hit the United States. The events of 11 September 2001 (9/11) 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 2003. In response, the wing deployed personnel overseas and tightened security at geographically separated units and at Peterson AFB throughout these tumultuous times. For the first time in the history of the facility, Cheyenne Mountain temporarily closed its blast doors in reaction to the events of 9/11.



Brig Gen Jerry M. Drennan(wing commander from June 1998 to August 2000) and the mascot, Iron Mike.



The tragedy of 11 September 2001(9/11) only served to unite Americans across the land.



And as the dust settled...the wing deployed personnel overseas to combat terrorism.

The new millennium saw the reorganization of several squadrons within the wing's two operational groups, the 21 OG and the 821st Space Group (821 SG). In May 2001, the 11th Space Warning Squadron was reassigned from the 821 OG to the 21 OG, and inactivated in September, 2002.

The 821 SG itself inactivated along with three component squadrons in October 2001 at Buckley AFB, situated in Denver, Colorado. Elements of the group transitioned into the newly activated 460th Air Base Wing (460 ABW) which was directly assigned to Air Force Space Command. Buckley already had redesignated from a Colorado Air National Guard Base to an Air Force Base in October 2000. Both of these actions had been taken in order to begin addressing the needs of the enormous active-duty, Guard, Reserve, retiree and dependent population in the Denver area. The 460 ABW, therefore, was able to relieve the 21 SW of host base responsibility for the Buckley installation. This also set the stage for transitioning DSP to the 460th which would be responsible for the future development of the follow-on technology to DSP known as the Space Based Infrared System (SBIRS).

A component of the 21 SW, the 2 SWS, had been handling the transition from DSP to SBIRS. The 2 SWS managed to attain SBIRS Increment 1 "initial operating capability" in December 2001. Then, in August 2004, the 2 SWS transferred to the 460 ABW, thereby ending the 21st Space Wing's association with the DSP portion of missile warning.

The wing had lost a system but began adding a new dimension to another, space control. Due to a proliferation of international space assets and to an expanding quantity of space debris, the 21st began evolving into a new arena of the "space control" mission often referred to as "counterspace." The purpose was to guard against possible hostile action on the one hand and inadvertent and destructive contact with space debris on the other.



Airman First Class Pamela Cavit at a West Gate defensive point after 9/11.

To this end, the 76th Space Operations Squadron activated in 2000 at Peterson AFB and was redesignated as the 76th Space Control Squadron (76 SPCS) in January 2001. Symbolizing a new paradigm and emphasis, all space surveillance squadrons were redesignated as space control squadrons on 1 March 2003. The 76 SPCS achieved initial operating capability on its Counter Communications System in September 2004.

According to its mission statement, the 76 SPCS was "responsible for operating offensive and defensive space control capabilities to rapidly achieve flexible and versatile space superiority in support of theater campaigns as well as participate in the evaluation and operation of counterspace technologies to meet combatant commander requirements."

The 4th Space Control Squadron began transitioning into this new and evolving mission in July 2005, and activated its first counter - communications system in April 2006. In July 2014, the 4 SPCS relocated from Holloman AFB, New Mexico to Peterson AFB. Then, in February 2015 the 4 SPCS and the 76 SPCS consolidated into one squadron bearing the designation 4 SPCS. The 16th Space Control Squadron also entered the arena when it activated in May 2007 at Peterson AFB. The stance of the 16 SPCS was “defensive.”

The mission of space control continued to grow in the last decade of the wing’s history in another way. Central to space control was the concept of “space situational awareness” (SSA) which involved an arena of activities ranging from routine space-tracking to space object identification to event processing to orbital safety. The four detachments of the 21st Operations Group worked with the 20 SPCS at Eglin, Detachment 1 of the 20 SPCS at Dahlgren, and the Globus II site at Vardo, Norway to contribute to the space situational awareness component of space control.

The 821st Air Base Group activated at Thule AB, Greenland in June 2002 to manage the support functions which the 12 SWS had been undertaking in addition to its operational mission. Then, on 1 October 2002, the wing transitioned to the new organizational concept called the “Standard Combat Wing.” As a result, the 21st Support Group and 721st Support Group were redesignated as “mission support groups” and several support-related squadrons realigned accordingly. On that same day, 21st Maintenance Group activated in order to professionally align and organize maintenance personnel under one commander for greater efficiency. Similarly, a new 21st Logistics Readiness Squadron activated which consolidated wing logistics personnel.

After a six-year hiatus at the U.S. Air Force Academy, the 10th Medical Group was redesignated as the 21st Medical Group (21 MDG) and came under wing management in October 2003. Expansion occurred in October 2004 when the Area Dental Lab realigned from the 10th Medical Group to the 21 MDG. Next, the 21st Dental Squadron activated in July 2005 and the 21st Medical Squadron activated at Schriever AFB in June 2012, both squadrons being assigned to the 21st Medical Group at Peterson AFB.



**20th Space Surveillance Squadron
(now 20th Space Control Squadron)
Eglin AFB, Florida
AN/FPS-85**

In February 2004, the 721st Civil Engineer Squadron inactivated and became a division until its activation again as a squadron, in June 2012. The 18 SPCS inactivated in July, as part of an Air Force “Balance the Books” manpower reduction. Component Detachments 1-4 realigned to the 21st Operations Group. Then, in August 2004, Det 1, 20 SPCS activated in order to operate the Navy Space System and the Alternate Space Control Center.



On 1 February, 2003 the Columbia space shuttle mysteriously disintegrated and fell to the earth. That same day, wing commander Brig Gen Duane W. Deal (right) was selected as a key part of the Columbia Accident Investigative Board. Departing for Barksdale AFB the next day, General Deal soon transferred to the Johnson Space Center in Houston, Texas, until he returned to full-time command of the wing on 28 August . General Deal commanded the wing from May 2002 to March 2004.

Overall, the wing experienced the fewest organizational changes in its history from 2005 to 2015. Thanks to the Global War on Terror (GWOT) and other concerns, budgetary matters and “right-sizing the force” became more important with each passing year. At mid-decade of the new millennium the wing operated 16 weapon systems and managed 42 units at 27 locations and six independent installations across nine time zones and five countries.

Program Budget Decision 720 directed Air Force components to find ways to accomplish the assigned mission with reduced resources. As a result, the 21st Maintenance Group inactivated at Peterson AFB, Colorado in May, 2008. The 21st Communications Squadron transferred to the 21st Mission Support Group while other former assets were integrated into the 21st Operations Group and Director of Staff.

Two squadrons of the 21st Mission Support Group underwent changes in 2008. The 21st Mission Support Squadron (21 MSS) was re-designated as the 21st Force Support Squadron (21 FSS) on 15 July 2008. Simultaneously, the 21st Services Squadron (21 SVS), inactivated on 15 July 2008 and merged into the 21 FSS. These two actions were the result of an Air Force-wide initiative to consolidate customer service functions into one unit.

Security also became increasingly important. The commitment to security led to the Defense Biometric Identification System (DBIDS) which altered the way everyone entered PAFB. Begun in March 2009, DBIDS attained full implementation in January 2010. Between 2009 and 2013, concern for cyberspace issues also increased and led to specific training and briefings as well as to periodic Cyber Awareness Days.

While the pace of organizational change remained lower than in the earlier years, a few changes still took place. Detachment 1, 20 SPCS inactivated in April 2010 at Dahlgren, Virginia. Detachment 4, 21 OG inactivated at Moron AB, Spain in March 2013. The telescope system had become increasingly more expensive to operate and other space surveillance assets could prevent any loss of coverage. The Spanish flag was taken down.



**721st Mission Support Group,
Cheyenne Mountain Air Force Station**

In April 2013, the wing's 13th Space Warning Squadron at Clear AFS, Alaska began oversight, through Operating Location CD, of the Cobra Dane radar situated at the western end of the Aleutian Islands at Shemya. The Cobra Dane Upgrade Program had begun in 2004 in order to carry out the critical missile defense mission and would be aided in this by the 7th SWS at Beale, AFB, the 12th SWS at Thule AB, and RAF Fylingdales. These sites would detect and categorize, provide real-time track data and automatically disseminate information to designated users to protect America and its allies. These would work in conjunction with the 6th SWS at Cape Cod, the 10th SWS at Cavalier and the 13th at Clear to carry out the overall missile warning mission.

Base development had always been a priority for the wing given the number of units assigned, its large host base and retiree population, and the need to keep an eye toward expansion for the future. The "Peterson AFB Area Development Plans" document divided the base into sections based on current mission or function. Evolving plans referred to as "Blueprint 2025" and "Blueprint 2050" had an end-goal in mind; namely what the base could look like in 2025 and 2050 and even envisioned the eventual acquisition of additional land adjacent to the base itself.

Increasing budget cuts, however, faced by the wing during each subsequent fiscal cycle, delayed many projects and made several of them problematical on a case-to-case basis. Nevertheless, two significant projects were completed in 2007 -- the Base Exchange in June, and the Commissary in August. The new 76 SPCS building opened in April 2010. One project, the Tierra Vista Communities housing privatization initiative, began in April 2008 and came to fruition with the completion of the community center in January 2013.

Budget cuts affected the wing in other ways besides construction. The Department of Defense mandated a 30 percent reduction in energy consumption at all bases and installations between the years 2007 and 2015 and the wing as "host base" to Peterson AFB postured to comply. One consequence begun in June 2012 was the Thule AB consolidation plan to reduce overall square footage of buildings and save 30 percent of utility consumption, improve housing and quality of life issues, and consolidate similar functions.

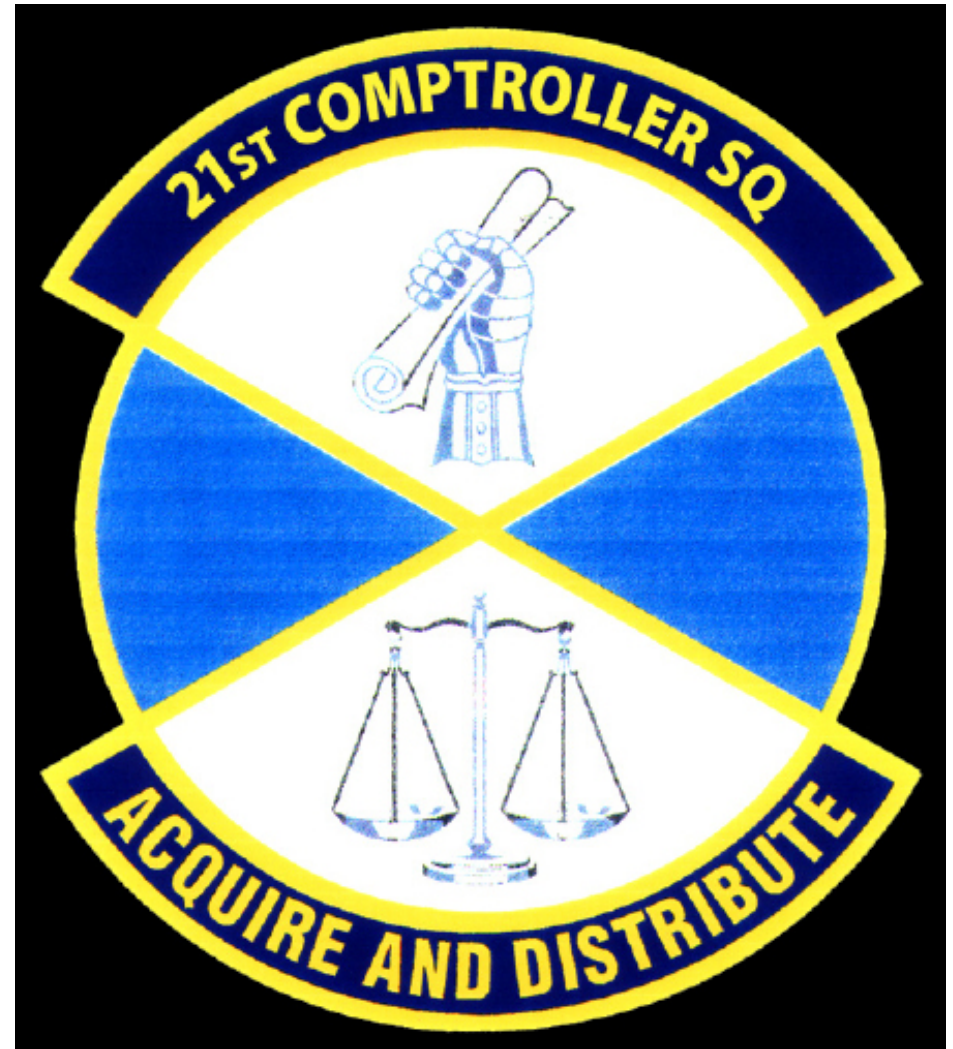


An NCO of the 21SFS takes action near the West Gate of Peterson AFB.



Detachment 4, Moron AB, Spain inactivated in March 2013. Detachment 4 had served the wing in Spain since 1997. This commemorative coin was struck just before closure.

Numerous additions to the Director of Staff (DS) occurred between 2005 and 2012. The Anti-Terrorism and Force Protection (ATFP) function realigned under the wing staff in January 2005, and in June 2005 the Sexual Assault Prevention and Response Program (SARC) activated. In November 2007, the Peterson Installation Control Center (PICC) achieved IOC. Three more changes took place in 2008. First, the Military Equal Opportunity and Equal Employment Opportunity offices merged to create the Equal Opportunity (EO) function in January. Second, the Program Management Division (PMD) came to the DS as a result of the inactivation of the 21 MXG in May. Third, the Information Protection (IP) function was established in December. An additional function, the AFSO21 office, activated in August 2007 but was placed directly under the vice commander. Then, in October 2012, the DS realigned into a new Air Force-wide structure known as the Wing Staff Agencies (WSA). The following month, the last agency was added, Installation Resiliency Operations (CVB). A total of eighteen agencies and the 21st Comptroller Squadron were under the WSA in 2015.



Three ceremonies in 2012 and 2013 caused the wing to pause and take stock of its challenges and successes over the previous twenty years. Wing commander Col Chris Crawford (commander 28 June 2011-26 July 2013) hosted all three events. The first ceremony commemorated the 20th anniversary of the 21st Space Wing and was held at the Aragon Dining Facility, Peterson Air Force Base on 15 May 2012, exactly twenty years to the day. Lunch and cake followed a speech extolling the past achievements of the wing.

The second of these, the “Historical Leadership Board Dedication,” took place on 10 August 2012. This event consisted of a second floor hallway ceremony held inside the wing headquarters building followed by a dedication luncheon at the Club, Peterson Air Force Base. The first Board consisted of 8x10 photos of all past commanders and senior enlisted advisors of the 21st Space Wing from 1992, while the second Board displayed all past commanders of the 1st Space Wing and 3rd Space Support Wing, the wings that had provided the personnel and equipment for the 21st. In addition to current wing personnel, all past commanders and senior enlisted advisors in the photos, who could be contacted, were invited to attend.



**7th Space Warning Squadron,
Beale Air Force Base, California**

The third event entailed the “21st Anniversary of the 21st” held the second week of May 2013. Colonel Crawford and designated staff unveiled the anniversary plaque on 14 May in front of wing headquarters, Building 845, then finished the week’s activities with a dinner at the Club on 17 May. General C. Robert Kehler, Commander, United States Strategic Command and former wing commander of the 21st Space Wing from 28 August 2000 to 15 May 2002, was guest Speaker. After talking about his positive experiences commanding the wing during the events of 9/11, General Kehler closed with words that were the stuff of prose and poetry:

“ There is a long heritage associated with all of you and what you do. I couldn’t be prouder to have served with you. I couldn’t be prouder to be counted among the members of the 21st Space Wing. I couldn’t be prouder of the jobs that you do for our country today.”



The eternal warrior - the wing mascot - Iron Mike. Iron Mike joined fellow 21st Space Wing wingmen to do battle during an exercise in 2011.

Col John E. Shaw, assumed command on 26 July 2013, replacing Colonel Crawford. A series of natural disasters hit the wing from 2012-2013. The Waldo Canyon fire of 2012 and the Black Forest fire of 2013 had occurred during Colonel Crawford's command, but the Cheyenne Mountain Mudslide of 2013 occurred during Colonel Shaw's tenure. These disasters helped hone the wing's cooperation with the emergency response forces of the City of Colorado Springs, Fort Carson and El Paso County, Colorado. The 21st had practiced with the city and county many times in the arena of emergency response in previous years during local Condor Crest exercises. However, these natural disasters brought real meaning to the word "partnership."

Two disasters were up close and human. Airman First Class (A1C) Matthew R. Seidler, 21st Civil Engineer Squadron, Explosive Ordnance Disposal Flight (EOD), was killed in Afghanistan on 5 January 2012. On 5 January 2014, the two-year anniversary of his death, a memorial stone was dedicated to A1C Seidler, and a small park on Peterson AFB was named for him. Colonel Shaw ordered El Dorado Street on Peterson to be renamed Seidler Street. Fittingly, the EOD had been scheduled to relocate to that exact street in the future. Fellow EOD partner A1C Terry Smith spoke of his friend shortly after his death. "We would talk to each other about how proud we were to be part of such a close-knit, small community. The look in his eyes, you could tell it was a big deal for him."

Captain David Lyon, member of the wing's 21st Logistics Readiness Squadron, was killed on 27 December 2013 in Afghanistan. An "Academy Grad," Captain Lyon was interred at the United States Air Force Academy on 8 January 2014. Exactly six months after his death, on 27 June 2014, Eagle Park on Peterson AFB was renamed as the Captain David Lyon Memorial Park. Colonel Brian Petit, who served in Army Special Forces with Captain Lyon training their Afghan counterparts, said the following about his Air Force colleague: "If someone who is joining the Air Force wants a role-model, this is the man. He was intelligent, physically fit, morally straight, compassionate, and tough as nails."

Colonel Shaw accepted many awards on behalf of the wing during his tenure, including the prestigious General Robert T. Herres Award for Best Space Wing in 2013 and the General Thomas S. Moorman, Jr. Award for Air Force Space Command's Best Operational Wing for 1 January through 31 December 2013. Another award, however, was even more important because it counted as a "Decoration" and therefore conferred points towards the wing's overall Air Force

ranking. This was the Air Force Outstanding Unit Award for the time period 1 October 2012 to 30 September 2014, Colonel Shaw was promoted to Brigadier General on 5 June 2015, exactly one week prior to relinquishing the 21 SW guidon.



Colonel Schiess assumed command of the 21st Space Wing on 12 June 2015.

The new wing commander, Col Douglas A. Schiess, assumed command on 12 June 2015. Colonel Schiess's opening speech at the ceremony credited the words of President John Quincy Adams: "if your actions can inspire others to dream more, to learn more, to do more, to become more, then you are a leader." He ended the speech exhorting every wing member to "dream more, to learn more, to do more, and become more."

His first commander's call was down to earth, filled with humor and modesty, and his wife, Debbie, also spoke with a view of supporting the families on Peterson AFB. A rapport of bonhomie was established from the start. Colonel Schiess stressed the similarities he shared with the previous wing commander but confirmed that he would "put my own spin on." He stressed the need for "professionalism" and to establish yourself as a role model for junior

personnel, and that core integrity meant being honest even when no one was watching. He then introduced the Command Chief, Idalia Peele, who emphasized service before self, teamwork, sense of community, and going the extra mile. Colonel Schiess closed the call stressing the importance of mission accomplishment, followed by taking care of each other.

His strategic plan of 25 November 2015 defined the mission as being able to “execute global capabilities to defend the homeland and secure space for our nation and allies.” His vision targeted “unrivaled space superiority – driving excellence and innovation today and tomorrow.” His priorities aimed to “win today’s fight, posture for tomorrow’s fight, take care of our people, strengthen partnerships (service, joint, allied and community), pursue innovation and effective stewardship of resources, and to promote a culture of dignity and respect for all.”

Three local emergencies hit the wing during Colonel Schiess’s tenure. The first was the crash of a USAF Thunderbird F-16C Fighting Falcon on 2 June 2016. The aircraft had been heading toward Peterson AFB after performing acrobatics at the Air Force Academy. Once again,



Building 845, Peterson AFB, headquarters of the 21st Space Wing in 2013.



Col Douglas A. Schiess, Commander, 21st Space Wing, outlines the way ahead at his first commander’s call.

the wing partnered with the emergency response teams of the local community to secure the situation. No personnel were harmed.

The second was the massive hailstorm of 28 July 2016. Never in 25 years had the base suffered such damage which included 90% of the governmental vehicle fleet, 100% of the museum static displays, 100% of the base Aero Club aircraft and vehicles, and everything from rooves, windows, the siding of base housing and buildings, signs, lawns, trees, to the golf course. Two personnel were injured.

The third was the death of Staff Sergeant Austin L. Bieren on 28 March 2017 while serving in Operation Inherent Resolve in northern Syria. Colonel Schiess described the 25-year old wing member as “a valuable and beloved member of our team. His dedication to his country was evident in his actions – he was a superb Airman.”

The wing continued to move forward in both operations and organization. Developments towards a new “Space Fence” and “Long-Range Discrimination Radar continued even as the C-Band Radar began operations in Australia. Upgrades in the space control and missile warning missions continued. Organizationally, Detachment 4 activated on 8 December 2015 under the 21st Operations Group while Detachments 1, 2 and 3, which comprised the GEODSS mission, transferred from the operations group and realigned under the 20th Space Surveillance Squadron on 20 April 2016. Then, on 22 July 2016, the 18th Space Control Squadron activated at Vandenberg AFB, California, an action needed to increase awareness in space.



During the 1990s, the North Gate at Peterson AFB saw the most traffic. By the 2000s, the volume of traffic had shifted to the East Gate and to the newer West Gate.

To Our Veterans

In April 2017 the wing comprised 36 units consisting of five groups, 27 squadrons and three provisional squadrons. These were arrayed across the globe from the United States to the United Kingdom to Australia, to Denmark to Greenland. Theoretically, the provisional units could be activated to any location in the world.

Looking back, our lineage and honors began in 1942 with two flying groups that served in the Second World War as well as with four flying wings that subsequently defended the forces of freedom from 1953 to 1991. Each had in common the numerical designation “21st” and are, by virtue of bestowed military honors, Team 21.

During these first 50 years we were the first to fly over the Polar icecap, the first to fly around its perimeter, and the first wing to have one of its former members, Michael Collins, circumnavigate the moon during the Apollo 11 lunar landing in 1969. Then, as now, Team 21 dominated the high ground.

Today, in our 25th year of being in space, the 21st Space Wing is authorized to display two campaign streamers for World War Two: “Antisubmarine, American Theater,” and “Air Offensive, Japan.” The wing is also authorized to wear the Distinguished Unit Citation: “Japan, 7 April 1945.” In aggregate, we won approximately 25 Air Force Outstanding Unit Awards or that award’s equivalent. More will follow in the future.

Experience and endeavor in space - the final frontier – has combined to produce the world’s premier military space wing. Whether flying top cover or searching the heavens while engaged in missile warning or space control, the 21st Space Wing and its legacy units have always positioned themselves for defining excellence today and tomorrow.

Dr. David Bullock
Chief, Office of History
21st Space Wing

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).

Appendix B

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 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 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
SSgt Barton Bosarge, wing mascot, arrives at
Vandenberg AFB, California on 6 May 2001
for Guardian Challenge



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

21st Composite Wing

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 - 11 Mar 04
Brigadier General Richard E. Webber	11 Mar 04 - 10 Nov 05
Colonel Jay G. Santee	10 Nov 05 - 28 Jun 07
Brigadier General John W. Raymond	28 Jun 07 - 20 Aug 09
Colonel Stephen N. Whiting	20 Aug 09 - 28 Jun 11
Colonel Chris D. Crawford	28 Jun 11 to 26 Jul 13
Colonel John Shaw	26 Jul 13 - 12 Jun 15
Colonel Douglas A. Schiess	12 Jun 15 - 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 43

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

21st Bombardment Group

Campaign Streamer	
Antisubmarine, American Theater	7 Dec 41 - 2 Sep 45

21st Fighter Group

Campaign Streamer	
Air Offensive, Japan	17 Apr 42 - 2 Sep 45
Decorations	
Distinguished Unit Citation, Japan	7 Apr 45
21st Fighter-Bomber Wing	None
21st Tactical Fighter Wing	None

21st Composite Wing 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

21st Tactical Fighter Wing 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

21st Space Wing 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
Air Force Outstanding Unit Award	1 Jan 99 – 31 Dec 99
Air Force Outstanding Unit Award	1 Jan 00 – 31 Aug 01
Air Force Outstanding Unit Award	1 Oct 05 – 30 Sep 07
Air Force Outstanding Unit Award	1 Oct 09 – 30 Sep 11
Air Force Outstanding Unit Award	1 Oct 11 – 30 Sep 12
Air Force Outstanding Unit Award	1 Oct 12 – 30 Sep 14

Appendix F 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 3rd 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 Edward J. Peterson Museum

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.



Main Gate, Peterson Field, 1942

The 21st Space Wing: “First in Space, First to the Moon”



Lt Col Michael Collins,
Module Pilot of the Apollo 11
Moon Mission in 1969



1Lt Michael Collins,
21st Fighter Bomber Wing,
in 1955

First Lieutenant Michael Collins, 21st Fighter-Bomber
Wing, 1955 (bottom row, third from the right).
Collins later signed the wing yearbook and noted his
Gemini 10 and Apollo 11 Missions



Michael Collins was born in 1930 and received his Air Force commission in 1952. After serving with the 21st Fighter Bomber Wing at George Air Force Base, California, he relocated with the wing to Chambley Air Base, France in 1954. Collins joined NASA from 1963 – 1970, taking part in the Gemini 10 mission in 1966 and in the Apollo 11 landing on the moon from 16-24 July 1969. Although a part of the first team of humans to land on the moon, Lieutenant Colonel Collins remained in the command module *Columbia* as command pilot, while Neil Armstrong and Buzz Aldrin physically landed in the lunar module, *Eagle*. He retired from the Air Force in 1978 with the rank of major general.

*The 21st has had at least two officers with the last name “Collins.” Colonel Frank J. Collins commanded the 21st Tactical Fighter Wing at Misawa Air Base, Japan in 1958.

