



Number	Subject	Blurb
1	DAF Memorial	The United States Air Force Memorial, located on Fort Meyer, Virginia, was dedicated in 2006. Its three memorial spires evoke contrails of jet aircraft peeling back from one another demonstrating the skills and aspirations of Airmen throughout the force's long history, as well as a "missing man" in recognition of fallen service members.
2	Ground Based Strategic Deterrence LGM-35A Sentinel	The U.S. Air Force LGM-35A Sentinel weapon system, formerly known as the Ground Based Strategic Deterrent (GBSD), is a critical modernization of the ground-based leg of the strategic nuclear triad, the bedrock of U.S. national security. The Sentinel boasts a modular open-system design that reduces operational and sustainment costs and offers enormous flexibility to maintain relevance as the threat landscape evolves.
3	B-21 Raider	The B-21 <i>Raider</i> was developed to be the United States Air Force's next-generation stealth bomber. Similar in appearance to the B-2 <i>Spirit</i> , the B-21 produced less noise, was harder to detect, and easier maintain than it's older sibling. The bomber was named after the Doolittle Raiders, a group of 80 crew members led by Lieutenant Colonel James "Jimmy" Doolittle, who flew 16 B-25 Mitchell bombers from the USS Hornet April 18, 1942, en route to an air raid to attack Tokyo in World War II, after the Japanese had bombed Pearl Harbor Dec. 7, 1941.
4	Notional Next Generation Air Dominance Prototype (Crewed/Uncrewed)	Next Generation Air Dominance (NGAD) platforms are a vital element of the Air Dominance Family. The NGAD Platform is one of many critical combat capabilities that will enable counter-air missions with the ability to strike both airborne and ground-based threats to achieve air superiority and support the Joint Force. Future NGAD platforms will have enhanced lethality and the ability to survive, persist, interoperate, and adapt in the air domain, all within highly contested operational environments. They may include crewed and uncrewed variations.
5	Thunderbirds Demonstration Team	Created in 1953, the United States Air Force Air Demonstration Squadron, also known as the Thunderbirds, provided audiences throughout the world with demonstrations of fighter aircraft capability and Airmen excellence. The Thunderbirds squadron consist of eight pilots, four support officers, three civilians, and more than 130 enlisted personnel.
6	Joint Strike Fighter F-35	The F-35 <i>Lightning II</i> , also known as the Joint Strike Fighter, serves as an air superiority fighter and an aircraft capable of strike missions. It entered service in 2006 and continues to function as the mainstay of aerial power projection.

7	F-22 Raptor	The F-22 <i>Raptor</i> , a single-seat, twin-engine, all-weather, tactical stealth fighter aircraft, entered service with the United States Air Force in 2005. Although designed to be an air superiority fighter aircraft, the F-22 is capable of providing ground attack, electronic warfare, and signals intelligence capabilities.
8	KC-135 Refueling F-15s - Strategic Air Bridge	The KC-135 Stratotanker has provided the United States Air Force with the ability to maintain a Strategic Air Bridge. Essentially a flying gas station, the KC-135 increased the reach of United States military aircraft.
9	RC-135 Rivet Joint	Based on the C-135 <i>Stratolifter</i> airframe, the many variants of the RC-135 provided near real-time on-scene collection, analysis, and dissemination capabilities to the United States and allied nations.
10	U-2 Dragon Lady	Entering service in 1956, the U-2 <i>Dragon Lady</i> is a high-altitude reconnaissance aircraft that provided strategic intelligence photographs. The U-2 typically has flown at an altitude of 70,000 feet in order to avoid enemy air defenses.
11	Gen Carl Spaatz	General Carl A. Spaatz was an early American military aviation pioneer, combat leader, World War I and World War II veteran, and first Chief of Staff of the USAF (1947-1948). From the Question Mark tests of aerial refueling (1929), through the massive bombardment campaigns of World War II, to establishing the original organizational structure for the new Air Force, this leader pushed innovative change.
12	SR-71 Blackbird	The SR-71 <i>Blackbird</i> was a long-range, high-altitude, strategic reconnaissance aircraft that flew more than three times the speed of sound. The aircraft typically flew at such high altitudes that the aircrew members had to wear special pressurized suits.
13	W. Stuart Symington	William Stuart Symington III was a businessman, politician, defense official, and served as the first Secretary of the Air Force from 1947 to 1950. Secretary Symington helped navigate a course for the newly established Air Force, guided the service through its first major test during the Berlin Airlift (1948-49), and laid organizational foundations by promoting the United States Air Force Academy.
14	Hazel Ying Lee	Hazel Ying Lee, known for her endearing attitude, became one of the first Chinese-American female pilots to join the Women Airforce Service Pilots (WASPs) in 1942. Lee, although senior to most female pilots, would not see her 33rd birthday. She became the 38th and final WASP to die in the line of duty when her aircraft and another crashed during landing, on the tail end of a ferrying mission.
15	Bessie Coleman	Bessie Coleman paved the way across the sky, becoming the first African-American and Native American to earn a pilot's license. She received her international pilot's license in France, 15 June 1921, before returning to the United States to perform masterful, daring aerial stunts in 1922.
16	Billy Mitchell	During World War I, William "Billy" Mitchell planned and led nearly 1,500 allied aircraft during the Battle of Saint-Mihiel. After the war, Mitchell was one of the most vocal proponents of airpower and the need for an independent air force.
17	Eddie Rickenbacker	A racecar driver before the outbreak of World War I, Edward "Eddie" Rickenbacker started the war driving officers around and ended the war with 26 confirmed victories. Rickenbacker earned a number of awards and forms of recognition including the Medal of Honor and the Croix de Guerre.
18	Eugene Jacques Bullard	Eugene Bullard, born in Columbus, Georgia, was one of the world's first black aviators. During World War I, Bullard enlisted in the French Foreign Legion before joining the Aéronautique Militaire in 1916. Although flying for the French, he is credited as the only African-American pilot in World War I.
19	Lt Gen Elwood Quesada	Lieutenant General Elwood "Pete" Quesada was a Hispanic American aviation pioneer and innovator. He helped establish the possibility of aerial refueling in the Question Mark tests, commanded the Ninth Fighter Command on D-Day and during the Battle of the Bulge in World War II, and developed the early parameters of the Air Force Reserve before retiring in 1951.
20	LGM-118 Peacekeeper Reentry Vehicles	The Peacekeeper served as the U.S. Air Force's most powerful, accurate, and technologically advanced Intercontinental Ballistic Missile (ICBM) deterrent from 1986 to 2005. When combined with new Multiple Independently Targeted Re-entry Vehicles (MIRV) technology, one Peacekeeper could accurately deliver a number of nuclear warheads on different targets at the same time. As a result of the changed strategic world situation and START II, the United States deactivated all 50 LGM-118As between 2003 and 2005.
21	Question Mark Refueling	The "Question Mark" took to the skies on 1 January 1929 and remained aloft until 7 January 1929. During that period, the crew of the "Question Mark" flew a total of 150 hours and 40 minutes. Most importantly, they proved that aerial refueling could be a safe and repeatable process.
22	A1C William Hart Pitzenbarger	Airman First Class William Hart Pitzenbarger served as a pararescueman during the Vietnam War, completing more than 250 missions in less than a year. On 11 April 1966, when attempting to rescue trapped infantrymen, A1C Pitzenbarger displayed selfless disregard for his own safety by working to evacuate as many soldiers as possible before rescue efforts were called off. Remaining on the ground, he continued to provide succor to the wounded while fending off the enemy, until receiving a fatal wound in this tense firefight. For these actions, A1C Pitzenbarger was awarded posthumously the Medal of Honor.

23	Capt John S Walmsley	Captain John S. Walmsley, Jr., flew as an instructor pilot during WWII and served during the Korean War with 25 missions complete. On 14 September 1951, while conducting a night mission in a specially equipped B-26, he saw a high-value target and pressed the attack. Capt Walmsley subsequently employed a mounted searchlight to highlight the target so that friendly forces could also fire for effect. Selflessly exposing the craft to enemy ground fire, Capt Walmsley's plane suffered a hit and crashed near Yandock, Korea. He was posthumously awarded a Medal of Honor for his bravery and perseverance under fire.
24	B-26 Intruder	The B-26 <i>Intruder</i> was a twin-engined medium bomber that was used extensively in World War II, the Korean War, and the Vietnam War. Many were painted black and used as a light bomber and ground attack aircraft.
25	MoH Recipient CMSgt Richard Loy Etchberger	Chief Master Sergeant Richard L. Etchberger served as a radar team crew chief stationed at Lima Site 85, a remote and austere location in Laos, during the Vietnam War. On 11 March 1968, CMSgt Etchberger posthumously earned the Medal of Honor by holding off multiple enemy attacks, directing air strikes and inbound air rescue efforts, and selflessly ensuring the evacuation of several injured teammates before suffering a fatal wound.
26	Felix Rigau Carrera	Felix Carrera, a native of Puerto Rico, was a United States Signal Corps parachutist prior to World War I. After the start of the conflict, Carrera joined the United States Marine Corps and later became the first hispanic pilot in the United States Military.
27	Morgan Freeman	Famous actor Morgan Freeman served in the U.S. Air Force from 1955 to 1959. He turned down a drama scholarship from Jackson State University to instead enlist in the Air Force. He was trained as a radar repairman and was discharged as an Airman First Class.
28	Brig Gen James "Jimmy" Stewart	Brigadier General James "Jimmy" Stewart made his mark in Hollywood and in the United States military. First serving in World War II, Stewart subsequently became a general in the Air Force Reserve.
29	Gen Henry Harley "Hap" Arnold	General of the Air Force Henry Harley "Hap" Arnold was a soldier, airman, innovator, production manager, strategist, and the first and still only 5-star general in USAF history. He participated in early military aviation development, receiving training from the Wright brothers, charted a course through the difficult signal corps and army air corps days, and helped build fledgling air force into the the mighty instrument that contributed to victory in WWII.
30	Capt Lance P. Sijan	Lieutenant (later Captain) Lance P. Sijan piloted an F-4 <i>Phantom</i> on 52 missions in the Vietnam War. On 9 November 1967, Lt Sijan ejected from his disabled aircraft and, although wounded, proceeded to evade capture for six weeks. Despite wounds, weakness from insufficient food, and eventual illness, Lt Sijan spoke frequently of escaping once more. He succumbed while in captivity in January 1968 and was posthumously promoted to captain and awarded the Medal of Honor.
31	A1C John L Levitow	Airman First Class John L. Levitow served as a loadmaster aboard an AC-47 <i>Dragon</i> during the Vietnam War. On the night of 24 February 1969, while supporting a U.S. Army post fending off an attack, A1C Levitow's aircraft received a hit that ignited one of the parachute illumination flares onboard. To protect the craft and crew, A1C Levitow threw himself on top of the flare, despite suffering from wounds, and managed to toss it out the cargo door. He received the Medal of Honor for his courageous action that night.
32	F-4 Phantom	The F-4 <i>Phantom</i> was an icon during the Vietnam War. First introduced in 1960, the F-4 was an all-weather, long-range supersonic jet interceptor and fighter-bomber that proved highly versatile, characteristics that served well in Southeast Asia.
33	Daniel "Chappie" James, Jr.	General Daniel "Chappie" James Jr., was the first black man to become a four-star general in any U.S. military branch. Gen "Chappie" James and Colonels Robin Olds appear as they did after the successful Operation BOLO in 1967. Together they were nicknamed "Blackman and Robin." During Operation BOLO, Col Olds dubbed their wing the Wolf Pack because of its aggressive tactics and high degree of teamwork.
34	Robin Olds	Colonel Robin Olds and General "Chappie" James after the successful Operation BOLO, often considered the greatest air battle of the Vietnam War. During Operation BOLO, Col Olds dubbed the wing the Wolf Pack because of its aggressive tactics and high degree of teamwork, which was demonstrated as U.S. fighters destroyed seven enemy MiG-21 aircraft in 1967. Together Col Olds and then-Col James were nicknamed "Blackman and Robin."
35	Gen Benjamin Oliver Davis Jr.	General Benjamin Oliver Davis, Jr. was a USAF general and commander of the WWII Tuskegee Airmen. During WWII, Davis was commander of the 99th Fighter Squadron and the 332nd Fighter Group, which escorted bombers on air combat missions over Europe. Davis flew sixty missions in P-39, Curtiss P-40, P-47, and P-51 <i>Mustang</i> fighters and was one of the first African-American pilots to see combat. He was the first African-American Brigadier General in the USAF - breaking racial barriers in a manner similar to his father, who was the first African-American General in the US Army.
36	Tuskegee Amn WWII	Beginning in 1941, African Americans underwent pilot and groundcrew training at the Tuskegee Institute in Alabama. Eventually forming the 332nd Fighter Group (the famed "Red Tails") and 477th Bombardment Group, America's first Black Airmen pushed boundaries to serve with distinction during and after World War II.

37	Jacqueline Cochran	Jacqueline Cochran pioneered women's aviation, breaking the sound barrier in 1953 after bridging the gender gap in the Army Air Corps. Known for advocating an increase in the number of women aviators, Cochran organized the Women's Flying Training Detachment, which would later merge with the Women's Auxiliary Ferrying Squadron to form the Women Airforce Service Pilots (WASPs).
38	WASPS Wings Badge	The Women Airforce Service Pilots (WASP) wing badge, worn by female pilots, symbolized the transformation of the armed forces. The original badge was redesigned to integrate a heraldic tradition, the lozenge, which was often used in women's coats of arms. After the WASP's were inactivated in 1944, the badge lay dormant, until the 1970s when female pilots in the Air Force were authorized to wear the wings.
39	Betty Gillies	Betty Gillies championed women's rights to fly throughout her lifetime. She was one of the first female pilots to qualify for the Women's Auxiliary Ferrying Squadron. Flying for more than 50 years of her life, she paved the way for future female pilots everywhere.
40	Nancy Love	Nancy Harkness Love faced resistance but persevered to establish a unit of women that would later become the Women's Auxiliary Ferry Squadron on 10 September 1942. These women would be responsible for ferrying aircraft to airfields around the country during the height of WWII.
41	WASPS Emblem	The Women Airforce Service Pilots (WASPs) emblem, originally designed by Walt Disney for Roald Dahl's "The Gremlins," was approved for use during WWII. The Flying Fifinella, a name given to "female gremlins" in Dahl's story, became the WASP mascot, embodying the magical lore of the gremlins. The original emblem artwork is included in the Department of the Air Force Art Collection.
42	Donald Duck	Donald Duck was one of the most popular Disney characters during the WWII era. He appeared in <i>Victory through Airpower</i> and was featured in more than 216 emblems. The original emblem artwork is included in the Department of the Air Force Art Collection.
43	Bud Day	George Everette "Bud" Day earned the Medal of Honor for the bravery and perseverance that he demonstrated after being shot down over North Vietnam on 26 August 1967. Day was able to escape after his initial capture despite having suffered serious injuries. He was captured a second time and spent more than five years and seven months as a prisoner of war.
44	Chuck Yeager and Bell X-1	On 14 October 1947, Lieutenant Charles "Chuck" Yeager broke the sound barrier while flying the <i>Bell X-1</i> nicknamed "Glamorous Glennis" in honor of his wife. Yeager's exploits provided critical data on flight at transonic speeds that enabled aeronautical engineers to design faster and more capable aircraft.
45	Doolittle Raiders	Lieutenant Colonel (later Lieutenant General) Jimmy Doolittle led an unconventional raid by 16 B-25 bombers that launched from the deck of the USS <i>Hornet</i> on 18 April 1942. This strike demonstrated American reach when public confidence needed a boost in the grim initial months following Pearl Harbor; it also foretold the future shape of events in the Pacific Theater of World War II.
46 /47	Gulf War	Troops cross the airfield after disembarking from Military Airlift Command Command C-141 <i>Starlifter</i> aircraft with a C-5 <i>Galaxy</i> in the background. This depiction takes place at a non-disclosed base in Southwest Asia in support of Operation DESERT SHIELD in August 1990.
48	F-117 Nighthawk	The F-117 <i>Nighthawk</i> , a stealth fighter aircraft, had a small radar cross-section that enabled it to typically evade detection. During Operation DESERT STORM in 1991, United States Air Force pilots completed approximately 1,300 sorties in the F-117.
49	Operation DESERT STORM	Operation DESERT STORM air campaign began 16 January 1991, five months after Iraqi forces invaded and annexed Kuwait. DESERT STORM is often coined the "first" space war as our satellites revealed the way in the vast featureless desert at night, integrating space operations for the first time in theater. Joint forces used GPS and precision-guided missiles for the first time on a massive scale - liberating Kuwait by the end of February 1991.
50	B-52 Stratofortress	The B-52 <i>Stratofortress</i> , which entered service in 1955, was a long-range, subsonic, jet-powered strategic bomber. It was utilized extensively during the Vietnam War, as well as throughout the Cold War. The B-52 aircraft remained a mainstay of the United States Air Force bomber fleet for decades.
51	OIF Fallen Airmen	At Kirkuk Air Base, Iraq, airmen created a memorial in remembrance of two fallen comrades from Operation IRAQI FREEDOM. Staff Sergeant Patrick Griffin and Airman First Class Antoine Holt, both from the 727th Expeditionary Air Control Squadron, died during combat operations in 2003 and 2004. This memorial honors the fallen from the entire period of the operation, which spanned from 2003 to 2011.
52	Convoy Ops	During Operations IRAQI FREEDOM and ENDURING FREEDOMi, Airmen were called on to perform ground convoy operations in support of joint operations in theater.
53	9-11 Attack	On 11 September 2001, terrorists flew an aircraft into the Pentagon, an American symbol of power, challenging the ideals we hold sacred as a nation. The attacks on 9/11 transformed our foreign policy, and by 18 September 2001, Congress passed Public Law 107-40, effectively giving the President authority to use force against those complicit in the attacks and those who harbored them. On 7 October 2001, the twenty-year war in Afghanistan would begin.
54	B-2 Spirit	The B-2 <i>Spirit</i> was a heavy strategic bomber that featured low-observable stealth technology designed to penetrate dense anti-aircraft defenses. First deployed in 1994, the B-2 could carry conventional and nuclear munitions.

55	Capt Kathy La Sauce	Lieutenant Colonel Kathy La Sauce trailblazed her entire career. She was one of the first female pilots to fly the C-141 Starlifter, served as the first woman aircraft commander at Norton Air Base, and constituted part of the first class of women graduates at William Air Force Base in 1977.
56	HH-60 Pave Hawk	The HH-60 <i>Pave Hawk</i> helicopter became the primary workhorse for the Air Force Combat Search and Rescue community beginning in 1987.
57	Combined Air Operations Center	The Combined Air Operations Center (CAOC) commands and controls the broad spectrum of what air power brings to the fight: Global Vigilance, Global Reach, and Global Power. Functioning as the nerve center of the air campaign, the CAOC plans, monitors and directs sortie execution, close air support and precision air strike; intelligence, surveillance and reconnaissance; airlift; air refueling; aeromedical evacuation; air drop, and countless other mission-critical operations.
58	MOH MSgt John Chapman	Master Sergeant John Chapman was posthumously awarded the Medal of Honor for his heroism during the Battle of Takur Ghar. After their <i>Chinook</i> was ambushed by enemy forces, a fellow team member was in desperate need of support. Putting his teammates before himself, and despite his severe wounds, he engaged enemy combatants in the open. In performance of his remarkably heroic actions, Sergeant Chapman is credited with saving the lives of his teammates.
59	Air Crew Step Briefing	Members assigned to the 71st Rescue Generation Squadron receive a aircrew step brief prior to a combat search and rescue mission (CSAR). The personnel flew the HC-130J model, the only dedicated fixed-wing personnel recovery platform in the Air Force inventory. The CSAR mission is dedicated to saving lives anywhere, anytime.
60	A-10 Thunerbolt II	The A-10 <i>Thunderbolt II</i> was the primary Close Air Support aircraft for the United States Air Force since its introduction in March 1977. The aircraft was also known as the "Warthog." The A-10 was reliable, rugged, and a favorite of United States Army and United States Marine Corps ground forces.
61	Operatton ALLIES REFUGE	As the largest non-combatant evacuation operation in American history, Operation ALLIES REFUGE, a humanitarian mission, saw more than 120,000 Afghan citizens assisted by Airmen and equipment. Over 17 days, at the end of August 2021, nearly 800 civilian and military aircraft from more than 30 nations safely evacuated thousands of people, from Afghanistan, through a chaotic Hamid Karzai International Airport in Kabul.
62	Isolation Pods	The COVID-19 pandemic spurred a great deal of innovation. One example was the Transportation Isolation System which allowed COVID-positive patients to be transported aboard aircraft without endangering the health of the aircrew flying the plane.
63	ABMS Team	The United States Air Force's Advanced Air Battle Management System encompassed a new set of technologies, operational requirements, and warfighter integration efforts. The system allowed commanders and warfighters to share information faster than ever before.
64	C-130 Aerial Spray	The 910th Airlift Wing at Youngstown Air Reserve Station (YARS), Ohio maintains the DoD's only large area fixed-wing aerial spray capability to control disease-carrying insects, pest insects, undesirable vegetation, and to disperse oil spills in large bodies of water. The 757th Airlift Squadron, using altered C-130's, has provided expert service such as when it was called to provide support during the catastrophic Deepwater Horizon oil spill in the Gulf of Mexico in 2010.
65	Global Hawk	The RQ-4 <i>Global Hawk</i> was a remotely-piloted surveillance aircraft that operated at high altitudes to collect intelligence for the United States. It contained an integrated sensor suite that provided all-weather, day or night intelligence, surveillance and reconnaissance (ISR) capability.
66	E-4B Nightwatch	The E-4B <i>Nightwatch</i> Airborne Command and Control Aircraft was a strategic command and control military aircraft flown by the United States Air Force. Based on a Boeing 747-200, the E-4B served as the command, control, and communications center to direct U.S. forces, execute emergency war orders, and coordinate actions by civil authorities.
67	B-1 Lancer	The B-1B <i>Lancer</i> entered service with the United States Air Force in 1986. Commonly referred to as the "Bone," the B-1B was a long-range, multi-mission, supersonic conventional bomber.
68	Air Base Defense (SF - Moody AFB)	The 820th Air Base Defenders, as part of the lead-wing concept, demonstrated mission approaches for securing airfields down range. The defenders would be part of a proactive force able to operate in a contested environment with joint and coalition partners.
69	Joint All Domain Command and Control (JADC2)	The Joint All Domain Command and Control (JADC2) provides warfighting capability that make sense, and act at all levels and phases of war, across all domains, and with partners, to deliver information advantage at the speed of relevance.
70	Space X Falcon 9	Falcon 9 is a reusable, two-stage rocket designed and manufactured by SpaceX for the reliable and safe transport of people and payloads into Earth orbit and beyond. Falcon 9 is the world's first orbital class reusable rocket. Reusability allows SpaceX to reflly the most expensive parts of the rocket, which in turn drives down the cost of space access.
71	X-37B Orbital Test Vehicle	The Boeing X-37B was an unmanned robotic vertical-takeoff, horizontal-landing spaceplane. The X-37B operated in a low-earth orbit of 150 to 500 miles above the Earth.

72	Combined Forces Space Component Command (CFSCC)	The Combined Forces Space Component Command (CFSCC) mission is to plan, integrate, conduct, and assess global space operations in order to deliver combat relevant space capabilities to Combatant Commanders, Coalition partners, the Joint Force, and the Nation. As one of its primary roles, CFSCC plans, tasks, directs, monitors, and assesses the execution of combined and joint space operations.
72 A	Delta 4 Heavy	The Delta IV Heavy is the world's most capable rocket delivering our nation's most critical national security and science missions for the National Reconnaissance Office, the U.S. Air Force, and NASA. The Delta IV Heavy rocket assures access to space, launching from Cape Canaveral Space Force Station and Vandenberg Space Force Base.
73	Star Command Space Test and Training Range Operations	Staff Sergeant Kierra Valentin, 25th Space Systems intel analyst, and Captain Amolkumar Rathod, 25th Space Range Squadron, perform training at the Star Command Space Test and Training Range in a mobile transport. The Range Close Loop Environment (RCLE) is used for realistic training and testing of satellite communications and electronic warfare systems without the risk of information collection. The system pretends to be a real-world satellite to emulate satellite signal environments for tests and exercises across the globe.
74	Wideband Global SATCOM (WGS) Space Operations	Guardians of the 3d Space Operations Squadron (SOPS) assumed satellite control authority of the first Wideband Global Satellite Communications system, the DoD's newest and most robust communications satellite in 2008. Currently, 3 SOPS conducts on-orbit operations in support of US Space Command requirements.
75	Missile Warning	In response to the Cold War with the former Soviet Union, the Air Force established the first operational ballistic missile early warning radar in 1961. The Perimeter Acquisition Radar Attack Characterization System (PARCS) is a single-faced, multi-function, phased-array radar located at Cavalier Space Force Station, N.D. The primary mission of PARCS is to keep watch for sea-launched and intercontinental ballistic missiles launched toward North America, and to collect Launch and Predicted Impact (L&PI) data, generally defined as missile warning (MW) data. The secondary mission of PARCS is to provide data concerning space launches and orbiting objects as a collateral sensor for the Space Surveillance Network (SSN). Missile warning and attack characterization data is sent to the U.S. Missile Warning and Space Control Centers, the U.S. National Military Command Center and U.S. Strategic Command. Satellite tracking data is sent to the Combined Space Operations Center (CSpOC) for processing. https://www.spaceforce.mil/About-Us/Fact-Sheets/Article/2197752/pave-paws-radar-system/ https://www.spoc.spaceforce.mil/About-Us/Fact-Sheets/Display/Article/2381710/pave-paws-radar-system
76	Space X Dragon Spacecraft	The Dragon spacecraft is the only spacecraft currently flying that is capable of returning significant amounts of cargo to Earth. Space X Dragon was also the first private spacecraft to take humans to the International Space Station.
77	Col Michael S. Hopkins	Colonel Michael S. Hopkins commanded the first post certification mission of SpaceX's Crew Dragon spacecraft, from 15 November 2020 to 2 May 2021, which in turn became his second longest duration mission aboard the International Space Station. He would go onto to accomplish five spacewalks and complete 168 days in orbit.
78	Col Nick Hague	Colonel Tyler "Nick" Hague is a U.S. Air Force Academy graduate and instructor, combat veteran, and astronaut. In 2018, he survived an aborted launch after the spacecraft experienced a rocket booster failure shortly after takeoff. Col Hague flew to space in 2019, remaining for 203 days, during which time he conducted three separate spacewalks. He has since transferred to the U.S. Space Force.
79	Lt Gen Susan Helms	Lieutenant General Susan Helms, commissioned from the US Air Force Academy in 1980, has flown over 30 types of military aircraft, but one such feat is on the top of the list. On 13 January 1993, then a Major in the Air Force, she became the first U.S. Military woman in space as part of the crew on the space shuttle <i>Endeavour</i> .
80	Col Eileen Collins	Colonel Eileen Collins stood out from her peers, logging over 6,751 hours in 30 different types of aircraft, and those were only in our airspace. She also logged over 872 hours in outer space and completed four space flights. Col Collins was the first woman to pilot and command a U.S. Spacecraft with the shuttle mission STS-93 in July 1999.
81	Maj Gary Payton	With the development of the space shuttle, the USAF established the Manned Spaceflight Engineer (MSE) program to oversee DOD payloads on the shuttle. As one of 32 individuals selected and trained in the program, Major Gary E. Payton flew on <i>Discovery</i> (Mission 51C) in January 1985. Maj Payton and Maj William Pailles were the only two MSE-trained personnel to fly in space before the program ended in preference of unmanned rockets for USAF requirements.
82	Maj William Pailles	With the development of the space shuttle, the USAF established the Manned Spaceflight Engineer (MSE) program to oversee DOD payloads on the shuttle. As one of 32 individuals selected and trained in the program, Major William A. Pailles flew on <i>Atlantis</i> (Mission 51J) in October 1985. Maj Pailles and Maj Gary Payton were the only two MSE-trained personnel to fly in space before the program ended in preference of unmanned rockets for USAF requirements.

83	Col Ellison Onizuka	Colonel Ellison Onizuka, a distinguished Air Force officer, would become the first Asian American to fly in space in 1985 aboard Space Shuttle Discovery mission STS-51-C. On 28 January 1986, Col Onizuka lost his life when Space Shuttle <i>Challenger</i> exploded 73 seconds after launch.
84	Space Shuttle Launch	The Space Shuttle program was the fourth human spaceflight effort led by NASA, employing the first-ever reusable spacecraft, and lasted nearly 40 years (1972-2011). Its 135 missions produced notable results such as the first winged crewed spacecraft to achieve orbit and land, launching the Hubble Space Telescope, and helping to build the International Space Station. In 2011, after double the expected program lifetime, in the face of cost increases, and after a few notable disasters with the <i>Challenger</i> and <i>Columbia</i> , the Space Shuttle program concluded.
85	Lt Col Francis Richard "Dick" Scobee	Lieutenant Colonel Francis "Dick" Scobee was an engineer, combat veteran, test pilot, and astronaut. He logged more than 6,500 flying hours in 45 types of aircraft. Lt Col Scobee piloted the <i>Challenger</i> in 1984 (STS 41C) for a mission duration of 168 hours. He was commander of the <i>Challenger</i> in 1986 during its fatal mission failure shortly after launch (STS 51L). Lt Col Scobee, along with six others, perished on 28 January 1986. He was posthumously awarded the Congressional Space Medal of Honor. His son, Richard Scobee, achieved the rank of Lieutenant General in the U.S. Air Force and was commander of the Air Force Reserve Command until retirement in 2022.
86	Maj Robert Henry Lawrence Jr.,	With thousands of flying hours and a PhD in physical chemistry, Major Robert H. Lawrence, Jr., was the first African-American selected as an astronaut when he joined the Manned Orbiting Laboratory (MOL) Program in 1967. Major Lawrence was a perfect fit for this Cold War effort to conduct manned space-based observation efforts; however, he tragically perished in a jet crash later that year, and the program was cancelled in 1969.
87	Col Guion Bluford	Colonel Guion Bluford spent the beginning of his Air Force career flying combat missions, most of which were over North Vietnam. After his impressive Air Force career, Bluford became a NASA Astronaut in August of 1979 and would become the first African American astronaut in space. With the completion of his fourth flight, he logged over 688 hours in space.
88	Delta II with GPS satellite launch	The Delta II first launched on Valentine's Day, 1989, carrying the first full-scale GPS satellite and kickstarted the navigation constellation that global society continues to depend upon decades later.
89	Operation Desert Storm	F-16A Fighting Falcon, F-15C Eagle, and F-15E Strike Eagle fighter aircraft fly over burning oil fields in Kuwait during the Gulf War. DESERT STORM is often coined the "first" space war as our satellites revealed the way in the vast featureless desert at night, integrating space operations for the first time in theater. Joint forces used GPS and precision-guided missiles for the first time on a massive scale - liberating Kuwait by the end of February 1991.
90	Space Operations in Combine Air Operations Center	Space Duty Technician Staff Sergeant Cristina Kavanagh, deployed from Buckley Air Force Base, Colo., and Space Duty Officer First lieutenant Tanya Frazier, deployed from F.E. Warren AFB, Wyo., provided space-based theatre ballistic warning to U.S. forces in the Southwest Asia theatre. They performed this duty in the Combat Operations Space Cell inside the Combined Air Operations Center. They also ran Global Positioning Satellite (GPS) predictions to ensure GPS accuracy and support Personnel Recovery/Combat Search and Rescue missions when necessary via space support.
91	Air Force Satellite Control Network Ground Station Operators	The Satellite Control Network, which stretches across seven locations as far east as Hawaii and as far west as Guam, performs control functions consisting of tracking (determining where a satellite is located), telemetry (collecting information about its health and status) and command (transmitting signals to control subsystems and maneuvering satellites if necessary). The network, which once actively used analog communications systems, is transforming for the future and transitioning to a digital based system.
92	Roger Easton	Physicist Roger Easton worked with Bradford Parkinson and Ivan Getting to develop the Global Positioning System. Easton designed and developed a time-based navigational system equipped with passive ranging, circular orbits, and high precision clocks that was used onboard satellites.
93	Ivan Getting	Ivan Getting, an electrical engineer and physicist, was one of the pioneers of the Global Positioning System along with Roger Easton and Bradford Parkinson. Getting was the president of The Aerospace Corporation and a founding member of the Air Force Scientific Advisory Group.
94	Gladys West	Gladys West, an American mathematician, was born in rural Virginia in 1930. Her mathematical modeling of the shape of the Earth would be a building block for her future work on the Global Positioning System, the most widely used invention in the 21st century.
95	Bradford Parkinson	Bradford Parkinson was known as "the father of GPS" and he served as an engineer and Air Force officer. From 1972 to 1978, Parkinson was the Director of the Global Positioning System Joint Program Office.
96	Rita Sagalyn	Ms. Rita C. Sagalyn researched near-earth and space environments for nearly fifty years, successfully developing instruments and theories surrounding satellites, radar devices, and aircraft protections. Her research and accomplishments with space systems have led to increased survivability and reliability of military, civil, and commercial satellites as well as improved performance of command and control, communications, and surveillance systems.
97	Stand up of Air Force Space Command	On 1 September 1982, the Air Force established Air Force Space Command, with space operations as its primary mission. AFSPC provided military focused space capabilities with a global perspective to the joint warfighting team.

98	Corona Satellite Imagery	The CORONA reconnaissance satellites revolutionized the collection of intelligence in the 1960s and provided some of the first satellite imagery we have today. Satellite imagery is used for a variety of analytical purposes from assessing military strength to estimating the size of crop productions. Most notably, CORONOA collection was targeted against the Soviet union. This imagery helped verify compliance with arms control agreements.
99	C-119 Flying Boxcar	The C-119 <i>Flying Boxcar</i> was used to retrieve a capsule dropped by the CORONA satellite which was used to capture images of the Soviet Union. To grab the capsule, the C-119 would snag the capsule's parachute with a claw-like mechanism that deployed from the rear of the aircraft.
100	Early emblem with delta symbol	The Delta symbol evolved throughout the history of the Air Force, signifying airplanes first and then eventually serving to represent space components as well. The first known use of the delta emblem in early US airpower history started with the 36th Fighter-bomber Group.
101	Gen Moorman	General Thomas Moorman was the fifth commander of the United States Space Command and the 26th Vice Chief of Staff of the Air Force. Moorman was instrumental in establishing Air Force Space Command and the Department of Defense's space policy and programs.
102	DAF & NRO Secretary	Mr. Edward C. Aldridge, Jr., served as the Secretary of the Air Force and the Director of the National Reconnaissance Office (NRO) during the last three years of his tenure. This is an example of the historically close relationship between the Department of the Air Force and the NRO that continues today with a few hundred Space Force members serving in the NRO.
103	Corona Satellite	CORONA was the nation's first photo reconnaissance satellite system, operating from August 1960 until May 1972. The CORONA system became the United States' first reliable means for addressing difficult intelligence challenges once it became operational in 1960. It provided the nation with the first broad area imagery that was essential for understanding the strategic capabilities and arms control compliance of the Soviet Union and other Cold War adversaries.
104	Gen Schriever	General Bernard Schriever was instrumental to the development of the United States Air Force Ballistic Missile System and Space Program. Schriever's oversight led to the deployment of three successful ICBM systems and several space programs including the first reconnaissance satellite.
105	Defense Meteorological Satellite Program (DMSP)	Since the mid-1960's, when the Department of Defense (DoD) initiated the Defense Meteorological Satellite Program (DMSP), low, earth-orbiting satellites have provided the military with important environmental information. Each DMSP satellite has a 101 minute orbit and provides global coverage twice per day, "seeing" such environmental features like clouds, bodies of water, and pollution in the visual and infrared spectra.
106	Geosynchronous Space Situational Awareness Program (GSSAP)	Geosynchronous Space Situational Awareness Program (GSSAP) satellites are a space-based capability operating in the near-geosynchronous orbit regime supporting U.S. Space Command space surveillance operations as a dedicated Space Surveillance Network (SSN) sensor. GSSAP satellites communicate information through the worldwide Air Force Satellite Control Network (AFSCN) ground stations, then to Schriever Air Force Base, Colorado, where the 50th Space Wing conducts daily operations.
107	Defense Support Program Satellites (DSP)	Space Force-operated Defense Support Program (DSP) satellites are a key part of North America's early warning systems. In their 22,300-mile, geosynchronous orbits, DSP satellites help protect the United States and its allies by detecting missile launches, space launches and nuclear detonations. DSP's effectiveness was proven during Operation DESERT STORM, when DSP detected the launch of Iraqi Scud missiles and provided warning to civilian populations and coalition forces in Israel and Saudi Arabia.
108	Moon & Mars	The celestial bodies of Earth's Moon and Mars serve as practical navigational aids and visual reference points. They also constitute aspirational goals of the Air and Space Forces as Airmen and Guardian have maintained a long tradition of seeking these and other new frontiers.
109	Wideband Global SATCOM (WGS)	Wideband Global SATCOM Satellite (WGS) is the backbone of the U.S. military's Wideband satellite communications capability. WGS provides worldwide, flexible, high-capacity communications for US Government Agencies, Department of Defense (DOD), multiple International Partners, and the North Atlantic Treaty Organization (NATO). The WGS system provides essential wideband global communications services allowing Combatant Commanders to exert command and control of their tactical forces, from peacetime to military operations.
110	Defense Satellite Communications System (DSCS)	Originally launched in October of 1983, the Defense Satellite Communications System (DSCS) constellation provides long haul communications to users worldwide through contested environments. The DSCS supports the defense communications system, the military's ground mobile forces, airborne terminals, ships at sea, and the Department of Defense (DOD).
111	GPS (satellite system)	The Global Positioning System, originally Navstar GPS, is a satellite-based radio navigation system owned by the United States government and operated by the United States Space Force. The Global Positioning System first launched into the solar system 22 February 1978 and continues to provide navigation signals across the Earth's surface.
112	Delta Symbol	The meaning of the Delta symbol evolved over time. First representing airplanes, then eventually covering rockets and space, it now also signifies future weapon systems and platforms.
114	Future missions	The Air Force memorial and digital light beam represent the future, yet-to-be-imagined missions for the Department of the Air Force. These missions can and will take on new characteristics in an age of big data, global networks, artificial intelligence, and digital world building.

