

Forging the Sword of the United States Air Force

A Short History of Eglin Air Force Base, 1935 to 2007

Prepared by the
Air Armament Center Office of History
April 2008

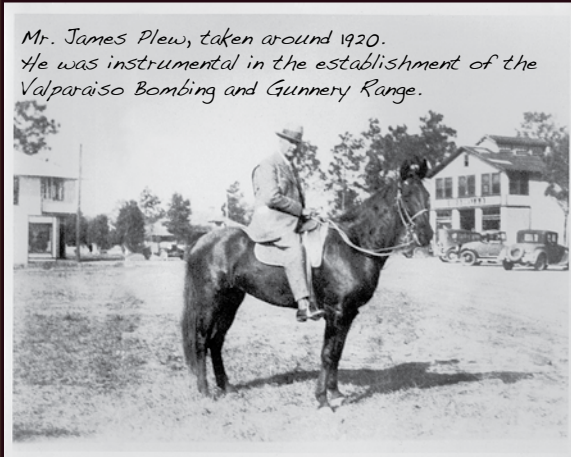
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Distribution A

I. Establishment of the Valparaiso Bombing and Gunnery Range

The large complex we now know as Eglin Air Force Base was first established as the Valparaiso Bombing and Gunnery Range. Its development was part of the growth of Army aviation and the local community.

Vale of Paradise. After World War I, John Perrine, founder of the Valparaiso Development Company, envisioned a community in this “Vale of Paradise.” The citizens of the small village on Boggy Bayou hoped to draw Midwesterners to the coast with small town living. These early dreams faltered temporarily when Perrine died suddenly in 1921, and the Valparaiso Development Company went bankrupt.



Fortunately, James E. Plew, a wealthy businessman from Chicago, also saw the area’s potential and, in 1922, bought the properties of the Valparaiso Development Company. He built an inn and golf course and managed several local businesses. Plew also had a keen interest in military aviation.

Beginnings of the Air Field.

The early 1930s also saw new flying fields spring up across the United States to train pilots in aerial gunnery and bombing. Pilots assigned to eastern bases could not effectively use the field that (then) Colonel Henry “Hap” Arnold, Chief of the Army Air Corps, had established near Muroc, California, (now Edwards AFB) to train new pilots in these techniques. Officers of the Air Corps Tactical School (ACTS) at Maxwell Field, Alabama, saw the potential of the Valparaiso, Florida, area to provide a training range in the east.

Maxwell officials began surveying a triangular region with corners at Mobile and Birmingham, Alabama, and Panama City, Florida,

to site an eastern bombing and gunnery range. As early as 1932, a Maxwell baseball team played at Crestview, and Maxwell officers drove to Valparaiso for golf and fishing. Pilots made occasional landings on Plew’s golf course and stayed at his inn. Maxwell’s leaders saw the potential of the Valparaiso area for military aviation, and, in turn, Plew realized the potential of the Army payroll for the economically depressed area.

In April 1933, Plew, officers from Maxwell, and civil leaders from Valparaiso met at Plew’s Valparaiso Realty Company. Plew showed Maxwell leaders a plan of the area with a dream of a city near the Choctawhatchee Bay—and a pencil sketch of two proposed landing strips in the lower left-hand corner.

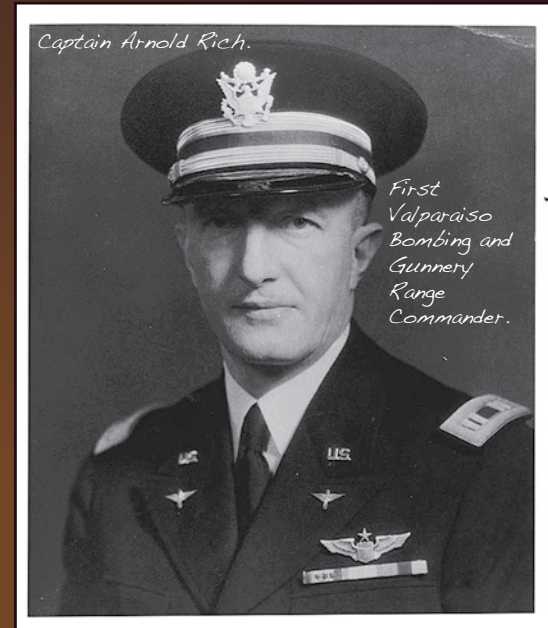
Lieutenant Arnold H. Rich from Maxwell supplied the momentum to pursue an airfield in Valparaiso.

Plew spent close to \$5,000 in subsequent trips, meetings, and other expenses in support of a possible airport. In February 1934, he offered to donate 1,460 acres of land to the government.

The combination of vast expanses of sparsely inhabited forests and the Gulf of Mexico offered great potential for bombing and gunnery ranges. In May 1935, Plew and Maxwell officials signed a lease for a portion of the land, and Maxwell Field assumed control of the Valparaiso airport while waiting for congressional action.

On June 14, 1935, the Army Air Corps activated the Valparaiso Bombing and Gunnery Range, with a detachment of 15 enlisted men, commanded by now Captain Rich. When he reported to the new field, Captain Rich found three completed buildings, two 2,000-foot by 100-foot paved runways, and a 250-acre landing field.

In August 1935, Congress approved the lease, and, in March 1937, the Secretary of War formally accepted the land.



II. Growth and Expansion of Eglin Field, 1935-1941

Between 1935 and 1941, the Valparaiso Bombing and Gunnery Range became one of the largest military reservations in the United States. It was renamed Eglin Field in 1937 and grew to 764 square miles of land with a main base area, ten auxiliary fields, and various land ranges.

Dual-mission Base. The installation had two major missions:

- Bombing and gunnery training for new pilots in the western half of the reservation
- Testing of Army Air Corps aircraft, aircraft armament, air-delivered munitions, and other aircraft systems in the eastern half.

The training mission began on March 27, 1936 when the Air Corps Tactical School (ACTS) conducted its first gunnery training at the Valparaiso Bombing and Gunnery Range. Later, the Tennessee and Alabama National Guard sent units to the new base for training.

Captain Rich and successive Eglin commanders oversaw the creation of permanent office facilities and living quarters. On August 4, 1937, the Army Air Corps renamed the

Valparaiso Bombing and Gunnery Range Eglin Field after Lt. Colonel Frederick I. Eglin, who had been killed in an airplane crash near Anniston, Alabama, in January of the same year.

The Air Corps also wanted a proving ground to test aircraft and armaments. In April 1939, a board, headed by Lt. Colonel Douglas B. Netherwood, Director of the Air Corps Board, recommended Eglin Field and its adjacent areas as the most suitable location for a proving ground. This recommendation resulted in disagreement



Land Area Expands. In 1940, the Department of Agriculture transferred nearly 400,000 acres of the Choctawhatchee National Forest to the War Department. Eglin now had room for an Air Corps Specialized Flying School to conduct the training mission and an Air Corps Proving Ground to test aircraft and weapons.

These developments led to increasing numbers of support personnel and the construction of more base facilities. In addition, ten auxiliary fields were built in the Choctawhatchee Forest for bombing and gunnery training. The main field and suitable range areas in the eastern portion of the base would be reserved for proving and testing activities.

During 1939, suitability testing began at Eglin Field. Then Lieutenant Seth J. McKee, 23 CG (later General and Commander in Chief, NORAD) stated,

"... Anytime they wanted to test anything, we did the testing. We first started our testing in the fall of 1939 and the spring of 1940. For example, we did all of the gunnery tests at the time at Eglin Field, which was a little 1,800-foot asphalt strip and one log cabin. That was

between the Air Corps Board and the ACTS, which was using Eglin for training. In December 1939, the 23rd Composite Group at Maxwell Field sent two single-seat P-37s to Eglin for Air Corps Board research.



Eglin Field. We would go down there [from Maxwell Field] to do our gunnery testing. We would fly tow targets over the Gulf of Mexico, and we would test different types of guns, different types of ammunition, and different types of aircraft. . . .”

However, after the fall of France in June 1940, bombing and gunnery training took precedence over testing, and only 18 service tests took place in 1940.

On May 19, 1941, the Air Corps established the Air Corps Proving Ground at Eglin Field. The 23 CG transferred from Orlando, Florida, to Eglin to conduct suitability testing of aircraft, aircraft armament and munitions, and other aircraft systems. In September 1941, the Air Corps Board moved from Maxwell Field to Eglin Field, and a Proof Department was organized as the Board’s testing agency. Members of the Air Corps Board, the Proof Department, and the Air Corps Proving Ground Detachment (the former 23 CG) participated jointly in perfecting the testing program and in devising and establishing the requisite testing facilities.

By 1941, many future Air Force leaders had served at Eglin as part of National Guard encampments or regular Army deployments,

particularly from Maxwell Field. Captain Claire Chennault, future leader of the Flying Tigers, visited Eglin on several deployments. Lieutenant Paul Tibbets, later commander of the 509th Composite Group (CG), which



dropped the atomic bombs on Japan in August 1945, and Captain William Tunner, later commander of the airlift over the Himalayas into China during World War II and the 1947 Berlin Airlift, also trained at Eglin Field.

III. Eglin Field during World War II

When Germany invaded Poland on September 1, 1939, the United States was woefully ill-prepared to fight a global war, and most Americans were against the country getting involved in these new conflicts. President Franklin Roosevelt had to move incrementally during 1940 and 1941 to prepare the country for a probable war with Germany, Italy, and Japan. The Japanese attack on Pearl Harbor on December 7, 1941, provided the impetus that brought the country together to fight these new threats.

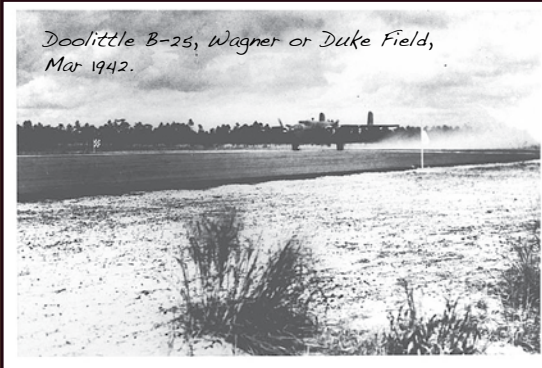
Wartime Test Support. The Air Corps Proving Ground Center (ACPGC) (Army Air Force Proving Ground Center—APGC after February 1942) conducted 49 tests in 1941 and 315 service tests in 1942. By spring 1942, the base had completed laboratories, technical buildings, ranges, and flying facilities for the test program, and by early 1943 it had the resources to conduct a full testing program. By the end of 1943, the APGC had detachments at several Florida locations and in six other states. By 1945, the APGC’s personnel strength had grown to 732 officers and 6,744 enlisted personnel who had conducted testing on every type of US aircraft and several enemy aircraft and over 2,900 service tests.

The majority of the testing activities were routine service tests of aircraft, weapons, and other aircraft systems. However, the APGC conducted several notable one-of-a-kind tests for AAF Chief of Staff General Henry “Hap” Arnold, including the most effective type of bombs to use against German and Japanese industry and cities, and the best method to destroy German V-1 “buzz bomb”

launch sites along the North Sea coast (Operation CROSSBOW). During the war Charles Lindbergh came to Eglin Field as a civilian test pilot to work on several Army Air Force projects.



Wartime Training. In the western portion of the reservation, thousands of new pilots trained in vital gunnery techniques. While most remain anonymous, some are well known. The Tuskegee Airmen and the crews of the 509 CG—that dropped the atomic bombs on Hiroshima and Nagasaki—trained at Eglin. Before taking



command of the 509 CG, now Colonel Tibbets had served at Eglin. In March 1942, the Doolittle Raiders practiced short takeoffs at Wagner Field (Field #1) and Duke Field (Field #3) in preparation for their historic April 18, 1942 raid on Tokyo. In 1944, Metro-Goldwyn-Mayer

filmed the movie that told the story of the Doolittle Raid “Thirty Seconds over Tokyo” at Peel Field (Auxiliary Field #4).

New Weapons. In late 1944, the APGC became involved in testing new warfighting technologies, beginning with the German V-1 “buzz bomb.” The Air Technical Service Command at Wright Field had made a copy of the V-1, designated the JB-2 “Loon,” from salvaged V-1 parts, acquired from southeastern England. In October, several JB-2s arrived at Eglin Field for testing at sites on Santa Rosa and Okaloosa Islands. By June 1945, the AAF had completed 128 successful launches out of 164 attempts. The war ended before the JB-2 became operational. In mid-1945, the APGC began testing the vertical bomb (VB) series of radio-controlled guided bombs, which had much greater accuracy than regular gravity bombs. The AAF used the VB-1 AZON (azimuth only) and the VB-3 RAZON (range and azimuth only) with great success in attacking bridges in Holland and Burma in the last months of World War II. However, despite these successes, the AAF shelved these programs in 1946 but revived them in 1951 for the Korean War.

IV: The Air Proving Ground Command Era at Eglin Air Force Base, 1945-57

Between 1945 and 1957, the Air Proving Ground Command (APGC) served as an independent agency to provide suitability (operational) testing of Air Force aircraft, armaments, and related systems and report its assessments directly to the Chief of Staff of the Air Force.

The Experimental Guided Missile Group. As a result of the successful JB-2 launches of 1944-45, the AAF activated the 1st Experimental Guided Missile Group (XGMG) on Feb 7, 1946, to develop tactics and techniques for guided missile operations and conduct functional and tactical tests of new guided missiles. The 1 XGMG assumed the postwar testing of the JB-2 and guided bombs and then moved into the testing of the Air Force’s prototype guided missiles. On July 23, 1949, the 1 XMG became the 550th Guided Missile Wing (GMW), indicating the growing



importance of guided missiles. In 1950, the APGC lost the development of surface-to-air and surface-to-surface missiles to Cape Canaveral.

The 1 XGMG also flew B-17s and B-29s and equipment for long-range remote-controlled flights. On Aug 5-6, 1946, the Group flew two remotely controlled aircraft from Hawaii to Muroc Army AFB, California, and, on Jan 13, 1947, successfully flew a drone from Eglin Field to Washington, DC,

on a simulated bombing mission. These successful tests led to the creation of a drone squadron (later group), stationed at Duke Field

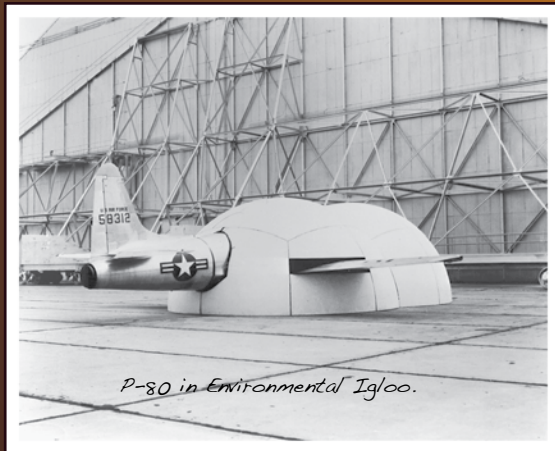


(Auxiliary Field #3), which flew radio-controlled aircraft through the radiation clouds from the atomic bomb tests in the western Pacific in the late 1940s and early 1950s. In 1949, Twentieth Century Fox used the drone squadron's QB-17s for its classic movie about the 1943-45 strategic bombing campaign of Germany, "Twelve O'clock High," filmed at Duke Field. The drone unit also developed, tested, and flew drones for aircraft and armament suitability tests over Eglin's land and water ranges into the early 1960s.

Eglin's Climatic Lab. On Aug 25, 1942, the APGC established the Cold Weather Testing Detachment near Fairbanks, Alaska, to conduct testing on aircraft, armament, clothing, and equipment under cold weather conditions. In 1943, Lt Colonel Ashley C. McKinley convinced the Air Force to build a Climatic Laboratory at Eglin Field that could recreate realistic climatic conditions inside a laboratory facility. The project, begun in March 1944, was completed in the spring of 1947, and the first test in the new facility occurred in May. On June 12, 1971, the Air Force dedicated the Climatic Lab to Col McKinley who died in 1970. On Oct 6, 1997, it was added to the National Register of Engineering Landmarks.



Ground control vehicle.



P-80 in Environmental Igloo.

V. Armament Development and Testing at Eglin AFB, 1949 to the Present

After 1945, the civilian aircraft industry and the Air Force had limited facilities for the research, development, and testing of aircraft armaments. As the Cold War developed, the Air Force realized that it needed its own organization to develop air armaments as, at that time, the Army and Navy conducted the development and testing of all military munitions.

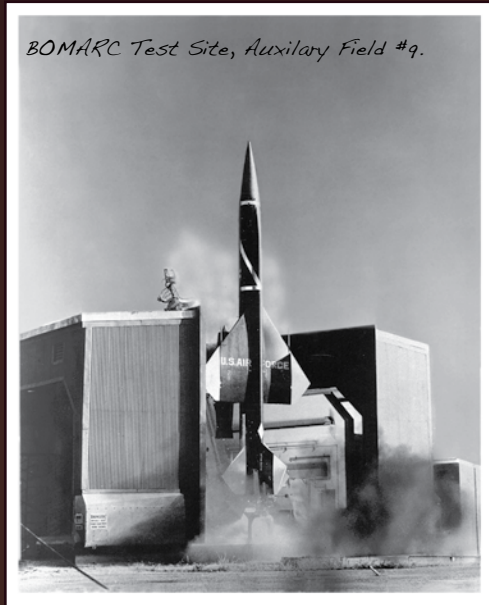
To remedy this situation, in late 1949, the Air Force established the Air Materiel Armament Test Center (AMATC) at Eglin AFB to conduct research and development testing of air armaments. In early 1951, the AMATC was reassigned to the Air Proving Ground Command (APGC) and then integrated into the APGC organization as the Armament Test Division (ATD). On December 1, 1951, the ATD became the Air Force Armament Center (AFAC).

During the Korean War, the APGC sent a team to Korea to test the F-84 and F-86 under real combat conditions and to work on projects coming from actual combat situations. Shortly after the outbreak of the war, the 550 GMW reactivated the guided bomb project and conducted testing in spring 1951. From August 10 to October 31, 1950, an APGC team assisted the 19th Bombardment Group with the combat employment of the RAZON in Korea with good results.

Throughout the 1950s, the APGC conducted operational suitability tests on every aircraft that entered the Air Force inventory in that decade and on weapons, photographics, electronics, aircraft maintenance, and other equipment. After 1954, the Air Force Operational Test Center provided project officers, charged with accomplishing a specific test, for the APGC's numerous tests. The 3200th Test Group designed and conducted the actual tests as close to the anticipated operational environment as possible.

The Korean War had found the Air Force handicapped in tactical air warfare because it had failed to develop tactical air support and weapons compatible with the new jet aircraft. By 1955, Eglin AFB had constructed new facilities, ranges, and laboratories for the AFAC to develop and test new missiles, bombs, and fire control systems. By 1957, the AFAC had made great improvements

in air-to-air tactics, close air support techniques, and air-delivered armaments, such as the infrared guided Sidewinder missile and the radar-homing Sparrow missile.



BOMARC Test Site, Auxiliary Field #9.

Over the 1950s, the Air Proving Ground Command (APGC) served as a major missile test center for weapons, such as the BOMARC, Matador, GAM-72 Quail, and GAM-77 Hound Dog. In December 1957, the Air Force combined the APGC and the AFAC to form the Air Proving Ground Center. The Center built the Eglin Gulf Test Range that allowed the center to utilize the airspace over part of the Gulf of Mexico for weapons testing since the new air-delivered weapons required increasingly greater areas for safe

target impact than the older land ranges provided.

Between 1968 and the present (2007), the Air Proving Ground Center underwent several name changes:

- August 1, 1968 – Armament Development and Test Center
- October 1, 1978 – Armament Division
- March 15, 1989 – Munitions Systems Division
- July 11, 1990 – Air Force Development Test Center
- October 1, 1998 – Air Armament Center (AAC)

The overall mission generally remained the same: the development and test of air-delivered nonnuclear munitions; command, control, communications, and intelligence systems; and aerospace navigation and guidance systems. New technology led to the development of increasingly more precise air-delivered weapons with laser, television, infrared, inertial navigation, and satellite navigation guidance systems. These weapons debuted in the late 1960s in Southeast Asia and then made the news during Operation DESERT STORM in February 1991. During the 1990s and early 2000s, AAC

provided American warfighters with the precision-guided munitions and combat support to dominate the enemy in Operations ALLIED FORCE, ENDURING FREEDOM, and IRAQI FREEDOM.

Additionally, in 1975, Eglin AFB built a refugee center for more than 10,000 Southeast Asian refugees, and, in 1980, for thousands of Cuban refugees. Eglin AFB also provided significant disaster relief and recovery efforts for hundreds of thousands of inhabitants along the Gulf coast, most recently in September 2004 after hurricane Ivan and in September 2005 after hurricane Katrina.

In the early 1960s, Air Force moved its Special Operations Forces (SOF) to Hurlburt Field, Eglin Field # 9, and eventually based a Special Air Warfare Center on Eglin Main. The Air Commandos were some of the first airman deployed to Vietnam and trained thousands of US and allied ground and air crew on the Eglin complex for the Southeast

Asian war into the early 1970s. The Air Commandos have participated in most combat operations and wars since 1973: the Son Tay Raiders (1970), the Eagle

Claw Iranian Rescue mission (1980), Granada (1983), Panama (1989), Haiti (1994) and the Balkans (1994 and 1999). Eglin's SOF units have also played significant roles in the anti-drug war in the United States and in Central and South America and major combat



Vietnamese Refugees, Eglin AFB, 1975.



AFSOC aircraft at Hurlburt Field, Nov. 27, 2007.

operations in Iraq and Afghanistan in the current Global War on Terror.

Because of the growing importance of its SOF, the Air Force activated the Special Operations Command at Hurlburt Field in 1990. By 2007, the most combat decorated regular Air Force wing (1 SOW) was based at Hurlburt Field, and the most combat decorated Reserve wing (919 SOW) was based at Duke Field.

The 4135th Strategic Wing, Strategic Air Command (SAC), equipped with the B-52 Stratofortress, was stationed at Eglin Air Force Base in 1959 in the western portion of Eglin Main as part of SAC's plan to disperse its B-52 wings around the country. In 1960, the wing's B-52s assisted in the developmental testing of the AGM-28 (GAM-77) Hound Dog air-to-surface missile and the ADM-20 (GAM-72) Quail decoy missile. On November 15, 1962, the wing was renamed the 39th Bombardment Wing. The Air Force inactivated the wing on June 25, 1965.

In 1965, the 33rd Fighter Wing (FW) (nicknamed the "Nomads"), the famed "MiG Killers" of the first Gulf War, assumed control of the former 39th Bomb Wing's areas. The largest associate unit at Eglin and a premier air-to-air combat unit of the Air Combat Command, the 33 FW has two squadrons of F-15 Eagles and an air control squadron. First established as the 33rd Pursuit Group in 1940, the wing has significantly contributed to tactical airpower around the world, flying the F-4 Phantom II from 1965 to 1978 and the



33FW F-15 with P-51 Mustang,
Eglin Air Show, 2002.

F-15 since 1978. The wing's first commander was then Colonel David C. Jones who later became Chief of Staff of the Air Force and Chairman of the Joint Chiefs of Staff. Other future Air Force generals who served with the 33 FW at Eglin AFB included General Daniel "Chappie" James, the first African-American to be promoted to full general in the Air Force.

Eglin AFB is also the home of the US Army's 6th Ranger Training Battalion, established at Eglin AFB in 1951 and currently located at Camp Rudder, formerly Biancur Field, Auxiliary Field #6, since 1970; and the US Navy's Explosive Ordnance Disposal School, located on Eglin Main since 1985.

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Aerial View, Eglin AFB, around 2000.

