

29 TEST AND EVALUATION SQUADRON



MISSION

The 29 Training Systems Squadron has personnel located at Eglin AFB and 11 geographically separated units around the nation: Barksdale, Beale, Creech, Dyess, Hill, Offutt, Robins, Tinker, Tyndall, and Whiteman AFBs as well as an operating location in Mesa, Ariz.

The squadron serves as the Combat Air Force's center of expertise for Aircrew Training Devices (ATD). Squadron personnel provide technical expertise on all aspects of ATD life-cycle management, including acquisition, modification, acceptance testing and certification testing for all A-10, B-1, B-2, B-52, E-3, E-4, E-8, EC-130, F-15C/E, F-16, F-22, F-35, HH-60, HC-130, MQ-1/9, RC-135, RQ-4 and U-2 ATDs.

Unit personnel also manage the CAF Simulator Certification Program. The squadron's efforts incorporate ATD oversight and management from concept development and preliminary design review through sustainment and program deactivation. By keeping training devices concurrent, cost effective and viable, the 29 TSS guarantees training systems meet present and future warfighters' needs while supporting evolving training demands with modern technology.

LINEAGE

29 Aero Squadron organized, 10 Oct 1918
Demobilized, 12 Sep 1919

29 Pursuit Squadron constituted on 24 Mar 1923
Activated on 1 Oct 1933

29 Aero Squadron reconstituted and consolidated with 29 Pursuit Squadron, 1935

Redesignated 29 Pursuit Squadron (Interceptor), 6 Dec 1939

Redesignated 29 Fighter Squadron, 15 May 1942
Inactivated, 25 May 1944
Activated, 21 Jul 1944
Inactivated, 3 Jul 1946
Redesignated 29 Fighter Interceptor Squadron, 23 Mar 1953
Activated, 8 Nov 1953
Inactivated, 1 Jul 1968
Discontinued and inactivated, 18 Jul 1968
Redesignated 29 Training Systems Squadron, 9 Apr 1993
Activated, 15 Apr 1993
Redesignated 29 Test and Evaluation Squadron, 16 Feb 2023

STATIONS

Camp Knox, KY, 10 Oct 1918
Godman Field, KY, Jan-12 Sep 1919
Albrook Field, CZ, 1 Oct 1933
Casa Larga, Panama, 17 May 1942-25 Mar 1944
Lincoln AAFld, NE, 5 Apr-25 May 1944
Pahndale AAFld CA, 21 Jul 1944
Bakersfield Mun Aprt, CA, 5 Aug 1944
Oxnard Flight Strip, CA, 9 Sep 1944
Santa Maria AAFld, CA, 10 Jul 1945
March Field CA, 6 Dec 1945-3 Jul 1946
Great Falls AFB, MT, 8 Nov 1953
Eglin AFB, FL, 15 Apr 1993

ASSIGNMENTS

Unkn, 1918-1919
16 Pursuit (later Fighter) Group, 1 Oct 1933
XXVI Fighter Command, 1 Nov 1943
Second Air Force, 8 Apr 1944-25 May 1944
412 Fighter Group, 21 Jul 1944-3 Jul 1946
29 Air Division, 8 Nov 1953
Great Falls Air Defense Sector, 1 Jul 1960
53 Test Management Group, 1 Oct 2002
753 Test and Evaluation Group, 1 Oct 2021

WEAPON SYSTEMS

JN-4
JN-6, 1918-1919
P-12, 1933
P-26 1938-1939
P-36, 1939-1941
P-40, 1941

P-39, 1942
A-36, 1944
P-63, 1944
A-24, 1944-1945
P-38, 1944-1945
P-59, 1944-1945
P-51, 1945-1946
P-80, 1945-1946
F-94, 1953-1957
F-89, **1957-1960**
F-101, 1960

COMMANDERS

1st Lt Ernest R. Lawson, 1 Oct 1933
1st Lt Joseph H. Atkinson, 4 Dec 1934
Maj George H. Beverly, 1 Mar 1935
1st Lt Thayer S. Olds, 1 Oct 1936
1st Lt Norman D. Sillin, 13 Feb 1937
1st Lt Stephen B. Mack, 21 Apr 1937
Capt Donald B. Smith, 12 May 1937
Capt Dwight O. Montieth, 15 Jun 1939
Unknown, May 1941-7 Dec 1941
Lt Col Carl Leo

HONORS

Service Streamers

American Theater

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations

Air Force Outstanding Unit Awards

1 Jun 1994-31 May 1996

1 Jun 1998-31 May 2000

1 Jun 2002-31 May 2004

1 Jun 2004-31 May 2006

1 Jun 2006-31 May 2008

1 Jun 2018-31 May 2020

Air Force Organizational Excellence Award

[15 Apr 1993]-31 Dec 1993

EMBLEM



29 Pursuit Squadron emblem



On and over a blue disc bordered golden yellow a gamecock in the position of attack (body, head, neck, wings, and feathers, brown; legs, feet, beak, and eyes, yellow; comb and wattles, red).
(Approved, 15 Mar 1935)



29 Training Systems Squadron emblem approved, 11 Jan 2016.

MOTTO

OPERATIONS

Constituted in the Regular Army on 23 March 1924, assigned to the 16th Pursuit Group, and allotted to the First Corps Area. Designated Active Associate was the 1st Pursuit Squadron 1923-27. Withdrawn from the First Corps Area on 19 February 1927 and allotted to the Second Corps Area. Withdrawn from the Second Corps Area on 1 September 1928 and allotted to the Eighth Corps Area. San Antonio, TX, designated as headquarters location on organization, but the unit was never organized at that location.

Participated in the "Goodwill Flight" to Guatemala 7-12 February 1938. Transferred on 5 October 1940 to Rio Hato Airfield, CZ. Transferred on 13 November 1940 to Albrook Field, CZ.

The squadron was later assigned to California where it was assigned to perform testing of the P-59 and P-80 based at Muroc Dry Lake). The early jets provided USAAF pilots and ground crews with valuable data about the difficulties and pitfalls involved in converting to jet aircraft. This information proved quite useful when more advanced jet fighters finally became available in quantity.

1 March 1945 Two Bell P-59A of the 29 Fighter Squadron, collided in mid-air over the Mojave Desert near Grey Butte Army Airfield during an anti-aircraft tracking exercise. 2nd Lt. Robert W. Murdock, pilot of 44-22620, and 2nd Lt. Howard L. Wilson, in 44-22626, are killed in the collision

The squadron later moved to several other airfields in California providing transition training to new jet pilots until being inactivated in July 1946.

It was reactivated in 1953 as part of Air Defense Command as an air defense squadron and equipped with F-94C Starfire day interceptors. It was assigned to Great Falls AFB, Montana with a mission for the air defense of the Upper Midwest region. It was re-equipped in 1957 with F-89H Scorpion Interceptor and later with the F-89J.

By June 1958 the 29 FIS was equipped with twenty-six F-89Js and in October they deployed to Tyndall AFB to represent the CADF in the Scorpion category at the First Annual William Tell competition. They placed second, scoring 33,200 out of the possible 40,800 points. In 1959 they again represented CADF with their Scorpions and placed second once again.

It received the new McDonnell F-101B and the F-101F operational and conversion trainer in 1960. The two-seat trainer version was equipped with dual controls, but carried the same armament as the F-101B and were fully combat-capable.

Two Voodoo's of the 29 FIS were involved in a more peaceful mission when they took part in Operation Safe Slide. Hazardous snow accumulations were removed in Glacier National Park by utilizing the overpressures created during super-sonic passes made by 29 F-101Bs. Earlier in the Voodoo's career, on October 2, 1959, a specially equipped F-101B flew at 1,080 mph in order to permit the recording of 6 minutes and 51 seconds of a total eclipse of the sun over the Canary Island area. Research into severe storm conditions were performed under the auspices of Colorado State University using civilian registered F-101 B, N-8234 (ex-USAF 57-410).

On 22 October 1962, before President John F. Kennedy told Americans that missiles were in place in Cuba, the squadron dispersed one third of its force, equipped with nuclear tipped missiles to Billings Logan Field at the start of the Cuban Missile Crisis. These planes returned to Malmstrom after the crisis.

It was inactivated in July 1968 as part of the drawdown of ADC interceptor bases, and the aircraft were passed along to the Air National Guard.

Maintaining and certifying simulators is the job of people assigned to the 29 Training Systems Squadron. The 29 TSS is part of the 53rd Wing. The 53rd Wing is responsible for the operational testing of every combat system in the Air Force, including aircraft, weapons and electronic warfare systems. People from the 29 TSS keep simulators "flying" all over the Air Force and, in fact, a squadron team recently completed the simulator certification process on the F-117 simulator at Holloman's 49th Fighter Wing.

"The 29 is responsible for maintaining and certifying simulators all over the world," said Maj. Robert Fannon, chief of fighter simulator certification with the 29 TSS at Eglin. "Not only do we certify more than 200 simulators, we support more than 30 different kinds of simulators as well."

Practicing missions on a simulator is invaluable training, said Lt. Col. Joe Skaja, commander of the 7th Combat Systems Training Squadron at Holloman. "We don't have any two-seat F-117s, so the first mission for the stealth pilots is a solo flight. Obviously to get them ready for that, using the simulator is critical," said Skaja. "They'll go through about 11 full-up missions on the sim before their first actual flight." Providing as much realism as possible for the pilots is the goal. In fact, the simulator often exceeds the reality, said Skaja. "We train to a higher standard," he said. "We want the pilots to be able to face any scenario they may encounter in the real world, so in the simulator they face about every emergency scenario possible. We want them to go through it in the sim and learn the procedures for dealing with emergencies before they have to face it in reality."

The certification provided by 29 TSS people plays an important role in keeping the simulators working and current. "We're very pleased with the support we get from the 29," said Skaja. "Our simulator is very current and every time there's an upgrade to the jet, the sim is upgraded immediately." Supporting so many different kinds of simulators requires flexibility. "We just spent about two weeks at Barksdale (AFB, La.) certifying three B-52 simulators," said Fannon. "Certifying the F-117 simulator required about three days." The certification team reviews all of the software and hardware involved to make sure it is operating as advertised. Qualified flight crews then provide feedback on the accuracy and realism of the scenarios provided. "They tell us how close it comes to the real thing and we try to make sure that the simulator matches what you have to do in the airplane," said Fannon. Although many aspects of flight can be recreated in the simulator, some components cannot. "For example, we can train takeoff in the simulator, but it's not quite like the airplane because we don't have motion, but we can train the checklists," Fannon said. "We can provide visual cues and we can give them great training on the systems. The goal is to have pilots who really know the systems and procedures well before they have to face any problems for real." In the end, simulators put flight crews through situations they may never have to face for real.

DEPARTMENT OF THE AIR FORCE ORGANIZATIONAL HISTORIES

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Sources

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The Institute of Heraldry. U.S. Army. Fort Belvoir, Virginia.

Air Force News. Air Force Public Affairs Agency.

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Malmstrom AFB, First Minuteman Wing of the Air Force. Army and Navy Publishing, Co., Inc. Baton Rouge, LA.
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