# **49 TEST AND EVALUATION SQUADRON**



# **MISSION**

The 49 Test and Evaluation Squadron at Barksdale Air Force Base, La., perfects lethality by executing conventional and nuclear Operational Test & Evaluation, directing Nuclear Weapon Systems Evaluation Program and developing tactics, techniques and procedures to maximize B-52 readiness, optimize CAF integration, and validate national defense capabilities. The 49 TES executes conventional OT&E to increase B-52 capabilities through improvements in sensors, weapons, communications, and navigation systems. The squadron also plans, executes, analyzes, and reports ACC's \$50 million annual air-delivered NucWSEP (Combat Sledgehammer). Reliability data for nuclear capable aircraft (B-52, B-2, F-15 and F-16) and weapons (all nuclear bombs and cruise missiles) is reported to USSTRATCOM for inclusion in their annual strategic war plan update. The 49 TES is the Air Force's premier cruise missile test organization, launching approximately 6-12 conventional and nuclear cruise missiles each year.

#### LINEAGE

49 Aero Squadron organized, 6 Aug 1917 Demobilized, 22 Mar 1919

166 Aero Squadron organized, 18 Dec 1917 Redesignated 49 Squadron, 14 Mar 1921 Redesignated 49 Bombardment Squadron, 25 Jan 1923

49 Aero Squadron reconstituted and 49 Bombardment Squadron, consolidated, 16 Oct 1936

Redesignated 49 Bombardment Squadron (Heavy), 6 Dec 1939

Inactivated, 28 Feb 1946

Redesignated 49 Bombardment Squadron, Very Heavy, 5 Apr 1946

Activated, 1 Jul 1947

Redesignated 49 Bombardment Squadron, Medium, 28 May 1948

Inactivated, 1 Apr 1963

Redesignated 49 Test Squadron, 12 Feb 1986

Activated, 1 Jul 1986

Redesignated 49 Test and Evaluation Squadron, 20 Nov 1998

# **STATIONS**

49 Aero Squadron

Kelly Field, TX, 6 Aug-28 Dec 1917

Castle Bromwich, England, 1 Feb-24 Jun 1918

Issoudun, France, 2 Jul 1918

Vaucouleurs, France, 28 Jul 1918

Toul, France, 2 Aug 1918

Bebrain, France, 23 Sep 1918

Souilly, France, 7 Nov 1918

Colombey-les-Belles, France, 7 Dec 1918-unkn

Garden City, NY, Mar-22 Mar 1919

# 166 Aero Squadron

Kelly Field, Tex, 18 Dec 1917

Wilbur Wright Field, OH, 24 Dec 1917-20 Feb 1918

Catterick Bridge, England, 25 Mar-7 Aug 1918

Delouze, France, 26 Aug 1918

Vinets-sur-Aube, France, 1 Sep 1918

Delouze, France, 7 Sep 1918

Colombey-les-Belles, France, 12 Sep 1918

Amanty, France, 21 Sep 1918

Maulan, France, 25 Sep 1918

Jop-pecourt, France, 22 Nov 1918

Trier, Germany, 5 Jan 1919

Colombey-les-Belles, France, 17 Apr 1919

Le Mans, France, 3 May 1919

Brest, France, 19 May-3 Jun 1919

Mitchel Field, NY, 17 Jun 1919

Ellington Field, TX, Jul 1919

Kelly Field, Tex, 26 Sep 1919 (operated from Langley Field, VA, 20 May-26 Oct 1921)

Langley Field, VA, 30 Jun 1922

Aberdeen Proving Ground, MD, 17 Aug 1922

Langley Field, VA, 18 Jan 1928 to consolidation in 1936

Consolidated squadron

Langley Field, VA, from consolidation in 1936 to 23 Nov 1941

Newfoundland AB, Newfoundland, 13 Dec 1941 (air echelon, en route to Newfoundland, arrived Mitchel Field, NY, 1 Dec 1941; ordered to west coast for emergency duty, 8 Dec 1941;

operated from Geiger Field, WA, in conjunction with 12th Reconnaissance Squadron until echelon dissolved in late Dec 1941)

Argentia, Newfoundland, 16 Jan-Jun 1942

Langley Field, VA, 24 Jun 1942

Ephrata, WA, 29 Oct 1942

Lewistown, Mont, 28 Nov 1942-13 Mar 1943

Navarin, Algeria, 25 Apr 1943

Chateaudun-du-Rhumel, Algeria, 27 Apr 1943

Ain M'lila, Algeria, 17 Jun 1943

Massicault, Tunisia, 31 Jul 1943

Amendola, Italy, 10 Dec 1943

Foggia, Italy, 29 Oct 1945-28 Feb 1946

Andrews Field, MD, 1 Jul 1947

Davis-Monthan Field, AZ, 24 Sep 1947

Chatham AFB, GA, 1 May 1949

Hunter AFB, GA, 29 Sep 1950

Dyess AFB, TX, 1 Sep 1955-25 Jun 1961

Barksdale AFB, LA, 1 Jul 1986

# **DEPLOYED STATIONS**

Lakenheath RAF Station, UK, 9 Aug-16 Nov 1948

Sculthorpe RAF Station, UK, 21 Feb-20 May 1950

Mildenhall RAF Station, UK, 4 May-4 Sep 1951

Upper Heyford RAF Station, UK, 4 Sep-3 Dec 1952

Sidi Slimane AB, Morocco, 7 Aug-23 Sep 1954 and 6 Jul-25 Aug 1956

### **ASSIGNMENTS**

49 Aero Squadron

Unkn, 6 Aug 1917-28 Jul 1918

3 Pursuit Group, 28 Jul 1918

2 Pursuit Group, 2 Aug-Dec 1918

Unkn, Dec 1918-22 Mar 1919

166 Aero Squadron

Unkn, 17 Dec 1917-Sep 1918

1 Day Bombardment Group, Sep-Nov 1918

Unkn, Nov 1918-18 Sep 1919

1 Day Bombardment (later 2 Bombardment) Group, 18 Sep 1919 to consolidation in 1936 (detached for operations with 1st Provisional Air Brigade, May-Oct 1921; attached to Ordnance Department for service, Aug 1922-Jan 1928)

Consolidated squadron

2 Bombardment Group, from consolidation in 1936 to 28 Feb 1946

2 Bombardment Group, 1 Jul 1947

2 Bombardment Wing, Medium, 16 Jun 1952-1 Apr 1963

Strategic Air Command, 1 Jul 1986

USAF Air Warfare Center, 1 Jun 1992

79 Test and Evaluation Group, 15 Apr 1993

53 Test and Evaluation Group, 20 Nov 1998

# **ATTACHMENTS**

Newfoundland Base Command, Dec 1941-Jun 1942 2 Bombardment Wing, Medium, 10 Feb 1951-15 Jun 1952 Strategic Air Combat Operations Staff, 1 Jul 1986-1 Jun 1992

# **WEAPON SYSTEMS**

49 Aero Squadron JN-4, 1917 Spad XIII, 1918

166th Aero Squadron

DH-4, 1918-1919

DH-4, Caproni

MB-2 (NBS-1)

LB-5A

LB-7

B-3

B-5A

B-6A

Y1B-9

# Consolidated squadron

B-10B

B-18B

A-20

XB-15

B-23

B-17, 1942-1945

B-29, 1947-1950

B-50, 1949-1954

B-47, 1954

#### **COMMANDERS**

49 Aero Squadron

Maj Harvey B. S. Burwell, 6 Aug 1917 Maj John H. Reynolds, 9 Nov 1917 2Lt William B. Schultz, 31 Jan 1918 2Lt Richard D. Waller, 4 Apr 1918 1Lt John H. Sutton, Jr., 27 Jun 1918 Capt George F. Fisher, 18 Jul-Nov 1918 Unkn, Nov 1918-Mar 1919.

166 Aero Squadron 1Lt D. E. Miller, 18 Dec 1917 Capt Victor Parks, Jr., 26 Aug 1918-Jun 1919 1lt Fred S. Borum, Dec 1920 Capt Victor Parks, Jr., 4 Feb 1921 1lt Harold L. George, 12 May 1921 1lt Edward W. Raley, 30 Oct 1921 Capt Asa N. Duncan, 4 Jun 1922 Capt Richard H. Ballard, 1 May 1922 Capt Romeyn B. Hough, Jr., 29 Aug 1922 1lt Bernard S. Thompson, 3 Oct 1924 Maj Eugene A. Lohman, 18 Jun 1926 Maj Harold Geiger, 22 Jul 1926 1lt William H. Bleakley, 16 May 1927 1lt Mark R. Woodward, 29 Jul 1927 Maj Fred H. Coleman, 5 Aug 1927 Capt Henry Pascale, 10 Jul 1930 Capt Theodore H. Koenig, 3 Dec 1930 Capt Eugene L. Eubank, 15 Aug 1931 1lt Alva L. Harvey, 21 Dec 1933 Capt Henry H. Reily, 23 Feb 1934 Capt Eugene L. Eubank, 9 May 1934 1lt Edward A. Hillery, 4 Jun 1934 1lt Archibald Y. Smith, 14 Jul 1934 Capt Malcolm M. Lawton, 17 Dec 1934

Consolidated Squadron
Maj Caleb V. Haynes, (By Feb) 1938
Capt Alvord Van P. Anderson, Jr., (By Sep) 1940
Lt Col Robert E. Haynes, 10 Nov 1942
Maj George A. Robinson, 26 Sep 1943
Maj R. T. Headrick, 12 Oct 1943
Capt J. W. Bigham, 30 Nov 1943
Maj Robert F. Stafford, 20 Mar 1944
Lt Col Richard S. Abbey, 13 Jan 1944
Lt Col Luther M. Bevens, Jan 1945

Lt Col Walter Flora, Jr., 21 Apr 1945

Maj Sumner W. Peterson, 2 Oct 1945

Capt Jay E. Murphy, 3 Dec 1945

Capt William N. J. Cotter, 18 Jan 1946

Maj Reginald B. Munson, 27 Jan-28 Feb 1946

Lt Col Frank L. Luschen, 27 Sep 1947

Lt Col George L. Newton, Jr., 1 Jun 1948

Lt Col Robert T. Calhoun, (By 1 Jul) 1950

Lt Col Hugh B. Vail, 21 Mar 1951

Lt Col Walter H. Heath, Jr., Nov 1951

Lt Col Thomas H. Schnebly, 16 Jane 1953

Maj George H. Mckee, Jun 1953

Lt Col Floyd I. Robinson, 9 Jun 1955

Lt Col Elmer, H. Hammer, Jr., 1 Jun 1956

Lt Col Sug E. Roberts, 1 Aug 1958

Lt Col Paul A. Wiles, 1 Aug 1962-1 Apr 1963

#### **HONORS**

#### **Service Streamers**

# **Campaign Streamers**

World War I, credits of consolidated squadron: Lorraine (earned by 49 Aero)

St Mihiel (earned by 49 Aero)

Meuse-Argonne (earned by 49 Aero and 166th Aero)

World War II

Antisubmarine, American Theater

Air Offensive, Europe

Tunisia

Sicily

Naples-Foggia

Anzio

Rome-Arno

Normandy

Northern France

Southern France

North Apennines

Rhineland

Central Europe

Po Valley

Air Combat, EAME Theater

# **Armed Forces Expeditionary Streamers**

# **Decorations**

Distinguished Unit Citations Steyr, Austria, 24 Feb 1944 Germany, 25 Feb 1944

Air Force Outstanding Unit Award

1 Nov 1956-1 Apr 1957

1 Jul 1985-30 Jun 1987

1 Jul 1989-30 Jun 1991

1 Jul 1992-30 Jun 1994

1 Jul 1994-31 May 1996

1 Jun 1998-31 May 2000

1 Jun 2002-31 May 2004

1 Jun 2004-31 May 2006

# **EMBLEM**

One Hundred Sixty-sixth: Insignia: Includes the sun with a pair of wings made of the American, flag. In the foreground is a map of Europe, with Germany distinctly marked, while a hand, armed with an aerial bomb, hovers over it, ready to drop the bomb.







49 Bombardment Squadron emblems



49 Test Squadron emblem



49 Test and Evaluation Squadron emblem: On a disc Tenné, issuant from dexter fesswise the head of a wolf snarling Proper, all within a diminished border Silver Gray. Attached above the disc, an Orange scroll edged with a narrow Silver Gray border and inscribed "49 TEST & EVAL SQ" in Silver Gray letters. Attached below the disc, an Orange scroll edged with a narrow Silver Gray

border and inscribed "MEETING THE CHALLENGE" in Silver Gray letters. **SIGNIFICANCE:** Ultramarine blue and Air Force yellow are the Air Force colors. Blue alludes to the sky, the primary theater of Air Force operations. Yellow refers to the sun and the excellence required of Air Force personnel. The orange background recalls the tradition of the Army Air Corps. The snarling wolf represents the aggressive methods the unit employs in carrying out its mission. The Squadron's emblem dates back to World War I. (Approved 3 Mar 1924 from World War I emblem) Approved on 3 Mar 1924, latest rendering, 15 Feb 2019.

#### **MOTTO**

#### **OPERATIONS**

49 Aero: Primary flying training unit, Sep-Nov 1917; combat as pursuit unit with First Army, 10 Aug-10 Nov 1918. It was engaged in the operations in the Toul Sector, St. Mihiel, and the Argonne-Meuse first and second offensives. It accomplished 161 patrols and war missions, fought 53 combats and received official confirmation for 24 victories. It ceased operations on December 5, 1918. It suffered 6 casualties, consisting of 3 killed, 1 prisoner and 2 missing.

166th Aero Squadron: Combat as day bombardment unit with First Army, 18 Oct-5 Nov 1918. It was assigned to the First Day Bombardment Group, First Army, September 20, 1918, and reached the Front at Maulan about September 25th. This squadron engaged in operations in the Argonne-Meuse, first and second offensives. It accomplished 11 war missions and bombing raids into German territory/fought off many German attacks and received official confirmation for 6 victories. It suffered 4 casualties, consisting of 1 killed and 3 wounded. It ceased operations April 7, 1919.

Attached to the Ordnance Department at Aberdeen Proving Ground to conduct tests with newly developed aerial bombs August 1922-January 1928.

5 September 1923, the 49 assisted the 2nd Bomb Group in the first test of Air Power vs Naval Power at Cape Hatteras, off the coast of North Carolina, where the mighty battleships "New Jersey and Virginia" were sent to the bottom of the ocean.

Transferred on 17 January 1928 to Langley Field, VA. In order to better facilitate its training, administration, supply and operation which will result from its concentration with other bombardment units, the 49th Bombardment Sauahron has been transferred from Aberdeen Proving Ground, Md., to Langley Field, Va, The unit will proceed to Langley Field with organizational equipment, except such as will be required to properly operate three bombardment and two observation planes at Aberdeen. Orders provide that the following named Air Corps officers, now on duty with the 49th Squadron, and not to exceed ten enlisted men of this unit, will remain at Aberdeen Proving Gronni to carry on experimental work and demonstrations in conjunction with the activities at that posts Major Fred H. Coleman, 1st Lieuts. Mark R. Woodward, fm.H. Bleakley and 2nd Lieut, George H. Steel.

Participated in mercy missions to provide relief to marooned inhabitants on islands isolated by

the freezing of Chesapeake Bay.

12 to 13 October 1928, the 49 participated with the 2nd Bomb Group in the annual ordnance demonstration at the Aberdeen Proving Ground. Six bombers under the command of Major Hugh J. Knerr, dropped 12x600 pound bombs in salvo on a ground target.

Participated in demonstrations of effectiveness of aerial bombardment on warships, Jun-Sep 1921

25 June 1933 Boeing Y1B-9A, 32-307, '190', of the 49 Bombardment Squadron, departs Logan Field, Baltimore, Maryland at 2020 hrs. on routine night training mission to Langley Field, Virginia, but experience difficulties at 2200 hrs., attempts crash landing in the James River one mile from Rushmere Island. Bomber strikes water nose first, breaks in half, sinks, killing four crew including pilot 2nd Lt. Lewis Horvath and co-pilot H. W. Macklean.

10 to 11 February 1936, the 49 dropped much needed food and supplies to the marooned inhabitants of Tangier and Smith Islands in the Chesapeake Bay. Many lives were saved by this action.

In March 1936, the 49 along with the rest of the 2nd Bomb Group flew mercy missions carrying food, medicine, and supplies to communities in Pennsylvania isolated by devastating floods.

4 March 1936, the first YB-17 was delivered to the 2nd Group at Langley Field. This was the first ship of this type to go to a tactical outfit.

Consolidated squadron: Participated in good-will flights to Argentina, 15-27 Feb 1938, Colombia, 3-12 Aug 1938, Mexico, 9-15 Jun 1939, and Brazil, 10-28 Nov 1939.

Unit B-17s located the Italian luxury liner S.S. Rex about 725 miles out to sea on the famous long range interception mission conducted on 12 May 1938.

Participated in mercy missions in support of relief operations during the Chilean Earthquake at Santiago 4-14 February 1939.

Antisubmarine patrols off Pacific coast, Dec 1941, and Atlantic coast, 25 Jul-c. 28 Oct 1942; combat in MTO and ETO, 28 Apr 1943-1 May 1945.

After activation on 1 Jul 1947 at Andrews Field, MD and transfer to Davis-Monthan Field, AZ, without personnel and equipment, received B-29s and began training in Nov as part of Strategic Air Command's long-range strike force.

Deployed to Lakenheath RAF Station, UK, 9 Aug-16 Nov 1948. Deployed to UK in Feb 1950 to learn British system of refueling. After transfer to Hunter AFB, GA, in Sep 1950, reequipped with B-50s for training missions over eastern United States. Deployed to UK, 2 May-4 Sep 1951 and 4

Sep-3 Dec 1952.

In Sep 1953, sent aircraft and crews to participate in NATO exercises and RAF bombing competition in England. Transitioned to B-47s in Feb 1954.

Deployed aircraft and crews to Morocco. UK, and Spain on several occasions between 1954 and 1962. Served on alert during Cuban Missile Crisis, 24 Oct-27 Nov 1962. Inactivated on 1 Apr 1963.

The mission of the 49 Bombardment Squadron (M) is the training of medium bombardment aircrews as an integral part of the 2nd Bombardment Group (M) in its role as a ready striking force for the Strategic Air Command.

DEPARTMENT OF THE AIR FORCE ORGANIZATIONAL HISTORIES

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Unit yearbook. 43<sup>rd</sup> Bombardment Wing, Davis Monthan AFB, Tucson AZ. 1948.