





## Vance Air Force Base, Oklahoma



### **LOCATION**

Located 90 miles north by northwest of Oklahoma City at Enid, Okla., with an elevation of 1,307 feet above sea level, Vance Air Force Base is the northernmost Joint Specialized Undergraduate Pilot Training base in the Air Education and Training Command.

### **PHYSICAL FACILITIES**

There are 130 buildings and 306 facilities on Vance, not including housing, as of November 2019. Additionally, Vance has 242 housing units - 141 officer family units, 101 enlisted family units, 309 unaccompanied units, 28 visitor units, and 5 temporary lodging units. Vance is currently replacing the outside runway, several runways, and recently completed construction of a new Air Traffic Control Tower. The base is approximately 2,122 acres, which includes fee-owned land and easements. Kegelman Auxiliary Field is 1,054 acres with seven buildings and 39 facilities, and is located near Jet, Okla.

### **BASE POPULATION**

Vance has about 1,400 active duty and reserve military, as well as more than 1,500 family members, living in the local area. The base also employes more than 1,400 Federal civilian employees, non-appropriated fund civilian employees, contractors and private business employees. There are an estimated 3,000 retired military members in the local area.

### ANNUAL FLYING HOURS AND SORTIES

The wing operates over 200 aircraft, flies more than 50,000 sorties annually and logs more than 74,000 flying hours in the T-1A Jayhawk, T-6A Texan II and T-38C Talon. More than 300 U.S. Air Force and allied student pilots graduate from pilot training at Vance each year.

#### **GENERAL REVIEW**

The mission of the 71st Flying Training Wing is to deliver world-class U.S. & Allied pilots, develop innovative Airmen, deploy combat ready warriors and demonstrate our "Vance Proud" culture. Vance is responsible for training Air Force and allied student pilots for worldwide deployment and Aerospace Expeditionary Force support. The wing reports to Air Education and Training Command.

Joint Specialized Undergraduate Pilot Training (JSUPT) is divided into three phases that cover 52 weeks. Phase I (preflight) is 24 days long and is split into two units: five hours of ground training and 220.9 hours of academic training. Ground training consists of emergency procedures, aircraft operating limitations, checklist usage and local radio procedures while academic training consists of aerospace physiology/human factors, T-6 systems, flying fundamentals and introduction to aerodynamics. As part of the primary training syllabus developed at Vance, water survival training was added to Phase I in April 1998.

Phase II (T-6) primary training is 90 flying training days (28 calendar weeks) long and split into five units: Contact, instrument, navigation, formation and low-level. These units include 50.6 hours of academic and ground training — instruments, weather, navigation and mission planning — 48.3 hours of flight simulator training and 86.8 hours of aircraft flying training.

Phase III fighter-bomber track (T-38C) advanced training is 120 days long and is split into five units: 60 hours of ground training, 80 hours of academic training consisting of T-38C systems, aerodynamics, flight planning, and an instrument qualifying examination, three hours of cockpit familiarization, 29 hours of simulator training and 119 hours of in-flight training.

Phase III tanker-airlift track (T-1A) advanced training is 120 days long and is split into five units: 10 hours of ground training; 140 hours of academic training consisting of T-1A systems, aerodynamics, instruments and an instrument qualifying examination, three hours of cockpit familiarization, 42 hours of simulator training and 87 hours of in-flight training.

Vance Air Force Base is named for Lt. Col. Leon R. Vance, a local World War II hero and Medal of Honor recipient. Originally a flight school that trained more than 9,000 pilots for the Army Air Corps between 1941 and 1945, the base was activated Jan. 13, 1948 within the Air Training Command of the newly formed Air Force.

Vance was the first base in AETC to have extensive civilian contractor support for base functions ranging from operational functions such as aircraft maintenance to support functions such as child care services. The support contract began in 1960 with award to Serv-Air. Northrop Worldwide Aircraft Services was awarded the follow-on contract when it was competed in 1972. On Feb. 1, 2001, the next contract was awarded to DynCorp Technical Services. Computer Sciences Corporation purchased Dyncorp Technical Services and assumed contract performance in 2005. Computer Sciences Corporation received award of the next contract in 2008. In 2013 Pacific Architects and Engineers purchased Computer Sciences Corporation and assumed performance of the contract. In December 2014 a separate contract for Flying Operations Support was issued to L-3 Communications Vertex Aerospace while Pacific Architects and Engineers continued support of Base Operating Support functions under a "bridge contract. A separate Base Operating Support contract was competed and awarded in May 2016 to Arctic Slope Regional Corporation Communications. In 2019 Vertex Aerospace was divested from L-3 Communications and assumed responsibility as Vertex Aerospace for performance of the Flying Operations Support contract.

#### **POINT OF CONTACT**

71st Flying Training Wing, Public Affairs Office, 246 Brown Parkway, Suite 206, Vance AFB, OK 73705-5028; (580) 213-5250



FACT SHEET



# Vance AFB T-6A Texan II



### **MISSION**

The T-6A Texan II is a single-engine, two-seat primary trainer designed to train Joint Primary Pilot Training, or JPPT, students in basic flying skills common to U.S. Air Force and Navy pilots.

### **FEATURES**

Produced by Raytheon Aircraft, the T-6A Texan II is a military trainer version of Raytheon's Beech/Pilatus PC-9 Mk II.

Stepped-tandem seating in the single cockpit places one crewmember in front of the other, with the student and instructor positions being interchangeable. A pilot may also fly the aircraft alone from the front seat. Pilots enter the T-6A cockpit through a side-opening, one-piece canopy that has demonstrated resistance to bird strikes at speeds up to 270 knots.

The T-6A has a Pratt & Whitney Canada PT6A-68 turbo-prop engine that delivers 1,100 horsepower. Because of its excellent thrust-to-weight ratio, the aircraft can perform an initial climb of 3,100 feet (944.8 meters) per minute and can reach 18,000 feet (5,486.4 meters) in less than six minutes.

The aircraft is fully aerobatic and features a pressurized cockpit with an anti-G system, ejection seat and an advanced avionics package with sunlight-readable liquid crystal displays.

### BACKGROUND

Before being formally named in 1997, the T-6A was identified in a 1989 Department of Defense Trainer Aircraft Master Plan as the aircraft portion of the Joint Primary Aircraft Training

System, or JPATS. The system includes a suite of simulators, training devices and a training integration management system.

On Feb. 5, 1996, Raytheon was awarded the JPATS acquisition and support contracts. The first operational T-6A arrived at Randolph Air Force Base, Texas, in May 2000. The full rate production contract was awarded in December 2001. Air Force production of the aircraft was completed in 2010.

The T-6A is used to train JPPT students, providing the basic skills necessary to progress to one of four training tracks: the Air Force bomber-fighter or the Navy strike track, the Air Force airlift-tanker or Navy maritime track, the Air Force or Navy turboprop track and the Air Force-Navy helicopter track.

Instructor pilot training in the T-6A began at Randolph in 2000. JPPT began in October 2001 at Moody Air Force Base, Georgia, and is currently at Columbus AFB, Mississippi, Vance AFB, Oklahoma, and Laughlin AFB and Sheppard AFB in Texas.

### **GENERAL CHARACTERISTICS**

Primary Function: Entry-level trainer in joint primary pilot training Builder: Raytheon Aircraft Co. Powerplant: 1,100 horsepower Pratt & Whitney Canada PT6A-68 turbo-prop engine Wingspan: 33.5 feet (10.19 meters) Length: 33.4 feet (10.16 meters) Height: 10.7 feet (3.23 meters) Speed: 320 miles per hour Standard Basic Empty Weight: 6,500 pounds (2,955 kilograms) Ceiling: 31,000 feet (9448.8 meters) Range: 900 nautical miles (1,667 kilometers) Crew: Two, student pilot and instructor pilot Armament: None Date Deployed: May 2000 Unit Cost: \$4.272 million Inventory: Active force, 446 aircraft



**FACT SHEET** 



# Vance AFB T-1A Jayhawk



### **MISSION**

The T-1A Jayhawk is a medium-range, twin-engine jet trainer used in the advanced phase of specialized undergraduate pilot training for students selected to fly airlift or tanker aircraft. It is also used to support navigator training for the U.S. Air Force, Navy, Marine Corps and international services.

### **FEATURES**

The swept-wing T-1A is a military version of the Beech 400A. It has cockpit seating for an instructor and two students and is powered by twin turbofan engines capable of an operating speed of 538 mph. The T-1A differs from its commercial counterpart with structural enhancements that provide for increased bird strike resistance and an additional fuselage fuel tank.

### BACKGROUND

The first T-1A was delivered to Reese Air Force Base, Texas, in January 1992, and student training began in 1993. Vance AFB received its first T-1A in 1995.

Starting in 1993, undergraduate pilots who have graduated from their primary aircraft have proceeded to specialized training tailored for their follow-on assignments. The T-1A is used in advanced training for students identified to go into airlift or tanker aircraft. Those selected for bombers and fighters receive their advanced in the T-38.

The T-1A is used at Columbus AFB, Miss., Laughlin AFB, Texas, and Vance AFB, Okla. It is also used at Randolph AFB, Texas, to train instructor pilots and at Naval Air Station Pensacola, Fla., for combat systems officer training.

### **GENERAL CHARACTERISTICS**

Primary Function: Advanced trainer for airlift and tanker pilots Builder: Raytheon Corp. (Beech) Power Plant: Two Pratt and Whitney JT15D-5B turbofan engines Thrust: 2,900 pounds each engine Length: 48 feet, 5 inches (14.75 meters) Height: 13 feet, 11 inches (4.24 meters) Wingspan: 43 feet, 6 inches (13.25 meters) Maximum Speed: 538 miles per hour (Mach .78) Ceiling: 41,000 feet (12,500 meters) Maximum Takeoff Weight: 16,100 pounds (7,303 kilograms) Range: 2,222 nautical miles (2,900nm flying long-range cruise) Armament: None Crew: Three (pilot, co-pilot, instructor pilot) Date Deployed: February 1992 Unit Cost: \$4.1 million Inventory: Active force, 178; ANG, 0; Reserve, 0



**FACT SHEET** 



# Vance AFB T-38C Talon



### MISSION

The T-38 Talon is a twin-engine, high-altitude, supersonic jet trainer used in a variety of roles because of its design, economy of operations, ease of maintenance, high performance and exceptional safety record. Air Education and Training Command is the primary user of the T-38 for joint specialized undergraduate pilot training. Air Combat Command, Air Force Materiel Command and the National Aeronautics and Space Administration also use the T-38A in various roles.

### **FEATURES**

The T-38 has swept wings, a streamlined fuselage and tricycle landing gear with a steerable nose wheel. Two independent hydraulic systems power the ailerons, rudder and other flight control surfaces. Critical aircraft components are waist high and can be easily reached by maintenance crews.

The T-38C incorporates a "glass cockpit" with integrated avionics displays, head-up display and an electronic "no drop bomb" scoring system. The AT-38B has a gun sight and practice bomb dispenser.

The T-38 needs as little as 2,300 feet (695.2 meters) of runway to take off and can climb from sea level to nearly 30,000 feet (9,068 meters) in one minute. T-38s modified by the propulsion modernization program have approximately 19 percent more thrust, reducing takeoff distance by 9 percent.

The instructor and student sit in tandem on rocket-powered ejection seats in a pressurized, airconditioned cockpit.

### BACKGROUND

Air Education and Training Command uses the T-38C to prepare pilots for front-line fighter and bomber aircraft such as the F-15E Strike Eagle, F-15C Eagle, F-16 Fighting Falcon, B-1B Lancer, A-10 Warthog and F-22 Raptor.

The Talon first flew in 1959. More than 1,100 were delivered to the Air Force between 1961 and 1972 when production ended. As the T-38 fleet has aged, specific airframe, engine and system components have been modified or replaced. Pacer Classic is the name given to a sustainment program that integrates essential modifications, and includes major structural replacements into one process.

AETC began receiving T-38C models in 2001 as part of the Avionics Upgrade Program. T-38C models will also undergo a propulsion modernization program which replaces major engine components to enhance reliability and maintainability, and an engine inlet/injector modification to increase available takeoff thrust. These upgrades and modifications, with the Pacer Classic program, should extend the service life of T-38s to 2020.

Advanced JSUPT students fly the T-38C in aerobatics, formation, night, instrument and crosscountry navigation training.

Test pilots and flight test engineers are trained in T-38s at the U.S. Air Force Test Pilot School at Edwards Air Force Base, Calif. Air Force Materiel Command uses the T-38 to test experimental equipment such as electrical and weapon systems.

Pilots from most North Atlantic Treaty Organization countries train in the T-38 at Sheppard AFB, Texas, through the Euro-NATO Joint Jet Pilot Training Program.

The National Aeronautics and Space Administration uses T-38 aircraft as trainers for astronauts and as observers and chase planes on programs such as the space shuttle.

#### **GENERAL CHARACTERISTICS**

Primary Function: Advanced jet pilot trainer Builder: Northrop Corp. Power Plant: Two General Electric J85-GE-5 turbojet engines with afterburners Thrust: 2,050 pounds dry thrust; 2,900 with afterburners Thrust (with PMP): 2,200 pounds dry thrust; 3,300 with afterburners Length: 46 feet, 4 inches (14 meters) Height: 12 feet, 10 inches (3.8 meters) Wingspan: 25 feet, 3 inches (7.6 meters) Speed: 812 mph (Mach 1.08 at sea level) Ceiling: Above 55,000 feet (16,764 meters) Maximum Takeoff Weight: 12,093 pounds (5,485 kilograms) Range: 1,093 miles Armament: T-38A/C: none; AT-38B: provisions for practice bomb dispenser Unit Cost: \$756,000 (1961 constant dollars) Crew: Two, student and instructor Date Deployed: March 1961 Inventory: Active force, 546; ANG, 0; Reserve 0