



VIPER EAST F-16 DEMONSTRATION TEAM



(Left to Right)

Major Geoff "HAK" Hickman – Viper East Commander and Demo Pilot

SSgt Donald G. Russell, Avionics Spec
SSgt Daryl L. Page, Crew Chief
SrA Timothy J. Strickenberger, Crew Chief
SSgt Brian M. Lavorgna, Crew Chief

SSgt John M. Schaub, Avionics Spec
SrA Eddie Escamilla, Crew Chief
TSgt Elden J. McBride, Asst NCOIC
MSgt James A. Montano, NCOIC





Fact Sheet

United States Air Force

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Viper East F-16 Demonstration Team



The Viper East F-16 Demonstration Team is one of six fighter demonstration teams sponsored by the Air Combat Command of the United States Air Force. The Viper East F-16 Demonstration Team is assigned to the 20th Fighter Wing, 20th Aircraft Maintenance Squadron, 77th Aircraft Maintenance Unit at Shaw AFB, SC.

The demonstration team's primary duty is to promote recruiting and retention through the understanding of the Air Force and its mission. To do this, the team exhibits the tactical capabilities of the F-16CJ and the professional competence of Air Force members.

The team has performed for more than 7 million spectators in the U.S., Canada and Europe. Team members include the pilot, four safety officers and eight maintenance personnel. The eight maintainers are responsible for ensuring the three aircraft are mission capable and repaired if necessary.

The F-16 is a multi-purpose aircraft capable of a variety of missions including air interdiction, suppression of enemy air defenses, close air support and air superiority. It's been part of the United States Air Force inventory since 1979 and is flown by numerous allied nations.

The F-16 served with distinction in the Gulf War logging more sorties and dropping more bombs than any other aircraft engaged in that war. The aircraft is powered by a single engine capable of producing approximately 30,000 pounds of thrust. As a comparison, that is more horsepower than the entire starting lineup of the Indianapolis 500. The aircraft has a top speed of more than twice the speed of sound.

Despite the power of the F-16, it can fly over 2,000 miles without refueling, and with in-flight refueling, the F-16 flew non-stop to the Middle East before the start of the Gulf War. The F-16 has the reputation as the most maneuverable fighter in the world, but can also deliver bombs with deadly accuracy. The aircraft flown in the demonstration is fully equipped and combat ready.

The F-16 demonstration is designed to highlight the superior performance characteristics of the aircraft. The combination of rapid rolls, high- and low-speed maneuvering, and high performance climbs and descents vividly illustrate the Fighting Falcon's capabilities. After a demonstration, team members are available to answer any questions about the demonstration or the Air Force in general.

(Current as of February 2004)



FACT SHEET

U.S. Air Force Fact Sheet

F-16 FIGHTING FALCON

Mission

The F-16 Fighting Falcon is a compact, multi-role fighter aircraft. It is highly maneuverable and has proven itself in air-to-air combat and air-to-surface attack. It provides a relatively low-cost, high-performance weapon system for the United States and allied nations.



Features

In an air combat role, the F-16's maneuverability and combat radius (distance it can fly to enter air combat, stay, fight and return) exceed that of all potential threat fighter aircraft. It can locate targets in all weather conditions and detect low flying aircraft in radar ground clutter. In an air-to-surface role, the F-16 can fly more than 500 miles (860 kilometers), deliver its weapons with superior accuracy, defend itself against enemy aircraft, and return to its starting point. An all-weather capability allows it to accurately deliver ordnance during non-visual bombing conditions.

In designing the F-16, advanced aerospace science and proven reliable systems from other aircraft such as the F-15 and F-111 were selected. These were combined to simplify the airplane and reduce its size, purchase price, maintenance costs and weight. The light weight of the fuselage is achieved without reducing its strength. With a full load of internal fuel, the F-16 can withstand up to nine G's -- nine times the force of gravity -- which exceeds the capability of other current fighter aircraft.

The cockpit and its bubble canopy give the pilot unobstructed forward and upward vision, and greatly improved vision over the side and to the rear. The seat-back angle was expanded from the usual 13 degrees to 30 degrees, increasing pilot comfort and gravity force tolerance. The pilot has excellent flight control of the F-16 through its "fly-by-wire" system. Electrical wires relay commands, replacing the usual cables and linkage controls. For easy and accurate control of the aircraft during high G-force combat maneuvers, a side stick controller is used instead of the conventional center-mounted stick. Hand pressure on the side stick controller sends electrical signals to actuators of flight control surfaces such as ailerons and rudder.

Avionics systems include a highly accurate inertial navigation system in which a computer provides steering information to the pilot. The plane has UHF and VHF radios plus an instrument landing system. It also has a warning system and modular countermeasure pods to be used against airborne or surface electronic threats. The fuselage has space for additional avionics systems.

Background

The F-16A, a single-seat model, first flew in December 1976. The first operational F-16A was delivered in January 1979 to the 388th Tactical Fighter Wing at Hill Air Force Base, Utah.

The F-16B, a two-seat model, has tandem cockpits that are about the same size as the one in the A model. Its bubble canopy extends to cover the second cockpit. To make room for the second cockpit, the forward fuselage fuel tank and avionics growth space were reduced. During training, the forward cockpit is used by a student pilot with an instructor pilot in the rear cockpit.

All F-16s delivered since November 1981 have built-in structural and wiring provisions and systems architecture that permit expansion of the multirole flexibility to perform precision strike, night attack and beyond-visual-range interception missions. This improvement program led to the F-16C and F-16D

aircraft, which are the single- and two-place counterparts to the F-16A/B, and incorporate the latest cockpit control and display technology. All active units and many Air National Guard and Air Force Reserve units have converted to the F-16C/D.

The F-16 was built under an unusual agreement creating a consortium between the United States and four NATO countries: Belgium, Denmark, the Netherlands and Norway. These countries jointly produced with the United States an initial 348 F-16s for their air forces. Final airframe assembly lines were located in Belgium and the Netherlands. The consortium's F-16s are assembled from components manufactured in all five countries. Belgium also provides final assembly of the F100 engine used in the European F-16s. Recently, Portugal joined the consortium. The long-term benefits of this program will be technology transfer among the nations producing the F-16, and a common-use aircraft for NATO nations. This program increases the supply and availability of repair parts in Europe and improves the F-16's combat readiness.

USAF F-16 multi-mission fighters were deployed to the Persian Gulf in 1991 in support of Operation Desert Storm, where more sorties were flown than with any other aircraft. These fighters were used to attack airfields, military production facilities, Scud missile sites and a variety of other targets.

Most recently in the Spring of 1999 during Operation Allied Force, USAF F-16 multi-mission fighters flew a variety of missions to include suppression of enemy air defense, offensive counter air, defensive counter air, close air support and forward air controller missions. Mission results were outstanding as these fighters destroyed radar sites, vehicles, tanks, MiGs and buildings.

General Characteristics

Primary Function: Multirole fighter

Builder: Lockheed Martin Corp.

Power Plant: F-16C/D: one Pratt and Whitney F100-PW-200/220/229 or General Electric F110-GE-100/129

Thrust: F-16C/D, 27,000 pounds

Length: 49 feet, 5 inches (14.8 meters)

Height: 16 feet (4.8 meters)

Wingspan: 32 feet, 8 inches (9.8 meters)

Speed: 1,500 mph (Mach 2 at altitude)

Ceiling: Above 50,000 feet (15 kilometers)

Maximum Takeoff Weight: 37,500 pounds (16,875 kilograms)

Range: More than 2,000 miles ferry range (1,740 nautical miles)

Armament: One M-61A1 20mm multibarrel cannon with 500 rounds; external stations can carry up to six air-to-air missiles, conventional air-to-air and air-to-surface munitions and electronic countermeasure pods

Unit cost: **F-16A/B** , \$14.6 million (fiscal 98 constant dollars); **F-16C/D**, \$18.8 million (fiscal 98 constant dollars)

Crew: F-16C, one; F-16D, one or two

Date Deployed: January 1979

Point of Contact

[Air Combat Command](#), Public Affairs Office; 115 Thompson St., Ste. 211; Langley AFB, Va. 23665-1987; DSN 574-5014 or (757) 764-5014; e-mail: acc.pai@langley.af.mil

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BIOGRAPHY



UNITED STATES AIR FORCE

MAJOR GEOFF HICKMAN

Major Geoff Hickman is the Air Combat Command's Viper East F-16 Demonstration Team pilot and officer in charge of the F-16 Demonstration Team. As the Demonstration pilot, he showcases America's F-16 Fighting Falcon to more than seven million people at approximately 65 shows around the world. He is currently assigned as an F-16 instructor pilot and flight examiner with the 20th Fighter Wing, Shaw Air Force Base, S.C.

Major Hickman was born March 20, 1972 in Oak Park, Ill. He graduated from Oak Park – River Forest High School in Oak Park, Ill. in 1990. In 1994, he earned a Bachelor of Science degree in History specializing in Far East area studies. He has served as an air liaison officer and instructor pilot.

EDUCATION

1994 Bachelor of Science Degree in History, United States Air Force Academy, Colo.

1996 Master of Public Policy Degree, John F. Kennedy School of Government, Harvard University, Mass.

ASSIGNMENTS

1. 1994 - 1996: Graduate Student, John F. Kennedy School of Government, Harvard University, Mass.
2. 1996 - 1997: Student Pilot, T-37, T-38, Laughlin Air Force Base, Texas
3. 1997 - 1998: Student Pilot, F-16 RTU, Luke Air Force Base, Ariz.
4. 1998 - 2000: F-16 Pilot, Shaw Air Force Base, S.C.
5. 2001 - 2001: Air Liaison Officer to the 2nd Infantry Division, Camp Red Cloud, Republic of Korea
6. 2002 - Present: F-16 Instructor Pilot and Flight Examiner, Shaw Air Force Base, S.C.

FLIGHT INFORMATION

Rating: Pilot

Flight hours: Approx. 1450 hours

F-16 Flight Hours: 1200

Combat hours: 265 hours

Aircraft flown: T-41, T-37, T-38, AT-38, F-16

MAJOR AWARDS AND DECORATIONS

Air Medal, four oak leaf clusters

Aerial Achievement Medal

Air Force Commendation Medal, one oak leaf cluster

Combat Readiness Medal, one oak leaf cluster

National Defense Service Medal, one bronze star

Armed Forces Expeditionary Medal, one bronze star

NATO Medal

EFFECTIVE DATES OF PROMOTION

Second Lieutenant June 1994

First Lieutenant June 1996

Captain June 1998

Major July 2004



(Current as of July 2004)

Viper East F-16 Demonstration Team Biographies

TEAM CHIEF'S

Master Sergeant James Montano – Team Chief

Master Sergeant James Montano is in his first season with the Viper East F-16 Demonstration Team. As the team chief/non-commissioned officer in charge, his responsibilities include supervising the maintenance personnel for the team's three F-16s, managing the team budget and organizing all aircraft logistics, lodging and travel arrangements throughout North America and Canada.

MSgt Montano enlisted in the Air Force in 1985; assignments include Clark Air Base, Philippines, Davis-Monthan Air Force Base, Ariz., Royal Air Force Bentwaters, England and Osan Air Base, Republic of Korea. Before his selection to the team, he served as a section chief in the 20th Aircraft Maintenance Squadron/79th Aircraft Maintenance Unit at Shaw Air Force Base, S.C. MSgt Montano graduated in 1985 from Aurora Central High School, located in Aurora, Colo. He is currently pursuing a bachelor's degree in Aircraft Maintenance Technology through Embry-Riddle and the Community College of the Air Force.

Technical Sergeant Elden McBride – Assistant Team Chief

Technical Sergeant Elden McBride is in his second season with the Viper East F-16 Demonstration Team. As the assistant team chief/non-commissioned officer in charge, his responsibilities include supervising the maintenance personnel for the team's three F-16s, augmenting the team chiefs, managing the team budget and organizing all aircraft logistics, lodging and travel arrangements throughout North America and Canada.

TSgt McBride enlisted in the Air Force in May 1985 and has been stationed at MacDill Air Force Base and Homestead Air Force Base, Fla., Moody Air Force Base, Ga., Cannon Air Force Base, N.M. and Kunsan Air Base, Republic of Korea. Before his selection to the team, he served as a Quality Assurance inspector for the 20th Fighter Wing at Shaw Air Force Base, S.C. TSgt McBride graduated from Ellison High School located in Killeen, Texas in 1982. He also attended Central Texas College where he earned an associate's degree in Applied Science and is currently pursuing a bachelor's degree in Aircraft Maintenance Technology from Embry-Riddle and the Community College of the Air Force.

CREW CHIEFS

Staff Sergeant Brian Lavorgna – Crew Chief

Staff Sergeant Brian Lavorgna is in his second season with the Viper East F-16 Demonstration Team. As a crew chief, he is responsible for the scheduled maintenance performed on an aircraft. His job is similar to an airframe and power plant technician in the civilian sector. This includes aircraft refueling, scheduled inspections and major maintenance.

SSgt Lavorgna enlisted in the Air Force in 1993 and has been stationed at Holloman Air Force Base, N.M., and Kunsan Air Base, Republic of Korea. Before his selection to the team, he served as a crew chief for the 20th Aircraft Maintenance Squadron/79th Aircraft Maintenance Unit at Shaw Air Force Base, S.C. The Washingtonville, New York native is a 1993 graduate of Washingtonville High School.

Staff Sergeant Daryl Page – Crew Chief

Staff Sergeant Daryl Page is in his first season with the Viper East F-16 Demonstration Team. He is responsible for all scheduled maintenance performed on the F-16 aircraft. His job is similar to an airframe and power plant technician in the civilian sector. This includes aircraft refueling, scheduled inspections and major maintenance.

SSgt Page enlisted in the Air Force in May 1993 and has previously been station at Nellis Air Force Base, Nev., Osan Air Base, Republic of Korea and Spangdahlem Air Base, Germany. Before his selection to the team, he served as a crew chief for the 20th Aircraft Maintenance Squadron/77th Aircraft Maintenance Unit at Shaw Air Force Base, S.C. He is a graduate of Northeast Guilford High School in McLeansville, N.C. SSgt Page is pursuing a bachelor's degree in Aircraft Maintenance Technology from the Community College of the Air Force.

Senior Airman Timothy Strickenberger – Crew Chief

Senior Airman Tim Strickenberger is in his second season with the Viper East F-16 Demonstration Team. As a crew chief, he is responsible for the scheduled maintenance performed on an aircraft. His job is similar to an airframe and power plant technician in the civilian sector. This includes aircraft refueling, scheduled inspections and major maintenance.

SrA Strickenberger enlisted in the Air Force in 2001 with his first assignment at Shaw Air Force Base, S.C. Before his selection to the team, he served as a crew chief for the 20th Aircraft Maintenance Squadron/79th Aircraft Maintenance Unit at Shaw Air Force Base, S.C. The Erie, Pa. native is a 1998 graduate of McDowell High School. SrA Strickenberger is working on an associate's degree in Aircraft Maintenance Technology from the Community College of the Air Force.

Senior Airman Eddie Escamilla – Crew Chief

Senior Airman Eddie Escamilla is in his second season with the Viper East F-16 Demonstration Team. As a crew chief, he is responsible for the scheduled maintenance performed on the F-16 aircraft. His job is similar to an airframe and power plant technician in the civilian sector. This includes aircraft refueling, scheduled inspections and major maintenance.

SrA Escamilla enlisted in the Air Force in February 2000 with his first assignment at Shaw Air Force Base, S.C. Before his selection to the team, he served as a crew chief for the 20th Aircraft Maintenance Squadron/77th Aircraft Maintenance Unit at Shaw Air Force Base, S.C. The San Antonio, Texas native is a 1996 graduate of South San Antonio High School. SrA Escamilla is working on his associate's degree in Aircraft Maintenance Technology from the Community College of the Air Force.

AVIONICS SPECIALIST

Staff Sergeant John Schaub – Avionics Specialist

Staff Sergeant John Schaub is in his second season with the Viper East F-16 Demonstration Team. As an avionics specialist, he is responsible for communications, navigation, fire control and flight control systems on the team's three F-16s.

SSgt Schaub enlisted in the Air Force in 1993 and has previously been station at Kunsan Air Base, Republic of Korea. Before his selection to the team, he served as an avionics specialist for the 20th Aircraft Maintenance Squadron/79th Aircraft Maintenance Unit at Shaw Air Force Base, S.C. The Deposit, New York native is a 1993 graduate of Deposit Central High School. SSgt Schaub is pursuing an associate's degree in avionics technology from the Community College of the Air Force.

Staff Sergeant Donald Russell – Avionics Specialist

Staff Sergeant Don Russell is in his second season with the Viper East F-16 Demonstration Team. As an avionics specialist, he is responsible for communications, navigation, fire control and flight control systems on the team's three F-16s. He is also responsible for filming the aircraft demonstration during practice and airshow appearances.

SSgt Russell enlisted in the Air Force in 1999 and has been stationed at Osan Air Base, Republic of Korea. Before his selection to the team, he served as an avionics specialist for the 20th Aircraft Maintenance Squadron/55th Aircraft Maintenance Unit at Shaw Air Force Base, S.C. The Oklahoma City, Okla. native is a 1993 graduate of Westmoore High School. He is pursuing an associate's degree in Avionics Technology from the Community College of the Air Force.

