



VIRGINIA AVIATION MUSEUM

HISTORIC AIRCRAFT

View 37 historic aircraft, including one of the largest collections of airworthy Wright Brothers reproduction aircraft in the world. Other planes include the 1936 Vultee V1-A Special (once owned by William Randolph Hearst); the spectacular SR-71 Blackbird spy plane; and the F-14 Tomcat as featured in the movie "Top Gun."



Wings With Tales



VIRGINIA AVIATION MUSEUM

HISTORIC AIRCRAFT

WRIGHT BROTHERS REPRODUCTIONS

Wright Brothers 1899 Kite	2
Wright Brothers 1900 Glider.....	2
Wright Brothers 1901 Glider.....	3
Wright Brothers 1902 Glider.....	3
1903 Wright Flyer Reproduction.....	3

MILITARY AIRCRAFT

SR-71 Blackbird4.....	4
1917 SPAD VII	5
1918 Standard E-1.....	6
1917 Curtiss Model	7
1970 Vought A-7D Corsair II	8
Douglas A-4C Skyhawk.....	9
Bell UH-1V MEDEVAC Iroquois.....	10
Grumman F-14D Tomcat	11

CIVILIAN AIRCRAFT

1927 Pitcairn Mailwing PA-5	12
1927 Travel Air 2000	13
1927 Fairchild FC-2W2	14
1928 Heath Super Parasol	15
1928 Bellanca CH-400 Skyrocket	16
1928 Pietenpol Air Camper and Sky Scout.....	17
1929 Brunner-Winkle Bird, BK	18
1929 Curtiss Robin J-1D	19
1930 Fleet Model 1	20
1932 Aeronca C-2	21
1932 Taylor E-2 Cub	22
1935 Aeronca C-3	23
1935 WACO Model YOC	24
1936 Curtiss-Wright Speedwing Model A-14D	25
1936 Vultee V-1A Special	26
1937 Fairchild 24 Model G2	27
1938 Stinson Reliant SR-10	28
1941 Bücker 133-C Jungmeister.....	29
1943 Piper J-3 Cub	30
1946 Ercoupe Model 415	31
1988 Quickie 200 Tri-Gear	32



WRIGHT BROTHERS 1899 KITE

In 1899, the Wright brothers designed an experimental bi-wing kite to test their wing warping theory. They built the kite of pine wood and shellacked fabric. A horizontal stabilizer was at the rear of the kite and the 5-foot wings had a curved profile. Wilbur Wright flew the kite at a park in Dayton, Ohio during the summer of 1899. The Wrights were pleased with the kite's performance and they decided to build a full-size glider. The original kite hung in their workshop for several years and was burned with other trash in 1905.

Orville described Wilbur's test with words: "This model consisted of superposed planes [i.e., a biplane] measuring five feet from tip to tip and about thirteen inches from front to rear. The model was built and, as I remember it, was tested in the latter part of July 1899 ... I was not myself present."

The Virginia Aviation Museum's reproduction 1899 Wright kite was built by and is on generous loan from Rick Young.



WRIGHT BROTHERS 1900 GLIDER

Wilbur and Orville Wright designed and constructed their first man-carrying glider in Dayton, Ohio in the spring of 1900. The glider incorporated control concepts developed in their 1899 kite and used lift data from tables prepared by German glider pilot Otto Lilienthal in the 1890's. Their bi-wing glider had a wing span of 17 feet, cord of 5 feet, length of 11 feet, and weighted 52 lbs. without a pilot. The glider incorporated "wing warping*" to control roll and a forward mounted elevator to control pitch; there was no rudder. The 1900 glider was flown mostly as a tethered kite when early tests showed it would only carry half the load earlier calculations had predicted. The glider was flown on several occasions by Wilbur who discovered pitch control was surprisingly easy and glides were made at an angle of less than one-in-six. The original glider was left at Kitty Hawk by the Wright's and no longer exists. No drawings and only four photographs of this important aircraft exist. This 1900 reproduction glider was constructed by Rick Young using high-resolution scans of original Wright photographs now located at Wright State University in Dayton.

On generous loan from Rick Young.

Wing Warping was an early system for lateral (roll) control of aircraft. Wing warping was successfully used by the Wright Brothers to make their early gliders bank or roll in the desired direction of turn. They used a system of pulleys and cables to "twist" the wings in such a manner that one wing increased its angle of attack and therefore produced greater lift while the opposite wing decreased its angle of attack and therefore produced less lift.

These differences in lift between the two wings caused the aircraft to bank or roll towards the wing with less lift and thus turn in that direction. Later, a simpler wing warping method was devised that involved simply pulling down on the trailing edge of one wing which caused that wing to create more lift which caused the aircraft to bank and therefore turn. By 1915, the use ailerons, little wings that move in opposite directions on each wing, had become the standard method for laterally controlling aircraft.



WRIGHT BROTHERS 1901 GLIDER

The Wrights' second bi-wing glider was built in 1901 and had a wing span of 22 feet, chord of 7 feet, length of 14 feet, and weighed 98 lbs. without a pilot. The glider incorporated a front elevator for pitch control and wing warping system for roll control, but did not have a rudder. This glider was twice as large as their 1900 glider. Designed according to the best available flight data the Wrights were perplexed to discover its performance was worse than the 1900 glider. A series of kite tests of the upper surface confirmed existing aeronautical theory was wrong in areas such as the movement of center of pressure, lift and drag. They modified their glider and made a series of flight tests, some over 300 feet and in winds as high as 27 MPH. Poor lift performance in both the 1900 and 1901 gliders made the Wrights doubt the accuracy of Lilienthal's lift/drag tables. This led to the Wrights to using a wind tunnel of their own design to develop a more accurate set of lift/drag tables and design a much more efficient wing for their next glider.

This prototype reproduction was built by Rick Young and flown in October 1997 for a NOVA documentary in production. On generous loan from Rick Young.



WRIGHT BROTHERS 1902 GLIDER

The Wrights 1902 bi-wing glider had a wing span of 32 feet, cord of 5 feet, length of 16 feet 1 inch, weighed 112 lbs. without a pilot, and was the first aircraft to have three-axis control. This glider was fitted with an elevator in front for pitch control, wing warping system for roll control, and a vertical rudder in the rear for yaw control. Designed using data confirmed in their wind tunnel tests, its performance soon broke world soaring records for the longest time in the air (26 sec.), smallest angle of descent (5 degrees) and flight in the highest winds (30 mph). These long flights allowed Wilbur and Orville to discover that a movable vertical rudder was necessary to fully control their glider. The steadiness and control the Wrights experienced in this glider's over 600 flights convinced the brothers the time had come to attempt powered flight. While assembling their first powered flying machine in the fall of 1903 the Wrights practiced often with this glider modified with a new double vertical rudder. They continued their record-breaking performances with flights of over 1 minute and distances in excess of 600 feet. As usual, the Wrights did not preserve this important aviation relic and it was left at Kitty Hawk in an old camp building.

Sue and Rick Young built this reproduction in 1980 and restored it in 1997. This glider was flown in the IMAX film *On The Wing*, the PBS television program *The Wright Stuff*, and was featured in a NOVA documentary.

On generous loan from Rick Young.



1903 WRIGHT FLYER REPRODUCTION

The 1903 Wright Flyer was the first successful manned, heavier-than-air, fully controllable, powered airplane. The Wright Flyer had a wing span of 40 feet 4 inches, chord of length of 21 feet and weighed 605 lbs. A 12-horsepower horizontal, four-cylinder gasoline engine drove two counter-rotating wooden propellers. The airplane included a forward elevator, rudder and wing warping for pitch, yaw and roll control. On Dec. 17, 1903, at Kill Devils Hills, N.C., Orville Wright flew the famous first flight, which covered 120 feet in 12 seconds. On that day, the Wrights made three additional flights with the final flight carrying Wilbur 852 feet in 59 seconds. The original Wright Flyer was destroyed by high winds soon after the last flight and never flew again. The Aviation Museum's 1903 Wright Flyer reproduction is on loan from its builder, Rick Young.



SR-71 BLACKBIRD

1966 Lockheed SR-71

Flying three times faster than the speed of sound and higher than 85,000 feet, the SR-71 is the most technologically significant aircraft built since WW II. They flew thousands of hazardous reconnaissance missions over North Vietnam, North Korea, the Middle East and many other hot spots throughout the world. 29 A Models, two B Models (two-seat pilot trainers), one C Model (two-seat trainer built from two different airframes) were produced in the 1960's. Out of the total of 32 SR-71's built, 21 are still in existence and our on exhibit in museums. Of the 12 SR-71s lost, no USAF pilots or RSOs lost their lives nor were any shot down by hostile fire.

Virginia Aviation Museum's aircraft, USAF tail number 61-7968, set the endurance record on April 26, 1971. Majors Thomas B. Estes and Dewain C. Vick, flew 61-7968 over 15,000 miles in 10 hrs. 30 min. non-stop (Time includes aerial refueling at subsonic speeds). Awards for this flight include the 1971 Mackay Trophy for the "most meritorious flight of the year" and the 1972 Harmon Trophy for the "most outstanding international achievement in the art/science of aeronautics".



The legendary SR-71 "Blackbird's" performance has never been superseded by any known manned aircraft. None was ever lost to enemy action and the intelligence gathered gave the United States the raw data needed to effectively counter real and potential threats. The aircraft is particularly significant as an example of American dominance in applied science.

The aircraft is on loan from the United States Air Force Museum. (Serial #61-7968)

TECHNICAL INFORMATION

Mission: High Speed, High Altitude Reconnaissance

Crew: 2 (Pilot and Reconnaissance System Officer)

Construction: Titanium monocoque with some super-high-temperature plastics

Length: 107 feet, 5 inches

Wingspan: 55 feet, 7 inches

Height: 16 feet, 6 inches

Landing Weight: 68,000 pounds

Maximum Gross Take-off Weight: 140,000 pounds

Maximum Speed: 3.2+ Mach

Maximum Altitude: over 85,000 feet

Maximum Unrefueled Range: 3,200 nautical miles

Armament: None

Powerplant: 2 Pratt & Whitney J-58 High-bypass-turbojets with 34,000 pounds of thrust

Program Information (as of Jan 1990)

Total Flight Hours: 53,490

Total Mach 3+ Time: 11,675 hours

Total Sorties: 17,300

Operational Sorties: 3,551

Operational Hours: 11,008

Total Air Refuelings: 25,862

Total Crew Members: 284 (8 aircrew had 1000 hours +, high time 1,392.7 hours)



1917 SPAD VII

Prized WWI Fighter

The SPAD VII was one of the best fighter planes of World War I. Designed by Louis Bechereau, it was a product of the Société pour l'Aviation et ses Dérivés, France; hence, SPAD. The SPAD VII was powered by a Hispano-Suiza engine designed by Marc Birkight, the famous Swiss automotive engineer. The SPAD VII was maneuverable, fast and structurally one of the most reliable fighters of the war. Armed with a single Vickers 303 (7.62 mm) synchronized machine gun, which fired through the propeller arc and an Aldis gun sight, SPAD VII's served in over 50 Allied squadrons (three American squadrons) including the famous French Lafayette Escadrille and Storke Groupe (Les Cicognes) squadrons. Many World War I aces scored victories in the SPAD VII, including French ace Georges Guynemer (54 victories) and the Allies' ace-of-aces, René Fonck (75 victories).

The Virginia Aviation Museum's SPAD VII (B9913) was manufactured in 1917 by Mann Egerton & Co. Ltd. It was one of 19 British-built SPAD VII's sent to the U.S. Army's Rockwell Field Pursuit Gunnery School in San Diego in 1918 to serve as advanced fighter trainers for the U.S. Air Service. In the 1920s B9913 was decommissioned and passed through several private owners. In May 1969 James S. Ricklef bought the remains of B9913 and, in 1973, completely restored the aircraft to its present condition featuring original British markings.

The fuselage, wings and tail-group are built of wood and plywood. Wire-in-wing and tail trailing edges gave a scalloped effect. Fabric covers the entire structure except for the front third of the fuselage, which is aluminum-covered. The aircraft has a round frontal radiator, a tailskid, no brakes, and it cannot be trimmed in flight.

Shannon Collection • Serial No. 103

SPECIFICATIONS

General Type: Single-seat fighter (or Scout), World War I era

Manufacturer: Eight French and two British aircraft manufactures

Dates: 1916–1918

Numbers: 5,820 (220 built by the British)

Cost: Unknown

Power Plant Hispano-Suiza 8 A, 150- to 180-horsepower at 1,450 rpm, V-8 water-cooled engine

Dimensions

Length: 20 feet, 3 inches

Height: 7 feet

Wingspan: Upper 25 feet, 6 inches; Lower 24 feet, 6 inches

Weights & Capacities

Empty Weight: 1,177 pounds

Military Load: 260 pounds (fuel and oil 195 pounds)

Maximum Gross Weight: 1,632 pounds

Fuel Capacity: 24 gallons

Oil Capacity: 2.125 gallons

Coolant: 6.75 gallons

Performance

Maximum Speed: 123 to 132 mph

Cruise Speed: 110 mph

Landing Speed: 57 mph

Rate of Climb: Climb to 10,000 feet: 11 minutes, 30 seconds

Service Ceiling: 17,500 feet

Cruise: 2.5 hours

Armament

One Synchronized Vickers 303 machine gun (7.62 mm)



1918 STANDARD E-1

Advanced Trainer

The Standard E-1 was the only pursuit or fighter type aircraft the US produced during WWI. It was powered by a 100-horsepower Gnome B-9 or an 80-horsepower Le Rhone rotary engine, which drove a fixed-pitch wooden propeller. Some E-1s were armed with a 30-caliber Vickers or Marlin machine gun, which fired through the propeller arc. These E-1s never saw combat service and approximately 60 were re-titled M-Defense. In an early attempt to develop smart weaponry, the Sperry Co. converted three Standard E-1s into experimental radio-controlled aerial torpedoes in 1919.

The Virginia Aviation Museum's Standard E-1 was manufactured in 1918 and is powered by an 80-horsepower Le Rhone rotary engine. Sidney L. Shannon Jr. found this airplane in a barn near Dayton, Ohio, in the early 1950s. Air Shannon spent eight years restoring the aircraft to its current condition.

The fuselage and wings are wooden. The tail is a welded metal tube and wood construction. Fabric covers the entire aircraft, except for the engine cowling and the top of the fuselage, which are aluminum-clad. The aircraft has a tailskid, no brakes and cannot be trimmed in flight.

Shannon Collection

SPECIFICATIONS

General Type: Single-seat advanced trainer, World War I era

Manufacturer: Standard Aircraft Corporation, Elizabeth, N.J.

Dates: 1917 and 1918

Number Built: Approximately 128

Cost: Unknown

*Power Plant La Rhone, 80-horsepower at 1,200 rpm, 9-cylinder air-cooled rotary engine
(Gnome B-9, 104-horsepower at 1,200 rpm, 9-cylinder air-cooled rotary engine)*

Dimensions

Length: 18 feet, 5 inches

Height: 9 feet, 4 inches

Wing Span: 24 feet

Weights & Capacities

Empty Weight: 866 pounds (890 pounds)

Maximum Gross Weight: 1,195 pounds (1,275 pounds)

Useful Load: 329 pounds (385 pounds)

Fuel Capacity: 19 gallons (27 gallons)

Oil Capacity: 3 gallons (5 gallons)

Performance

Maximum Speed: 100 mph (105 mph)

Cruise Speed: 80 mph

Landing Speed: 53 mph

Rate of Climb: 600 fpm (950 fpm) at sea level

Service Ceiling: 14,500 feet

Cruise: 2 hours

Range: 160–200 miles

Armament

One synchronized Vickers or Marlin 30-caliber machine gun



1917 CURTISS MODEL JN4-D

Military Trainer Jenny

The Curtiss JN models - also known as the "Jenny" series - began in 1914 when Curtiss combined the best features of the J and N series. The U.S. Army used Jennies as observation planes and trainers. After World War I, Jennies became popular on the barnstorming circuit. This Curtiss Jenny was built in January 1917 in Buffalo, N.Y. Powered by a 90-horsepower, 8-cylinder, water-cooled engine, this airplane is capable of a maximum horizontal speed of 75 mph. This aircraft was meticulously restored by Ken Hyde and in 1987, was featured in the National Geographic television program, "Treasures From the Past." Owner Ken Hyde and Charles Kulp flew it to the 1987 EAA AirVenture Oshkosh, where they won the Antique Grand Champion award. In 1989, Hyde and Kulp again flew to Oshkosh and were joined by five other flight-worthy Jennies from across the United States.

On loan from Ken W. Hyde (Serial #450)

SPECIFICATIONS

General Type: Two-place, World War I Trainer

Manufacturer: Curtiss Aeroplane and Motor Corporation, Buffalo, NY

Dates: 1917–1919

Number Built: 2,812

Original Cost: \$3,155–\$5,465

Power Plant Curtiss OX-5, 90-horsepower V-8 water-cooled engine

Dimensions

Length: 27 feet, 4 inches

Height: 9 feet, 11 inches

Wingspan: Upper 43 feet, 6 inches

Weights & Capacities

Empty Weight: 1,390 pounds

Useful Load: 530 pounds

Maximum Gross Weight: 1,920 pounds

Fuel Capacity: 25 gallons

Oil Capacity: 4 gallons

Performance

Maximum Speed: 75 mph

Cruise Speed: 60 mph

Landing Speed: 45 mph

Rate of Climb: 7.5 min. to 2,000 feet

Service Ceiling: 6,500 feet

Cruising Range: 250 miles



1970 VOUGHT A-7D CORSAIR II

The A-7D Corsair II is a single seat, light attack aircraft. Originally designed for the U.S. Navy, 459 A-7Ds was built for the U.S. Air Force from 1968 to 1976. USAF A-7Ds saw service in Vietnam and were also flown by the Air National Guard including the 192nd Tactical Fighter Group at Richmond International Airport. The A-7D achieved excellent bomb-deliver accuracy due to its automatic electronic navigation and weapon-delivery system. The A-7D was powered by one 14,250-pound thrust Allison TF-41 turbofan engine, which allowed it to carry up to 15,000 pounds of mixed ordnance.

The museum's A-7D flew with the 192nd Tactical Fighter Group and is on loan from the USAF Museum. (Serial #70-966)

SPECIFICATIONS

General Type: Single-seat, tactical close air support aircraft, 60s – 80s era

Manufacturer: Ling-Temco-Vought (LTV), Dallas, TX

Dates: 1967 - 1975

Number Built: 454 production aircraft

Cost: \$15,000,000

Power Plant One Allison TF41 turbofan engine of 14,250 pounds thrust

Dimensions

Length: 46 feet, 1 inches

Height: 16 feet, 1 inches

Wing Span: 38 feet, 8 inches

Weights & Capacities

Empty Weight: 19,127 pounds

Maximum Gross Weight: 39,325 pounds (42,000 pounds combat)

Fuel Capacity: 1,425 gallons internal (plus up to four 300 gallon external drop tanks)

Performance

Maximum Speed: 699 mph

Cruise Speed: 532 mph

Landing Speed: 53 mph

Rate of Climb: 15,000 fpm at sea level

Service Ceiling: 42,000 feet

Cruise: 2.6 hours (5.7 hours with external drop tanks)

Range: Combat 715 miles; ferry 2,281 miles (2,861 miles with external drop tanks)

Armament

One M61A1 20mm rapid-fire cannon plus 15,000 pounds of mixed ordnance (bombs, rockets, missiles and dispensers)



DOUGLAS A-4C SKYHAWK

US Navy Light Attack Bomber

The U.S Navy used the Douglas A-4 Skyhawk for many years as a front-line light attack-bomber. The A-4 prototype, or Heinemann's Hotrod as it was sometimes called, was first flown on June 22, 1954. The A-4C first flew on August 21, 1958 and was first delivered to the fleet in February 1960. Newer features of the C model included radar, auto-pilot, improved ejection seat, low-altitude bombing system and angle of attack instrumentation. At \$860,000 a copy it was the last "under a million dollar" fighter the US ever built.

One outstanding feature of the Skyhawk was its ability to carry a variety of external stores. The early A-4s carried up to 5,000 lbs of missiles, fuel tanks, rockets, and gun pods, on three stations. Subsequent models could carry 8,200 lbs of weapons and fuel on five stations. The A-4 was also armed with two 20-mm cannons. The A-4 was widely used by the Navy and Marines in Vietnam to support ground troops and attack other ground targets. The A-4 was also used by several foreign nations including Argentina, Australia, and Israel.

The Virginian Aviation Museum's A-4C was received from the Navy in November 2005. It was repainted by volunteers of VFA-106, NAS Oceana in the markings LTJG Paul Galanti of Richmond, VA who flew with VA-216 aboard the USS Hancock (CVA-19) during the Vietnam War. Galanti was shot down and captured while flying his 97th combat mission on June 17, 1966.

SPECIFICATIONS

General Type: Navy, carrier based, single-seat bomber (light)

Manufacturer: Douglas Aircraft Corporation, El Segundo, CA

Dates: 1956 - 1979 (all models - longest production run of any US military fighter aircraft)
(1958-1962 C Model)

Number Built: 2,960 all models (638 C models)

Original Cost: \$860,000 (C model)

*Power Plant Originally a single 7,700 lbs thrust Curtiss-Wright J-65 W-16A turbojet engine
Later a single 8,400 lbs thrust, Pratt & Whitney J-65-W-20 turbojet engine*

Dimensions

Length: 39 feet 2 inches

Height: 14 feet 11 inches

Wingspan: 27 feet 6 inches

Weights & Capacities

Empty Weight: 9,146 pounds

Internal Fuel Capacity: 5,400 pounds (approx. 800 gal)

Maximum External Load (weapons and fuel): 7,900 pounds

Maximum Gross Weight: 22,500 pounds

Performance

Maximum Speed: 649 mph

Cruise Speed: 420 kts (M 0.72 or 496 mph)

Landing Speed: 132 kts (150 mph)

Stalling speed: 110 kts (125 mph)

Rate of Climb: 7,100 fpm at sea level

Service Ceiling: 42,250 feet

Tactical Range 400 nm

Ferry Range: 2,000 nm (unrefueled with external tanks)

Armament

Three under-fuselage/wing hard points with 7,900 pounds total capacity normal load was 2X300 gal drop tanks and 6XMk 82s (500 lbs general purpose bombs)
2X20 mm Colt Mk. 12 cannons, one in each wing roots with 100 rounds per gun.



BELL UH-1V MEDEVAC IROQUOIS

Nickname "Huey"

The UH-1V is the US Army's medical evacuation (MEDEVAC) conversion of the UH-1H "Huey". A total of 220 UH-1Hs were modified to the MEDEVAC configuration in the 1980s. This single-engine helicopter carries no external weapons, but can transport three litter patients and four ambulatory patients. A crew of four operates each air ambulance: Pilot, Co-Pilot, Crew Chief and an Emergency Medical Technician.

The mission of the medical company UH-1V's was to provide air evacuation and support within the theater of operations. These helicopters evacuated patients to division and corps-level medical units and hospitals. UH-1Vs also delivered whole blood, and biological and medical supplies to meet critical requirements; rapidly moved medical personnel, equipment and supplies to meet the requirements for mass casualty reinforcement, reconstitution, or emergency situations.

The UH-1 was the first operational turbine powered helicopter. The first prototype UH-1 flew in 1956 and the first operational UH-1As were delivered to the US Army in 1959. The original military designation of HU-1 (changed to UH-1 in 1962) gave rise to the common name 'Huey'. Although the official name of the UH-1 is the Iroquois, the UH-1 is still to this day commonly referred to as the Huey. More than 15,000 UH-1s have been built making the Huey the second most produced aircraft in the world since WWII (next to the AN-2 Colt).

The Museum's UH-1V, 68-16623 was last operated by the Virginia Army National Guard 986th Air Evac based at the Army Aviation Service Facility at Richmond International Airport. It flew combat missions during Desert Storm in 1991.

On loan from the US Army (USTACOM). Serial Number 68-16623

SPECIFICATIONS

General Type: Multi-role helicopter [V – MEDIVAC]
Manufacturer: Bell Helicopter Textron, Ft. Worth, TX
Dates: 1959 – 1979 [1980s]
Number Built: More than 15,000 in 13 models [220]
Replacement Cost: \$4,700,000

Power Plant:

1400-shaft hp Lycoming T53-L-13

Dimensions:

Length: 41 feet 11 inches
Height: 14 feet 6 inches
Rotor Diameter: 48 feet

Weights and Measures:

Empty Weight: 5,210 pounds
Useful Load: 4,290 pounds
Maximum Gross Weight: 9,500 pounds
Fuel Capacity: 209 gallons (JP-4)

Performance:

Maximum Speed: 127 mph
Cruise Speed: 115 mph
Rate of Climb: 1,600 fpm at sea level
Service Ceiling: 12,600 feet
Cruising Range: 320 miles



GRUMMAN F-14D TOMCAT

Navy Air Superiority Fighter

The F-14D Tomcat is a supersonic, air-superiority fighter. The unique swing-wing design allowed the wings to be moved automatically or manually between 20 and 68 degrees of leading-edge sweep. This optimizes wing area, camber and aspect ratio to enhance the aircraft's performance. The wings would be forward for slow-speed flight (takeoff and landing) and swept back for high-speed (supersonic) flight.

In addition to its primary air superiority capabilities using Sparrow and Sidewinder missiles, and an internal 20-mm gun, the F-14 provided fleet air defense with the Phoenix missile and ground attack capability using conventional ordnance.

The F-14D was powered by two F110-GE-400 dual-axial compressors, turbofan engines equipped with afterburners for thrust augmentation. Variable-geometry air inlets in front of the engines controlled the air flow and speed of the air entering the engines to ensure optimum engine performance throughout the flight envelope.

The pilot controls the aircraft using hydraulically powered flight controls which are operated by a conventional control stick and rudder pedals. Pitch control is achieved by symmetrical deflection of the horizontal stabilizer deflections. Roll control is accomplished by differential stabilizer deflections and augmented by wing spoilers at wing-sweep positions less than 62 degrees. Yaw control is provided by dual rudders.

The museum's F-14D bureau number 164346, Block 170, was delivered to the Navy on Feb. 2, 1992. It was last assigned to VF-31 at NAS Oceana, Va. The aircraft saw combat twice in Operation Iraqi Freedom. The first on board the USS Abraham Lincoln (CVN-72) in a historic 10-month cruise when the ship was diverted from returning home back to the Persian Gulf to participate in the second Gulf War. The return to the Gulf aboard the USS Theodore Roosevelt (CVN-71) was the final Tomcat cruise. On June 28, 2006, F-14D Tomcat 164346/AJ-110, flown by pilot Lt. Chris Rattigan and RIO Lt. Paul Dort, was the last Tomcat to operationally trap onboard a US Navy carrier. Tomcat 164346 was last flown on Sept. 15, 2006, when it was delivered to the Virginia Aviation Museum by pilot Lt. Roy Gordon and RIO Lt. Bill Frank.

This aircraft is on loan from the National Museum of Naval Aviation at Pensacola, Fla.

SPECIFICATIONS

General Type: Navy, carrier based, two-seat (pilot and Radar Intercept Officer)

Manufacturer: Grumman Aerospace Corporation

Dates: 1970–1992 (all models)
1988–1992 (D Model)

Number Built: 712 all models
(55 D models: 37 new; 18 converted from A models)

Original Cost: \$38,000,000 (1998)

Power Plant Two General Electric F110-GE-400 turbofans (military – 16,090 lbs thrust; afterburning – 26,795 lbs thrust)

Dimensions

Length: 62 feet 8.5 inches

Height: 16 feet

Wingspan at 20 degree sweep:
64 feet 1.5 inches

Wingspan at 68 degree sweep:
38 feet 2.5 inches

Weights & Capacities

Empty Weight: 43,735 pounds

Maximum Fuel Capacity: Internal – 2,385 gal (16,200 lbs) External – 534 gal (3,600 lbs, external drop tanks) Total Fuel Quantity – 2,919 gal (19,800 lbs)

Maximum External Load (weapons and fuel): 14,500 pounds

Maximum Gross Weight: 76,000 pounds

Performance

Maximum Speed: Mach 2.34 (approximately 1,404 kts or 1,620 mph) high altitude; Mach 1.2 low altitude

Max Cruising Speed: Mach 0.72 (approximately 432 kts or 496 mph)

Carrier Approach Speed: 125 kts (144 mph)

Rate of Climb: 45,000 fpm at sea level

Service Ceiling: 53,000 feet plus

Tactical Range 576 nm (without air refueling)

Ferry Range: 1,600 nm (without air refueling)

Armament

One 20-mm General Electric M61A1 Vulcan canon with 675 rounds

Combination of up to eight air-to-air missiles (AIM-9L/M; AIM 7F/M Sparrow, AIM-120 AMRAAM, and AIM-54A/C Phoenix)

Mk 82, 83, or 84 general purpose bombs or laser-guided bombs; GBU-10/12/16/24/31/38, Mk-20 Rockeye, or AGM-88B HARM missiles



1927 PITCAIRN MAILWING PA-5

Purpose-Designed Mail Aircraft

The Pitcairn PA-5 was the first in the Mailwing series. It was designed to carry airmail and cargo. Pitcairn Aviation (the forerunner of Eastern Air Transport and Eastern Airlines) used 16 PA-5s to carry airmail on Contract Air Mail route No. 19 between New York and Atlanta. These airplanes served seven cities, including Richmond, Va., on the 792-mile route and were among the first radio-equipped commercial airplanes. The reliable Wright Whirlwind J-5 engine that powered the Spirit of St. Louis across the Atlantic in 1927 also drove the PA-5. Pitcairn also produced a 3-seat civilianized version of the PA-5 mail plane called the Sport Mailwing.

The Virginia Aviation Museum's Pitcairn Mailwing PA-5 (N3835) was built in 1927 and purchased by Colonial Western Airways of New York in 1929. Universal Aviation Corporation, American Airlines, Central Airlines and Robertson Aircraft Corporation later operated this aircraft. Air Shannon purchased the aircraft in 1957 and restored it in Eastern Air Transport colors in 1972.

The fuselage is built of welded steel and wood fairing strips. The wings are made of solid spruce spars and built-up wooden ribs. The tail-group is a welded steel tube structure and the horizontal stabilizer is adjustable in flight. The aircraft is fabric-covered and came equipped with electric lights and parachute flares for night flying.

Shannon Collection Serial No. 9

SPECIFICATIONS

General Type: Light cargo/mail transport
Manufacturer: Pitcairn Aircraft Inc., Bryn Athyn, Pennsylvania
Dates: 1927–1928
Number Built: Approximately 30
Original Cost: \$10,000
Power Plant Wright Whirlwind J-5
220-horsepower, 9-cylinder air-cooled radial engine

Dimensions

Length: 21 feet, 10 1/2 inches
Height: 9 feet, 3 inches
Wing Span: Upper 33 feet; Lower 30 feet

Weights & Capacities

Empty Weight: 1,612 pounds
Useful Load: 1,008 pounds
Maximum Gross Weight: 2,620 pounds
Fuel Capacity: 56 gallons
Oil Capacity: 6 gallons

Performance

Maximum Speed: 130 mph
Cruise Speed: 110 mph
Landing Speed: 50 mph
Rate of Climb: 1,100 fpm at sea level
Service Ceiling: 18,000 feet
Cruising Range: 600 miles



1927 TRAVEL AIR 2000

"Old Elephant Ears"

Travel Air 2000 was inspired by the team of Lloyd Stearman, Walter Beech, Clyde Cessna and Walter Innes who formed the Travel Air Manufacturing Company in 1924. A classic aircraft of the late 1920s, the Travel Air 2000 was one of several planes that replaced the aging Curtiss Jenny and Standard J-1 on the barnstorming circuit. With a range of 425 miles, barnstormers could hop passengers in and out of small fields all day. The versatile Travel Air 2000 was also favored by early, fixed-base operators because it was reliable, easy to maintain and a delight to fly.

The Travel Air 2000s nickname, Old Elephant Ears, came from its large balance horns on the ailerons. Also known as the Wichita Fokker, the Travel Air 2000 has a passing resemblance to the famous World War I German Fokker D VII fighter. Many were used as German Fokker D VIIIs in movies about World War I.

The fuselage is built of welded steel and wood fairing strips while the wings are made of solid spruce spars and spruce and plywood ribs. The tail-group is a welded-steel tube structure, and the horizontal stabilizer is adjustable in flight. The entire aircraft is covered in fabric except for the aluminum engine cowling. The front cockpit seats two side-by-side passengers, while a single pilot occupied the rear cockpit.

Shannon Collection Serial No. 721

SPECIFICATIONS

General Type: 3-place biplane

Manufacturer: Travel Air Manufacturing Company, Wichita, Kan.

Dates: 1925–1930

Number Built: Approximately 600

Original Cost: \$2,195–\$3,500

Power plant Curtiss OX-5 engine, 90-horsepower at 1450 rpm, V-8 water-cooled engine

Dimensions

Length: 24 feet, 2 inches

Height: 8 feet, 11 inches

Wingspan: Upper 36 feet; Lower 28 feet, 8 inches

Weights & Capacities

Empty Weight: 1,335 pounds

Useful Load: 845 pounds

Maximum Gross Weight: 2,180 pounds

Fuel Capacity: 42 gallons

Performance

Max Speed: 100 mph

Cruise Speed: 85 mph

Landing Speed: 40 mph

Rate of Climb: 550 fpm at sea level

Service Ceiling: 10,000 feet

Cruising Range: 425 miles



1927 FAIRCHILD FC-2W2

Antarctic Research Aircraft

Virginia's Adm. Richard E. Byrd used this airplane on his legendary expeditions to the Antarctic. On Jan. 15, 1929, the Stars and Stripes became the first American aircraft to fly over the Antarctic. In 1930 the Stars and Stripes was stored in a hangar of snow blocks until, in late 1934, she was dug out and resumed service during Byrd's second expedition. After returning to the United States in 1935, the Stars and Stripes was used for barnstorming, crop dusting and aerial photography. In 1957 Fairchild Aircraft Co. re-acquired the Stars and Stripes and, in 1961, donated the plane to the Smithsonian's National Air and Space Museum where it was restored to its original condition.

The FC-2W2 was a larger version of the standard Fairchild FC-2W and was powered by a 450-horsepower Pratt & Whitney Wasp radial engine. The FC-2W2 was a rugged work plane with excellent short field and climb characteristics and a large cargo capacity. FC-2W2s were used to transport people and cargo in the world's most rugged terrain. The FC-2W2 has Fairchild's unique fold-back wings, and was available with skis or metal pontoons.

The fuselage is built of welded steel tubing and wooden fairing strips. The wings are made of spruce spars, and spruce and plywood ribs. The tail-group is a welded steel tube structure, and the horizontal stabilizer is adjustable in flight. The aircraft is fabric-covered.

On loan from the National Air and Space Museum. Serial No. 140

SPECIFICATIONS

General Type: 5- to 7-seat utility aircraft

Manufacturer: Fairchild Aircraft Co., Farmingdale, Long Island, N.Y.

Date: 1928

Number Built: 31

Cost: Unknown

Power Plant Pratt & Whitney Wasp, 450-horsepower, 9-cylinder air-cooled radial engine

Dimensions

Length: 33 feet, 2 inches

Height: 9 feet, 6 inches

Wingspan: 50 feet

Weights & Capacities

Empty Weight: 2,732 pounds

Useful Load: 2,768 pounds

Maximum Gross Weight: 5,500 pounds

Fuel Capacity: 148 gallons (Stars and Stripes: 300 gallons)

Oil Capacity: 12 gallons

Performance

Maximum Speed: 134 mph

Cruise Speed: 108 mph

Landing Speed: 55 mph

Rate of Climb: 875 fpm at sea level

Service Ceiling: 15,000 feet

Cruising Range: 750 miles (Stars and Stripes: 1,500 miles)



1928 HEATH SUPER PARASOL

Classic, Home-Built Light Plane

In the late 1920s, Edward B. Heath of Chicago began designing and selling Heath Parasol kits and plans. At the time, Heath Parasols were the lowest-priced approved airplanes in the country and the only kit-built airplane eligible for government license. Two major versions were available: the standard Heath Parasol with 31-foot wings and the Heath Super Parasol with 25-foot wings.

Throughout the 1930s, more than 1,000 of these popular, home-built aircraft, in several models, were built with countless personal modifications and variations. Heath Parasols were powered by a variety of 25- to 65-horsepower engines. After World War II, Heath Aircraft Co., which produced the kits and a few complete aircraft, became Heath Electronics of Heathkit fame.

This fabric-covered airplane is unusually small and lightweight. The fuselage and tail group are made of welded steel tube, and the wing is constructed of two spruce spars and built-up ribs — each rib weighs only 2.75 ounces! The airplane has a joystick and rudder pedals and no brakes. The horizontal stabilizer is adjustable only on the ground.

Donated by Dr. E. C. Garber. Serial No. 31919

SPECIFICATIONS

General Type: Single-seat home-built sport plane

Manufacturer: Heath Aircraft Co., Chicago

Date: Late 1920s to present

Numbers: More than 1,000

Original Cost: Ready-to-fly aircraft: \$925 –\$1,074. Do-it-yourself kits without engine: as little as \$199. Plans: \$5.

Power Plant Heath B4, 25-horsepower at 2,800 rpm 4-cylinder air-cooled engine

Dimensions

Length: 16 feet, 9 inches

Height: 5 feet, 10 inches

Wingspan: 31 feet, 3 inches (Super Parasol: 25 feet)

Weights & Capacities

Empty Weight: 260–450 pounds

Useful Load: 250–300 pounds

Maximum Gross Weight: 560–700 pounds

Fuel Capacity: 9–10 gallons

Oil Capacity: 3 quarts

Performance

Maximum Speed: 80 mph

Cruise Speed: 62–70 mph

Landing Speed: 28–32 mph

Rate of Climb: 350 fpm at sea level

Service Ceiling: 9,000 feet

Cruising Range: 200 miles



1928 BELLANCA CH-400 SKYROCKET

The One Lindbergh Really Wanted

Famous for their aerodynamic efficiency, Bellancas featured airfoil-shaped wing struts and an airfoil-contoured fuselage. The Skyrocket model, favored by executives and sports-pilots, featured a stronger airframe and a larger engine than earlier Bellancas. Because of their short take-off, steep climb-out and load carrying capabilities, Skyrockets were used in the wilds of Canada and Alaska.

A Bellanca, the Columbia, missed being the first to cross the Atlantic Ocean. Clarence Chamberlin and Charles Levine made a trans-Atlantic flight from New York to Eisleben, Germany in the Columbia only days after Charles A. Lindbergh's historic flight in 1927. Miss Veedol, a CH-400 piloted by Clyde Pangborn and Hugh Berndon, was the first aircraft to fly non-stop across the Pacific Ocean — 4,500 miles from Samishiro, Japan to Wenatchee, Wa. in 1931.

The Virginia Aviation Museum's Bellanca (NX237) was built in 1928 as a CH-300 Pacemaker. In 1964 it was salvaged from an Alaskan glacier by Preston Synder and, in 1976, converted to a CH-400 Skyrocket. The exterior logo is that of the Columbia, which was destroyed in a hangar fire.

The fuselage is built of welded steel tubing. The wings are made of solid spruce spars with spruce and truss-type wing ribs. The tail-group is a combination of wood and steel tubing, and the horizontal stabilizer is adjustable in flight. The aircraft is covered with fabric.

Shannon Collection. Serial No. 187

SPECIFICATIONS

General Type: 6-seat light transport

Manufacturer: Bellanca Aircraft Corp., New Castle, Del.

Date: 1930

Number Built: 32

Original Cost: \$17,800–\$20,000

Power Plant Pratt & Whitney Wasp, 420- or 450-horsepower, 9-cylinder air-cooled radial engine

Dimensions

Length: 27 feet, 10 inches

Height: 8 feet, 4 inches

Wingspan: 46 feet, 4 inches

Weights & Capacities

Empty Weight: 2,592 pounds

Useful Load: 2,008 pounds

Maximum Gross Weight: 4,600 pounds

Fuel Capacity: 120 gallons

Oil Capacity: 8 gallons

Performance

Maximum Speed: 172 mph

Cruise Speed: 150 mph

Landing Speed: 55 mph

Rate of Climb: 1,250 fpm first minute at sea level

Service Ceiling: 20,000 feet

Cruising Range: 670 miles at 22 gallons per hour



1928 PIETENPOL AIR CAMPER AND SKY SCOUT

Ford-Powered Homebuilt

The Pietenpol is one of the best-known homebuilt airplanes ever designed. Bernard H. Pietenpol of Cherry Grove, Minn. developed the 2-seat Air Camper and single-seat Air Scout Pietenpols in the late 1920s and early '30s. Considered the father of the homebuilt aircraft, Pietenpol designed the Air Camper to be "everyman's airplane" and based it on the inexpensive and plentiful Model A Ford engine. In the early 1930s, complete plans were available for \$7.50 from Modern Mechanics and Inventions, and Flying and Glider Manual magazines. Today, Pietenpol plans can still be purchased.

More than 30 types of engines power Pietenpols, the most popular being the 40-horsepower Ford Model A, Corvair and 65- to 85-horsepower Continental or Lycoming engines. The water-cooled Model A engine was mounted backward, with the propeller bolted to the flywheel flange.

The fabric-covered aircraft is built almost entirely of spruce and plywood (although some fuselages are built of welded steel tube). The wing, which weighs only 95 pounds, is constructed from two spruce spars and 28 equal size, built-up ribs. Most of the fittings are steel and simple to make. The original airplane had a joystick, rudder pedals and no brakes.

Built and donated by Charles F. Duff. Serial No. 410

SPECIFICATIONS

General Type: Homebuilt sport aircraft

Manufacturer: Bernard H. Pietenpol, Cherry Grove, Minn.

Dates: Late 1920s–present

Number Built: Hundreds

Cost: Plans cost \$7.50 in 1930

Power Plant 40-horsepower Ford Model A and more than 30 other 30- to 85-horsepower engines

Dimensions

Length: 17 feet, 8 inches

Height: 6 feet, 6 inches

Wingspan: 28 feet, 2 inches

Weights & Capacities

Empty Weight: 625 pounds

Useful Load: 385 pounds

Maximum Gross Weight: 1,010 pounds

Fuel Capacity: 10–18 gallons

Performance

Maximum Speed: 90 mph

Cruise Speed: 60–75 mph

Landing Speed: 40 mph

Rate of Climb: 200–500 fpm at sea level

Service Ceiling: N/A

Cruising Range: 200–330 miles



1929 BRUNNER-WINKLE BIRD, BK

Gentle, Honest and Trustworthy

The Brunner-Winkle Bird is a general-purpose biplane with straightforward flying characteristics. Charles A. Lindbergh was so captivated by the Bird he bought one for his wife, Anne Morrow Lindbergh. The Bird has outstanding slow-speed performance with quick, short takeoffs and unbelievably short landings. The Kinner K5 radial engine-powered Bird replaced the older Curtiss OX-5-powered Birds when those engines became scarce.

The fuselage is built of welded steel tubing, faired to shape with wooden formers and fairing strips. The wings were made of solid spruce spars with spruce and plywood truss-type ribs. The leading edges are covered with metal sheets. The tail-group is a welded steel tube structure, and the horizontal stabilizer is adjustable in flight. The aircraft is covered with fabric, except for the cowling and the top section of the fuselage, which are aluminum. Brakes were optional.

On loan from Dolph Overton. Serial No. 2025

SPECIFICATIONS

General Type: 3-seat light biplane

Manufacturer: Brunner-Winkle Aircraft Corporation, Glendale, N.Y.

Dates: 1929–1930

Number Built: 84

Original Cost: \$3,895–\$4,995

Power Plant Kinner K5, 100-horsepower, 5-cylinder air-cooled radial engine

Dimensions

Length: 23 feet

Height: 8 feet, 8 inches

Wingspan: Upper, 34 feet; Lower, 25 feet

Weights & Capacities

Empty Weight: 1,199 pounds

Useful Load: 781 pounds

Maximum Gross Weight: 1,980 pounds

Fuel Capacity: 37 gallons

Oil Capacity: 2.5 gallons

Performance

Maximum Speed: 110 mph

Cruise Speed: 92 mph

Landing Speed: 35 mph

Rate of Climb: 650 fpm at sea level

Service Ceiling: 14,000 feet

Cruising Range: 500 miles at 6 gallons per hour



1929 CURTISS ROBIN J-1D

Rugged Record-Setter

The Curtiss-Robertson Robin J-1 model was a newer version of the popular Robin and featured a Wright J-6 radial engine rated at 165 horsepower. Other models were powered by 170-horsepower Curtiss Challenger and 90-horsepower OX-5 engines. The Robin Model J-1 was surprisingly maneuverable and easy to maintain. The pilot sat in front and the two passengers sat in wicker seats in the back of the cabin. It was an immediate success with executives and operators of general-purpose flight operations.

In 1935 in Meridian Miss., brothers Al and Fred Key set a world record in a Curtiss-Robertson Robin: they remained aloft for 27 continuous days! In 1938 Douglas "Wrong Way" Corrigan flew a Robin on his infamous flight across the Atlantic Ocean from New York to Ireland — he was supposed to fly from New York to California!

The Robin's fuselage is built of welded steel tubing, spruce formers and fairing strips. The wings are solid spruce spars with stamped metal ribs. The tail-group is a welded steel tube structure, and the horizontal stabilizer is adjustable in flight. The aircraft is fabric-covered. Robin J-1s were available as seaplanes on Edo Type 3300 twin-floats.

The Virginia Aviation Museum's Robin (NC532N) was built in October 1929 and completely restored to its present condition by Francis Clore in 1969.

Shannon Collection. Serial No. 733

SPECIFICATIONS

General Type: 3-seat light aircraft

Manufacturer: Curtiss-Robertson Airplane Mfg. Co., Anglum (St. Louis), Mo.

Dates: 1929–1930

Number Built: 60

Original Cost: \$5,995–\$7,000

Power Plant Wright Whirlwind J-6, 165-horsepower, 5-cylinder air-cooled radial engine

Dimensions

Length: 25 feet, 6 inches

Height: 8 feet

Wingspan: 41 feet

Weights & Capacities

Empty Weight: 1,625 pounds

Useful Load: 898 pounds

Maximum Gross Weight: 2,523 pounds

Fuel Capacity: 50 gallons

Oil Capacity: 5 gallons

Performance

Maximum Speed: 118 mph

Cruise Speed: 90–100 mph

Landing Speed: 45 mph

Rate of Climb: 640 fpm at sea level

Service Ceiling: 13,000 feet

Cruising Range: 438 miles at 9 gallons per hour



1930 FLEET MODEL 1

Military Basic Trainer

The Fleet Model 1 was developed from the Consolidated Husky Junior and was powered by the smooth-running Warner Scarab radial engine. The Fleet is a brawny ship with stout wings — enough to hold the weight of two full-size elephants or 13,125 pounds! The Fleet is quick, nimble and capable of a complete aerobatic routine. In 1930 Paul Mantz set a record of 46 outside loops in a Fleet 2 (like a Fleet 1, but with a 100-horsepower Kinner K5 radial engine). An experimental Fleet (XN2Y-2) was built for the U.S. Navy for testing hook-on pick-ups onto a trapeze affair that projected below a dirigible. Virginia Polytechnic Institute used several Fleet aircraft in the civilian pilot training program before World War II.

The Virginia Aviation Museum's Fleet 1 (N766V) was built in August 1930. In 1933 it was fitted with a more powerful 125-horsepower Warner engine. Through the years, N766V passed through several owners in New Jersey, Washington, D.C., Maryland and Virginia. She was completely recovered in 1969 and was operated by the Barnstormers Airshows of Hanover Airport in the 1970s.

The fuselage is built of welded steel tubing and wood fairing strips. The wings are made of solid spruce spars and heavy gauge, stamped-out aluminum ribs. The tail-group is made of a steel tube spar, sheet steel ribs and formers. The aircraft is fabric-covered. The horizontal stabilizer is adjustable in flight.

Donated by Lennie Ellis. Serial No. 347

SPECIFICATIONS

General Type: 2-seat sport-trainer biplane

Manufacturer: Fleet Aircraft, a division of Consolidated Aircraft Corporation, Buffalo, N.Y.

Dates: 1928–1930

Number Built: Approximately 90

Original Cost: \$5,750

Power Plant Warner Scarab, 110-horsepower, 7-cylinder air-cooled radial engine

Dimensions

Length: 20 feet, 9 inches

Height: 7 feet, 10 inches

Wingspan: 28 feet

Weights & Capacities

Empty Weight: 1,022 pounds

Useful Load: 558 pounds

Maximum Gross Weight: 1,580 pounds

Fuel Capacity: 24 gallons

Oil Capacity: 2.5 gallons

Performance

Maximum Speed: 113 mph

Cruise Speed: 95 mph

Landing Speed: 44 mph

Rate of Climb: 780 fpm at sea level

Service Ceiling: 14,300 feet

Cruising Range: 360 miles



1932 AERONCA C-2

The Flying Bathtub

Designed by 1978 Virginia Aviation Hall of Fame inductee Jean A. Roche, the Aeronca C-2 was a first-production aircraft in a 22-year series of Aeroncas. The Aeronca's low purchase price, maintenance costs and comparatively good performance made it a popular aircraft and encouraged private flying during the economic hard times of the Great Depression.

The Virginia Aviation Museum's Aeronca C-2 (N11417) was originally built as a C-1, clipped-wing Cadet. With a 7-foot shorter wingspan and powered by a 36-horsepower Aeronca E-113 engine, the clipped-wing Cadet was 15 mph faster than the standard C-2. In 1932 this plane was converted to a C-2-N — a deluxe sport version of the C-2 Scout. With standard 36-foot wings, the C-2-N flies and climbs a little faster than the standard C-2. In 1962 this aircraft was rebuilt entirely.

The fuselage is built of welded steel and wood fairing strips. The wire-braced wings are made of solid spruce spars and spruce truss-type ribs with aluminum ailerons. The tail-group is a welded steel tube structure, and the horizontal stabilizer is adjustable only on the ground. The fabric-covered aircraft has a joystick, rudder bar and no brakes. The Aeronca was also available as a PC-2 seaplane on APC model A-1680 twin-floats.

Shannon Collection. Serial No. A151

SPECIFICATIONS

[Bracketed information is for C-2-N model.]

General Type: Single-seat light aircraft

Manufacturer: Aeronautical Corporation of America, Lunken Airport, Cincinnati

Dates: 1930 and 1931

Number Built: 167 [4]

Original Cost: \$1,245–\$1,990

Power Plant Aeronca E-107A, 26-horsepower 2-cylinder opposed air-cooled engine

[36-horsepower Aeronca, E-113A engine]

Dimensions

Length: 20 feet

Height: 7 feet, 6 inches

Wingspan: 36 feet

Weights & Capacities

Empty Weight: 398 [426] pounds

Useful Load: 274 pounds

Maximum Gross Weight: 672 [700] pounds

Fuel Capacity: 8 gallons

Oil Capacity: 3 quarts

Performance

Maximum Speed: 80 [85] mph

Cruise Speed: 65 [70] mph

Landing Speed: 32 [36] mph

Rate of Climb: 550 [650] fpm at sea level

Service Ceiling: 16,000 feet

Cruising Range: 240 [270] miles at 2- to 2.5-gallons per hour



1932 TAYLOR E-2 CUB

Civilian Basic Trainer

Introduced by C. Gilbert Taylor and William T. Piper, the Taylor E-2 Cub had an enormous impact on civilian aviation. In the design lay the foundation for what eventually became the famous Piper Cub. The E-2 Cub was somewhat underpowered but fairly light on the controls with good response. The E-2 Cub was well behaved in all basic maneuvers and was very popular with small flying-school operators. The E-2 combined the fun of open-cockpit flying with good wind protection.

The fuselage is built of welded steel tubing and the wings are made of solid spruce spars, riveted drawn aluminum ribs and a dural metal-covered leading edge. The tail-group is a welded steel tube structure, and the horizontal stabilizer is adjustable in flight. The aircraft is fabric-covered and came equipped with a wooden propeller, dual controls but no brakes.

Shannon Collection. Serial No. 33

SPECIFICATIONS

General Type: 2-seat light aircraft

Manufacturer: Taylor Aircraft Co., Bradford, Pa.

Dates: 1931–1936

Number Built: 351

Original Cost: \$1,325–\$1,425

Power Plant Continental A-40, 37-horsepower, 4-cylinder air-cooled opposed engine

Dimensions

Length: 22 feet, 3 inches

Height: 6 feet, 6 inches

Wing Span: 35 feet, 3 inches

Weights & Capacities

Empty Weight: 525 pounds

Useful Load: 440 pounds

Maximum Gross Weight: 925 pounds

Fuel Capacity: 9 gallons

Oil Capacity: 4 quarts

Performance

Maximum Speed: 78 mph

Cruise Speed: 65 mph

Landing Speed: 28–30 mph

Rate of Climb: 450 fpm at sea level

Service Ceiling: 12,000 feet

Cruising Range: 220 miles at 2.5 gallons per hour



1935 Aeronca C-3

Rugged Affordability

In 1931 an Aeronca C-3 was the first light aircraft to complete the grueling 4,858-mile National Air Tour. At Richmond's Byrd Field, in the years before World War II, a C-3 called Little Joe was one of Eastern Airlines personnel's favorite planes.

This Aeronca C-3 (NC14640) was donated to the museum by Ken Brugh in honor of William Bayne Grubb of Pulaski, Va. Mr. Grubb instructed many students in aviation in Southwestern Virginia, served as vice president of flight operations for Southern Airways and contributed greatly to the advancement of aviation in Southwestern Virginia.

The Aeronca's fuselage is built of welded steel and wood fairing strips. The wings are made of solid spruce spars and spruce truss-type ribs with aluminum ailerons. The tail-group is a welded steel tube structure, and the horizontal stabilizer is adjustable only on the ground. The airplane is covered with fabric, has a joystick, rudder bar and no brakes (1935 and later models had brakes). The Aeronca C-3 was the follow-on 2-seat version of the single-seat C-2 and was available as a PC-3 seaplane on Edo D-1070 or Warner A-1900 twin-floats.

Donated by Kenneth Brugh. Serial No. 426

SPECIFICATIONS

General Type: 2-seat light airplane

Manufacturer: Aeronautical Corporation of America, Lunken Airport, Cincinnati

Dates: 1931–1937

Number Built: Approximately 439

Original Cost: \$1,695–\$1,895

Power Plant Aeronca E-113, 36-horsepower, 2-cylinder opposed air-cooled engine

Dimensions

Length: 20 feet

Height: 7 feet, 6 inches

Wingspan: 36 feet

Weights & Capacities

Empty Weight: 466 pounds

Useful Load: 409 pounds

Maximum Gross Weight: 875 pounds

Fuel Capacity: 8 gallons

Oil Capacity: 3 quarts

Performance

Maximum Speed: 80 mph

Cruise Speed: 65 mph

Landing Speed: 35 mph

Rate of Climb: 500 fpm at sea level

Service Ceiling: 14,000 feet

Cruising Range: 200 miles at 2- to 2.5-gallons per hour



1935 WACO MODEL YOC

Superlative Business Aircraft

The WACO Model YOC is one of the most beautiful cabin airplanes ever built by WACO Aircraft. These custom-cabin WACOs were plush and generally owned by corporations and wealthy sports-pilots. The cabin is spacious, and the shortened elliptical-shaped lower wings give the YOC a look of speed. With several different engine choices, the YOC is a well-balanced combination of speed, comfort, safety and reliability. The 225-horsepower Jacobs L-4 engine powered the YOC, while the 285-horsepower Jacobs L-5 engine powered the YOC-1. The YOC can be modified to seaplane configuration with Edo twin-floats.

The fuselage is made of welded steel tubing, wooden formers and fairing strips. The wings are made of solid spruce spars with spruce and plywood truss-type ribs and leading edges covered with a dural metal sheet. The ailerons are metal, and the upper wings have vacuum-operated drag flaps on the underside. The tail group is a combination of aluminum and wood, and the horizontal stabilizer is adjustable in flight. Fabric covers the entire aircraft. The WACO Model YOC came with a Hartzell wooden or Hamilton-Standard controllable-pitch propeller and single or dual flight controls.

On loan from the Virginia Aeronautical Historical Society. Serial No. 4279

SPECIFICATIONS

[Bracketed information is for YOC-1]

General Type: 4- to 5- seat cabin sesquiplan

Manufacturer: Waco Aircraft Co., Troy, Ohio

Date: 1935

Number Built: more than 50

Original Cost: \$6,895–\$7,295 [\$7,995]

Power Plant Jacobs L-4 [L-5], 225-horsepower [285-horsepower], 7-cylinder air-cooled radial engine

Dimensions

Length: 25 feet, 6 inches [25 feet, 4 inches]

Height: 8 feet, 3 inches

Wingspan: Upper 35 feet; Lower 24 feet, 6 inches

Weights & Capacities

Empty Weight: 1,908 pounds [2,260 pounds]

Useful Load: 1,192 pounds [1,090 pounds]

Maximum Gross Weight: 3,100 pounds [3,350 pounds]

Fuel Capacity: 50 gallons

Oil Capacity: 4 gallons

Performance

Maximum Speed: 155 mph [162 mph]

Cruise Speed: 137 mph [132 mph]

Landing Speed: 53 mph [57 mph]

Rate of Climb: 760 fpm at sea level [920 fpm]

Service Ceiling: 16,000 feet [16,500 feet]

Cruising Range: 450 miles at 14 gallons per hour



1936 CURTISS-WRIGHT SPEEDWING MODEL A-14D

Rare, Classic Aircraft

The Curtiss-Wright Speedwing Model A-14D was designed to take advantage of the low-drag, National Advisory Committee for Aeronautics-designed radial engine cowling. Its speed and cruising range made it a favorite among sport-pilots. Although the front cockpit was designed for two passengers, the aircraft was most often used with the front cockpit covered to improve the airplane's speed. Earliest versions of the A-14D were lighter and called Sportsman Deluxe; later versions, called Speedwings, were heavier, better equipped and refined for more speed.

The Virginia Aviation Museum's Curtiss-Wright A-14D (N12329) is the only known A-14D in existence. It was originally owned by the Curtiss-Wright Co., and flown by such notables as famous test pilot Jimmy Doolittle and New York City Mayor Fiorello LaGuardia. The crest on the logo on the fuselage is one of the Sportsman Pilot magazine personal crests of the 1930s. The W and the eagle are the owner's personal identifiers.

The fuselage is built of welded steel tubing, formers and fairing strips. The wings are made of solid spruce spars and web-type spruce ribs spaced only eight inches apart. The tail-group is a welded steel tube structure, and the horizontal stabilizer is adjustable in flight. The aircraft is fabric-covered and equipped with brakes.

On loan from Allen H. Watkins. Serial No. 2009

SPECIFICATIONS

General Type: 3-seat sport biplane

Manufacturer: Curtiss-Wright Airplane Co., St. Louis

Date: 1936

Number Built: 7 or 8

Original Cost: \$8,750–\$10,895

Power Plant Wright J6-7 (R-760), 240-horsepower, 7-cylinder air-cooled radial engine

Dimensions

Length: 23 feet, 7 inches

Height: 9 feet, 1 inch

Wingspan: Upper, 31 feet; Lower, 23 feet, 7 inches

Weights & Capacities

Empty Weight: 1,772 pounds

Useful Load: 1,098 pounds

Maximum Gross Weight: 2,870 pounds

Fuel Capacity: 58 gallons

Oil Capacity: 4.75 gallons

Performance

Maximum Speed: 155 mph

Cruise Speed: 135 mph

Landing Speed: 60 mph

Rate of Climb: 1,000 fpm at sea level

Service Ceiling: 16,100 feet

Cruising Range: 540 miles at 13 gallons per hour



1936 VULTEE V-1A SPECIAL

Luxury in the Sky

The Virginia Aviation Museum's Vultee V-1A Special (NC16099) is the only known surviving V-1A in the world. Powered by a 1,000-horsepower Wright Cyclone R-1820 radial engine that turns a three-bladed controllable-pitch propeller, the aircraft was custom-built for publisher William Randolph Hearst Sr. In 1939 the Vultee was sold to a Panamanian airline and during World War II served Central and South America for the American government. After the war, the Vultee passed through several owners until the 1960s when Harold W. Johnston discovered this sole remaining V-1A and, after five years of restoration, it flew again on April 30, 1971. Johnson sold this aircraft to Sid Shannon Jr. for display at the Shannon Air Museum in Fredericksburg, Va. Mr. Shannon named the aircraft the Lady Peace II to commemorate Capt. Dick Merrill and actor Harry Richman's 1936 roundtrip trans-Atlantic crossing.

The V-1A was built in 1934 as an airliner for American Airlines. When the CAA (the forerunner of the FAA) ruled airliners had to have at least two engines, the V-1As were taken out of commercial service and used as executive airplanes. Nine deluxe versions (V-1AD), outfitted with plush interiors and a larger engine, were produced and used as executive aircraft. In addition to the Merrill/Richman record-setting flight mentioned above, in 1935 Jimmy Doolittle used a V-1A to set a transcontinental time record. At least 16 V-As and ADs including the Lady Peace were sold to Spain in 1937 for use in the Spanish Civil War. The last V-1A was built in 1936 for the Soviet government and flown 10,000 miles from California to Moscow.

Except for the fabric-covered ailerons and elevator, the aircraft is built of aluminum and covered with Alcad metal sheets. The flaps and retractable landing gear are operated by a single electric motor. The executive version's cabin was soundproof and featured plush reclining seats and a complete lavatory. All models were equipped with the latest radios and navigation aids of the time.

Shannon Collection. Serial No. 25

SPECIFICATIONS

General Type: 2 pilots plus 8 passenger single-engine airliner and executive airplane
Manufacturer: Airplane Development Corp. (later known as Vultee Aircraft Division), Glendale, Ca.
Dates: 1934–1937
Number Built: 27 (V-1, V-1A, V-1AD, V-1AS)
Original Cost: \$35,000 (V-1A)
Power Plant Wright Cyclone R-1820, 735- to 850-horsepower, air-cooled radial engine (V-1A Special: 1,000 horsepower, at 40 in Hg and 2,200 rpm)

Dimensions

Length: 37 feet
Height: 10 feet, 2 inches
Wingspan: 50 feet

Weights & Capacities

Empty Weight: 5,382 pounds
Useful Load: 3,118 pounds
Maximum Gross Weight: 8,500 pounds
Fuel Capacity: 206 gallons (V-1A Special: 306 gallons)
Oil Capacity: 15 gallons (V-1A Special: 19 gallons)

Performance

Maximum Speed: 225 mph
Cruise Speed: 205 mph (V-1A Special: 225 mph)
Landing Speed: 65 mph (with flaps)
Rate of Climb: 1,000 fpm at sea level
Service Ceiling: 20,000 feet (V-1A Special: 31,000 feet)
Cruising Range: 1,200 miles at 70 percent power and 32 gallons per hour (V-1A Special: 750 miles at 70 percent power and 70 gallons per hour)



1937 FAIRCHILD 24 MODEL G

The Cadillac of Private Planes

The Fairchild Model 24-G was available in the standard 4-seat or deluxe 3-seat version and was powered by a 145-horsepower Warner Super Scarab radial engine. The handsome Model 24-G appealed to both the sports-pilot, charter and pilot-training operator. Easy to fly, economical to operate and capable of carrying an ample load, the Model 24-G was available as a seaplane on Edo 44-2425 twin-floats.

The Virginia Aviation Museum's Fairchild Model 24-G (N19123) was built in August 1937. After passing through several owners, this plane was restored to its current condition in 1984.

The fuselage is built of welded steel tubing, spruce formers and fairing strips. The flap-equipped wings are made of solid spruce spars, and spruce and mahogany plywood truss-type ribs. The tail-group is a wood and welded steel tube structure, and the horizontal stabilizer is adjustable in flight. Except for the aluminum engine cowling, the aircraft is fabric-covered. The aircraft came standard with dual flight controls and wheel brakes.

Donated by Lyall O. Steger. Serial No. 2983

SPECIFICATIONS

General Type: 3- or 4-seat cabin monoplane

Manufacturer: Fairchild Engine & Airplane Corp, Hagerstown, Md.

Date: 1937

Number Built: 100

Original Cost: \$5,290–\$5,890

Power Plant Warner Super Scarab, 145-horsepower, 7-cylinder air-cooled radial engine

Dimensions

Length: 23 feet, 10 inches

Height: 7 feet, 4 inches

Wingspan: 36 feet, 4 inches

Weights & Capacities

Empty Weight: 1,475 pounds

Useful Load: 925 pounds

Maximum Gross Weight: 2,400 pounds

Fuel Capacity: 40 gallons

Oil Capacity: 3 gallons

Performance

Maximum Speed: 130 mph

Cruise Speed: 118 mph

Landing Speed: 48 mph

Rate of Climb: 675 fpm at sea level

Service Ceiling: 16,500 feet

Cruising Range: 475 miles at 75 percent power and 9 gallons per hour



1938 STINSON RELIANT SR-10G

Gull Wing Perfection

The Stinson Reliant SR-10 was the last model in a long line of Reliants, which were first introduced as the SR-1 in 1933. With its distinctive gull wing, the Stinson Reliant is considered a masterpiece of classic styling. Most of these graceful airplanes were sold to corporations and larger commercial operators and were used in a variety of roles from transporting executives to hauling supplies to wilderness camps. All-American Aviation used several Reliants from 1939 to 1948 in Western Virginia and Western Pennsylvania to pick up mail at 165 locations a day using a hook instead of having to land at each location. This recovery system was later modified to pick-up allied spies behind enemy lines during WWII and retrieve photographic canisters that were ejected from US spy satellites in the 60's and 70s. Reliants were also available as seaplanes on Edo 39-4000 twin-floats.

The Virginia Aviation Museum's Reliant (NC21135) was built for American Airlines and became one of American's route survey planes and VIP transports. In 1942 this plane, along with 44 other civilian Reliants, was impressed into the USAAF as an UC-81. In 1946 it returned to civilian status for the Virginia Aerial Mapping and Photo Service. In March 1973 NC21135 was completely restored in American Airlines colors.

The fuselage is made of welded steel tubing. The wings are made of metal spars and ribs. The tail-group is a welded steel tube structure, and the horizontal stabilizer is adjustable in flight. The aircraft is fabric-covered except the forward fuselage section, which aluminum-clad.

Shannon Collection. Serial No. 5903

SPECIFICATIONS

General Type: 4- or 5-seat light aircraft

Manufacturer: The Stinson Aircraft Company, Wayne, Mi.

Dates: 1939–1941

Number Built: 71 (12 were SR-10Gs)

Original Cost: \$12,585

Power Plant Lycoming R-680-E1, 300-horsepower, 9-cylinder air-cooled radial engine

Dimensions

Length: 27 feet, 10 inches

Height: 8 feet, 7 inches

Wingspan: 41 feet, 11 inches

Weights & Capacities

Empty Weight: 2,610 pounds

Useful Load: 1,390 pounds

Maximum Gross Weight: 3,900 pounds

Fuel Capacity: 76–100 gallons

Oil Capacity: 5–7 gallons

Performance

Maximum Speed: 160 mph

Cruise Speed: 151 mph

Landing Speed: 70–75 mph

Rate of Climb: 920 fpm at sea level

Service Ceiling: 15,000 feet

Cruising Range: 600–800 miles at 16 gallons per hour



1941 BÜCKER 133-C JUNGMEISTER

Aerobatic Prowess

Designed by Carl Bücker for the Luft Sports Bund, the Bu 133 featured excellent control effectiveness and light control pressure. A Bu 133 won the only Olympic aerobatic flying competition in the history of the games at the 1936 Berlin Olympics. Until the end of World War II, the Luftwaffe (the German air force) used Bu 133s (including the one you see here) to train pilots for fighter aircraft. After the war, Bu 133s were sought-after as acrobatic aircraft and became one of the world's premier competition aircraft.

After the war, the Virginia Aviation Museum's Bücker Bu 133 was owned by Count Jose L. Aresti, the originator of the Aresti Aerobatic Shorthand Scoring System. In 1979 Sidney Shannon acquired the airplane and to honor Beverly "Bevo" Howard — one of the most talented acrobatic air-show pilots in America — painted it in its current colors.

The fuselage and tail are built of welded tubular steel. The wings are constructed of built-up wood spars and ribs and both wings have ailerons. The entire aircraft is fabric-covered, except for the aluminum engine cowling. The aircraft is equipped with wheel brakes and a steerable tail wheel.

Shannon Collection. Serial No. 251

SPECIFICATIONS

General Type: Single-seat, advanced-training biplane

Manufacturer: Bücker-Flugzeugbau (Germany), Dornier-Werke (Switzerland), CASA (Spain)

Dates: 1930s and 1940s

Number Built: Hundreds

Original Cost: Unknown

Power Plant Siemens Sh 14A-4, 160-horsepower, 7-cylinder air-cooled radial engine

Dimensions

Length: 19 feet, 8 inches

Height: 7 feet, 2 inches

Wingspan: 21 feet, 8 inches

Weights & Capacities

Empty Weight: 925 pounds

Useful Load: 365 pounds

Maximum Gross Weight: 1,290 pounds

Performance

Maximum Speed: 137 mph

Cruise Speed: 124 mph

Landing Speed: 54 mph

Rate of Climb: 1,000+ fpm at sea level

Service Ceiling: 14,765 feet

Cruising Range: 311 miles



1943 PIPER J-3 CUB

The Classic Trainer Aircraft

The simple, inexpensive, easy to maintain and fly J-3 Cub is one of the most popular airplanes of all time. Civilian and military flight schools used Piper Cubs as trainers. It is estimated that nearly 75 percent of the pilots serving in World War II received their first training in a Piper Cub. Cubs also served the Army and Navy as liaison and observation aircraft. A special, engineless, 3-place training glider version (TG-8) of the Cub was produced to train new glider pilots for the U.S. Army. Piper Cubs were built with different engines ranging from 4-cylinder Continental A-40, A-50, A-65; Lycoming O-145; Franklin 4AC-150 or 176; and even a 3-cylinder Lenape "Papoose" radial engine. The Cub was also available as a seaplane on Edo D-1070 or 54-1140 twin-floats.

The fuselage is built up of welded-steel tubing. The wings are made of extruded aluminum spars (early model spars were solid spruce), stamped aluminum alloy ribs with leading edges covered in duralumin metal. The tail-group is a welded-steel tube structure, and the horizontal stabilizer is adjustable in flight. The entire aircraft is fabric-covered and painted in the familiar Cub yellow with black trim. The aircraft came equipped with a Sensenich wooden propeller and dual flight controls. Brakes were optional.

Shannon Collection. Serial No. 14812

SPECIFICATIONS

General Type: 2-seat light aircraft

Manufacturer: Piper Aircraft Corporation, Lock Haven, Pa.

Date: 1937–1950

Number Built: 14,125 civilian Cubs; 5,703 military (L-4, L-14, O-59, and TG-8)

Original Cost: \$1,270–\$1,598

Power Plant Continental A-65, 65-horsepower, 4-cylinder opposed air-cooled engine

Dimensions

Length: 22 feet, 3 inches

Height: 6 feet, 8 inches

Wingspan: 35 feet, 3 inches

Weights & Capacities

Empty Weight: 640 pounds

Useful Load: 460 pounds

Maximum Gross Weight: 1,100 pounds

Fuel Capacity: 12 gallons

Oil Capacity: 4 quarts

Performance

Maximum Speed: 92 mph

Cruise Speed: 82 mph

Landing Speed: 35 mph

Rate of Climb: 575 fpm at sea level

Service Ceiling: 12,000 feet

Cruising Range: 250 miles at 80 percent power and 4 gallons per hour



1946 ERCOUBE MODEL 415

The Average Guy's Airplane

The unusual Ercoupe was a light aircraft popular after World War II. Designed for the amateur pilot by renowned National Advisory Committee for Aeronautics—Langley engineer Fred Weick, the Ercoupe was a safe, docile flying machine. The Ercoupe was the first airplane to feature a steerable nose gear. To make Ercoupe stall- and spin-proof, it was built with limited elevator travel and rudders that automatically coordinated with the ailerons. The Ercoupe was steered on the ground and in flight with a control wheel — there were no rudder pedals. Since the Ercoupe had to be landed in a crab for crosswind landings, rugged trailing-beam landing gear were used, which were successfully tested in crosswinds up to 40 mph! To counteract the torque effect on climbout without rudders, Weick split the tail into two halves (each outside the propeller blast) and canted the engine in its mounts.

Between 1945 and 1952, over 5,000 Ercoupes were built; many were sold through the menswear department at Macy's! Before the U.S. entry into World War II, the Army Air Corps used an Ercoupe in the first test of Jet Assisted Take Off, which led to the formation of the Jet Propulsion Laboratory in California.

The aircraft structure was primarily aluminum. Although early Ercoupe wings were fabric-covered, most have since been re-covered with aluminum. Ercoupes came with dual controls, wheel brakes, no flaps and a horizontal stabilizer adjustable in flight.

Donated by Charles Drummond. Serial No. 1766

SPECIFICATIONS

General Type: 2-seat light aircraft

Manufacturer: The Engineering and Research Corporation, Riverdale, Md.

Dates: 1939–1952

Number Built: 5,140

Note: Forney, Alon Inc. and Mooney Aircraft produced an additional 545 “Ercoupes” under different names from 1956 to 1970.

Original Cost: \$2,590–\$4,090

Power Plant Continental C-75 or C-85, 75- or 85-horsepower, 4-cylinder opposed air-cooled engine

Dimensions

Length: 20 feet, 9 inches

Height: 5 feet, 11 inches

Wingspan: 30 feet

Weights & Capacities

Empty Weight: 815 pounds

Useful Load: 585 pounds

Maximum Gross Weight: 1,400 pounds

Fuel Capacity: 24 gallons

Oil Capacity: 4 quarts

Performance

Maximum Speed: 117 mph

Cruise Speed: 105 mph

Landing Speed: 60 mph

Rate of Climb: 550 fpm at sea level

Service Ceiling: 13,000 feet

Cruising Range: 450 miles at 80 percent power and 4.9 gallons per hour



1988 Quickie 200 Tri-Gear

High Performance Homebuilt Aircraft

The Quickie Q-200 is a two-place, high-performance, composite, homebuilt aircraft. The Q-200's compact size and efficient design evolved from the original single seat Quickie (mid-1970s) and the Q-2 (early 1980s) kits produced by Quickie Aircraft Company. Q-200s requires between two and five years to build.

The Q-200's high-lift canard (forward wing) is fitted with an elevator for pitch control and produces approximately 60% of the total lift. The rear wing is fitted with conventional ailerons for roll control and the tail has a conventional rudder for yaw control. The original Q-200s were designed as tail wheel type aircraft with the front wheels mounted on the tips of the canard. Some Q-200s were modified with a tri-gear arrangement.

The Q-200 is designed to be powered with a 100-hp Continental Q-200 engine and other engines including Mazda, Subaru, Rotax, and Corvair engines in the same horsepower range. Several hundred Q-200 plans were sold with an unknown total of those actually being completed.

The Museum's Quickie Q-200 Tri-Gear, N200XQ, was built and donated by Howard and Tom Burnette. In loving memory "Our Buckaroo" Tommy Burnette II, September 25, 1994 to September 19, 2002, from the Burnette brothers, Howard and Tom.