

HANGER TALK

NEWSLETTER OF EAA CHAPTER 58

OGDEN, UTAH

President	Todd Parker	(801) 544-1675
Vice President	Jonathan Tibbets	(801) 544-5110
Secretary	Rick Pewtress	(801) 755-9798
Treasurer	Don Pantone	(801) 726-5909
Newsletter Editor	Rene' Felker	(801) 721-60801

Chapter 58 meets monthly on the **SECOND Thursday of the month**. Meetings are held at 7:00pm at Ogden Hinkley Airport Terminal. Other meetings are held "on site" in members' hangers, shops, or garages. Onsite meeting locations are announced in the newsletter.

This Month's Meeting: "Off Site"

Location: Doug Barker's house (See directions below)

Featuring: Doug Barker's autogyro.

Subject: Project Visit

Thursday, 14 April 2011 1900 HRS, 0100 Z, or 7:00 PM

Doug's House

738 East 425 South
Layton, UT 84041

Take I-15 to the Layton Parkway Exit, go east off the interstate and turn right (South) on Ft. Lane. Go approx. 1 block south and turn left on 405 S.. Then turn right at 725 East and then turn left onto 425 South. My house will be the 3rd house on the right.

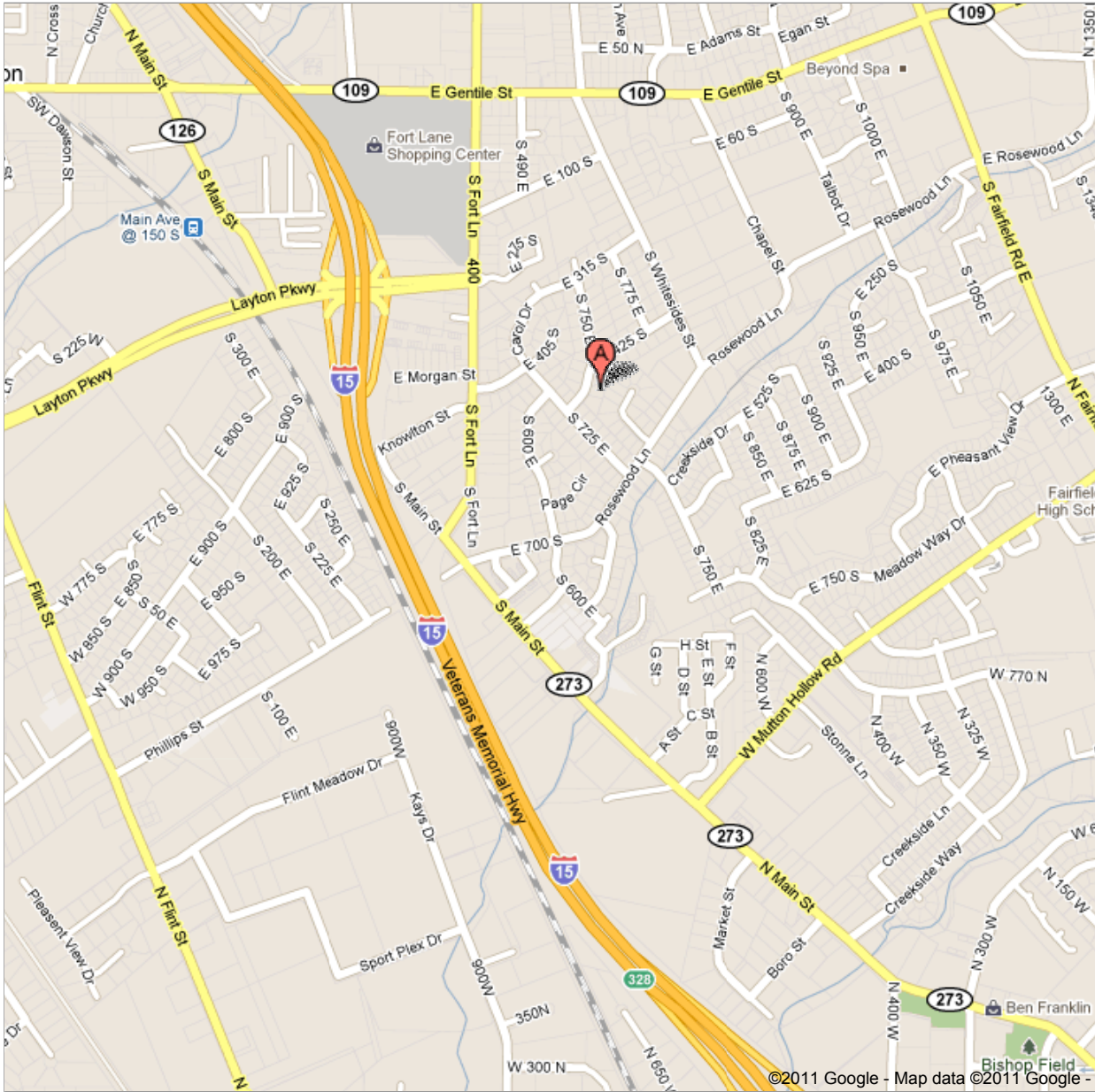


Address **738 E 425 S**
Layton, UT 84041

Get Google Maps on your phone



Text the word "GMAPS" to 466453



PREZ SEZ:

This has been a very busy month for me, so it hardly seems like it was yesterday I was writing this letter for the newsletter, but here we are again. Spring has been flying in like a World War One fighter, the only way for it to land it seems is with the interrupter stopping the engine, and that hasn't worked so well so far. My backyard looks like a nice grass yard, but a couple of steps into it tells you it is really a swamp.

This month we are going to see Doug Barker's Super Skycycle project. If you are like me, you have never flown an autogyro and in my case never sat in one. But maybe I will get my chance this week.

Doug, does it have a seat yet?

Anyway come join us at Doug's house to learn about his project, autogyro's, and hear more stories about flying. For those of you with X-Plane installed on your home computers, you can download an autogyro to fly just to get the feel of how they handle. I personally recommend this one:

<http://forums.x-plane.org/index.php?app=downloads&showfile=6544>

Right now all of my projects are in virtual space, so I hope you guys are compensating for that by building or flying real airplanes. The virtual projects I am working on are: Airtractor 802F for a full cockpit simulator and a theoretical WW II STOL aircraft for an online competition. Below are some images of those projects. The 802F is a sweet flying machine, pure fun to fly.

We hope to see you all at the meeting.

Todd Parker, Prez



FROM THE EDITOR:

PLEASE NOTE THAT THE ADDRESS HAS CHANGED!!! The old address has been given to another party and so we got reassigned. The box number is C-3.

The official mailing address for the chapter is:

EAA CHAPTER 58
3815 AIRPORT ROAD
OGDEN, UTAH 84405

The location of the Chapter web is www.eaa58.org,

Young Eagles

POC: Tom Holt (tom.holt@zionsbank.com) (801-497-0364)

Flights Since Inception: 500

Flights In 2011: 0

Next Event: 14 May 2011

Stan Andrews, P-38 ace, remembers his first fight and first victory



“Note the moccasins. I didn't fly in them in case you are wondering! Wore GI boots for flying”

On 27 Dec 42, I was tail-end Charlie in a flight of four P-38s lead by Lt. Eason. (He was killed a few months later in the Bismark Sea Battle). We were flying a patrol over Buna, New Guinea. My radio was out so I was just staying with the flight and was keeping my eyes open. There were broken clouds over the area at about fifteen thousand feet. We were cruising around in a out of the clouds and underneath them from time to time. I noticed the leader started down through them all of a sudden but since I didn't have a radio that was functioning, I didn't know what was taking place so I tagged along. When I broke out of the clouds, I was looking head-on at a Zero coming at me with a lot of little lights blinking on the wings. Needless to say, I suddenly got very busy turning on gun switches, pushing the throttles and prop pitches full forward and taking evasive action. I was really scanning the sky at this point, clearing my tail, underneath, above, etc. All of those fly specks on my windshield and canopy turning into Zeros in a hurry..

At this point, I can't remember seeing another P-38. I felt that I was a huge target, very slow and very vulnerable. Time seemed to slow down. After a few unsuccessful passes at an infinite number of Zeros, I got on the tail of one diving toward the water just of the coast of Buna. I had the impression that he never saw me. I gave him a long burst with no apparent damage until I noticed that the stab and rudder were coming apart. I was shooting behind him and almost missed the plane. About that moment, he seemed to lose control and shortly after crashed into the sea between the reefs and the shoreline. By this time, I was so far away from the original fight that I couldn't see any planes, ours or theirs! I finally found some other P-38s and joined forces with them for the trip back to home base. I don't think that any of us ever forget our first aerial combat.

McDonnell F-101 Voodoo

From Wikipedia, the free encyclopedia

Jump to: [navigation](#), [search](#)

F-101 Voodoo



McDonnell F-101A Voodoo

Role	Fighter aircraft
Manufacturer	McDonnell Aircraft
First flight	29 September 1954
Introduced	May 1957
Retired	1972, USAF 1982, US ANG 1984, Canada
Primary users	United States Air Force Royal Canadian Air Force
Number built	807

Unit cost	US\$1,276,145 (RF-101C)^[1] US\$1,754,066 (F-101B)^[2]
Developed from	XF-88 Voodoo
Variants	McDonnell CF-101 Voodoo

The **McDonnell F-101 Voodoo** was a [supersonic](#) military [jet fighter](#) which served the [United States Air Force](#) (USAF) and the [Royal Canadian Air Force](#) (RCAF). Initially designed by [McDonnell Aircraft](#) as a long-range [bomber escort](#) (known as a *penetration fighter*) for the [Strategic Air Command](#) (SAC), the Voodoo was instead developed as a nuclear-armed [fighter-bomber](#) for the [Tactical Air Command](#) (TAC), and as a [photo reconnaissance](#) aircraft based on the same airframe. Extensively modified versions were produced as an all-weather [interceptor aircraft](#), serving with the [Air Defense Command](#), [later renamed the Aerospace Defense Command](#) (ADC), the [Air National Guard](#), the [Royal Canadian Air Force](#) and the unified [Canadian Forces](#) after 1968.

The Voodoo's career as a fighter-bomber was relatively brief, but the reconnaissance versions served for some time. Along with the US Air Force's [U-2](#) and US Navy's [RF-8 Crusaders](#), the RF-101 reconnaissance variant of the Voodoo was instrumental during the [Cuban Missile Crisis](#) and saw extensive service during the [Vietnam War](#).^[3] Interceptor versions served with the Air National Guard until 1982, and in Canadian service they were a front line part of [NORAD](#) until their replacement with the [McDonnell Douglas CF-18 Hornet](#) in the 1980s.

While the Voodoo was a moderate success, it may have been more important as an evolutionary step towards its replacement in most roles, the [McDonnell Douglas F-4 Phantom II](#), one of the most successful Western fighter designs of the 1960s. The Phantom would retain the twin engines, twin crew for interception duties, and a tail mounted well above and behind the jet exhaust. Both aircraft were influenced by the McDonnell's [F-3 Demon](#), a carrier-based naval fighter-interceptor that served during the 1950s and early 1960s.

Design and development

Initial design on what would eventually become the Voodoo began just after [World War II](#) in response to a USAAF Penetration Fighter Competition in 1946 for a long-range high performance fighter to escort bombers, much as the [P-51 Mustang](#) had done in its time. After being awarded a contract (AC-14582) on 14 February 1947, [McDonnell](#) built two prototypes, designated the [XF-88 Voodoo](#).^[4] The first prototype (serial number 46-6525), powered by two 3,000 lbf (13.3 kN) [Westinghouse XJ34-WE-13](#) turbojets, flew from [Muroc](#) on 20 October 1948.^[5] Preliminary testing revealed that while handling and range was adequate, the top speed was a disappointing 641 mph (1,032 km/h) at sea level.^[6]

After fitting McDonnell-designed afterburners to the second prototype, thrust was increased to 3,600 lbf (16.1 kN) with corresponding performance increases in top speed, initial rate of climb and reduced takeoff distance. Fuel consumption was greatly increased by use of the afterburners, however, reducing the range.^[5]

Although the XF-88 won the "fly-off" competition against the competing [Lockheed XF-90](#) and [North American YF-93](#), the [detonation of the first nuclear weapon](#) by the [Soviet Union](#) resulted in the USAF (created in 1947) reevaluating its fighter needs, with interceptors being more important and bomber escorts being of reduced priority, and it terminated the Penetration Fighter program in 1950.^[7] Analysis of [Korean war](#) missions, however, revealed that contemporary USAF strategic bombers were vulnerable to fighter interception. In 1951, the USAF issued a new requirement for a bomber escort with all major US manufacturers submitting designs. The McDonnell design was a larger and higher powered version of the XF-88, and won the bid in May 1951. The **F-88** was redesignated the **F-101 Voodoo** in November 1951.

Design changes for new engines

The new design was considerably larger, carrying three times the initial fuel load and designed around larger, more powerful [Pratt & Whitney J57](#) turbojets. The greater dimensions of the J57 engines required modifications to the engine bays, and modification to the intakes to allow a larger amount of airflow to the engine. The new intake also was designed to be more efficient at higher Mach numbers. In order to increase aerodynamic efficiency, reduce structural weight and alleviate "pitch-up" phenomena recently identified in flight testing of the D-558-2, an aircraft with a control surface configuration similar to the XF-88, the horizontal tail was relocated to the top of the vertical stabilizer, giving the F-101 its signature "T-tail". In late 1952, the mission of the F-101 was changed from "penetration fighter" to "strategic fighter", which entailed equal emphasis on both the bomber escort mission and on nuclear weapons delivery. The new Voodoo mock-up with the reconfigured inlets, tail surfaces, landing gear, and dummy nuclear weapon was inspected by Air Force officials in March 1953. The design was approved, and an initial order for 29 F-101As was placed on 28 May 1953, no prototypes being required as the F-101 was considered a simple development of the XF-88, with the [Cook-Cragie](#) production policy, in which initial low-rate production would be used for testing without the use of separate prototypes, chosen instead.



 F-101A, AF Serial No. 53-2418, at Pueblo Weisbrod Aircraft Museum, Pueblo, CO

First production

Serial number 53-2418 was the first production A-model delivered to [Edwards AFB](#) in August 1954. Its maiden flight was on 29 September 1954, with a McDonnell test pilot Robert C. Little. Test flight results: Mach 0.9 at 35,000 ft (10,500 m), with a maximum test speed to Mach 1.4. This aircraft, which is privately owned, has been moved the Evergreen Maintenance Center in Marana, Arizona to undergo restoration for display at the [Evergreen Aviation & Space Museum](#) in McMinnville, Oregon. It was previously on display at the [Pueblo Weisbrod Aircraft Museum](#).

The end of the war in Korea and the development of the jet-powered [B-52](#) negated the need for fighter escort and [Strategic Air Command](#) withdrew from the program.

Operational history

F-101A / RF-101G

Despite SAC's loss of interest, the aircraft attracted the attention of [Tactical Air Command](#) (TAC), and the F-101 was reconfigured as a [fighter bomber](#), intended to carry a single [nuclear weapon](#) for use against [tactical targets](#) such as airfields. With the support of TAC, testing was resumed, with [Category II flight tests](#) beginning in early 1955. A number of problems were identified during development, with many of these fixed. The aircraft had a dangerous tendency toward severe [pitch-up](#) at high [angle of attack](#) that was never entirely solved.^[15] Around 2,300 improvements were made to the aircraft in 1955–56 before full production was resumed in November 1956.



 F-101A Voodoo

The first F-101A was delivered on 2 May 1957 to the [27th Strategic Fighter Wing](#), which transferred to TAC in July that year,^[16] replacing their [F-84F Thunderstreak](#). The F-101A was powered by two Pratt & Whitney J57-P-13 [turbojets](#),^[11] allowing good acceleration, climb-performance, ease in penetrating the sound barrier in level flight, and a maximum performance of [Mach](#) 1.52. The F-101's large internal fuel capacity allowed a range of approximately 3,000 mi (4,828 km) nonstop.^[17] The aircraft was fitted with an MA-7 fire-control radar for both air-to-air and air-to-ground use, augmented by a [Low Altitude Bombing System](#) (LABS) system for delivering nuclear weapons,^[11] and was designed to carry a [Mk 28 nuclear bomb](#). The original intended payload for the F-101A was the McDonnell [Model 96 store](#), a large fuel/weapons pod similar in concept to that of the [Convair B-58 Hustler](#), but was cancelled in March 1956 before the F-101 entered service.


Other operational nuclear payloads included the Mk 7, Mk 43, and Mk 57 weapons. While theoretically capable of carrying conventional bombs, rockets, or [Falcon air-to-air missiles](#), the Voodoo never used such weapons operationally. It was fitted with four 20mm [M39 cannon](#), with one cannon often removed in service to make room for a [TACAN](#) beacon-receiver.

The F-101 set a number of speed records, including: a JF-101A (the ninth F-101A modified as a testbed for the more powerful J-57-P-53 engines of the F-101B) setting a [world speed record](#) of 1,207.6 mph (1,943.4 km/h) on 12 December 1957 during "Operation Firewall",^[20] beating the previous record of 1,132 mph (1,811 km/h) set by the [Fairey Delta 2](#) in March the previous year. The record was then subsequently taken in May 1958 by a [Lockheed F-104 Starfighter](#). On 27 November 1957, during "Operation Sun Run," an RF-101C set the [Los Angeles-New York](#)-Los Angeles record in 6 hours 46 minutes, the New York to Los Angeles record in 3 hours, 36 minutes, and the Los Angeles to New York record in 3 hours 7 minutes.^[21] An **F-101A** flew from [Carswell, Texas](#) to [Bermuda](#) without refueling.¹

A total of 77 F-101As were built. They were gradually withdrawn from service starting in 1966.^[22] Twenty-nine survivors were converted to **RF-101G** specifications with a modified nose, housing [reconnaissance](#) cameras in place of cannons and radar. These served with the [Air National Guard](#) through 1972.

RF-101A



 A 33rd Tactical Group RF-101A (s/n 54-1512) at [Tan Son Nhut Air Base](#), 1965.

In October 1953, the USAF requested that two F-101As be built as prototype YRF-101A tactical [reconnaissance](#) aircraft. These were followed by 35 RF-101A production aircraft. The RF-101A shared the airframe of the F-101A, including its 6.33 *g* (62 m/s²) limit, but replaced the radar and cannons with up to six cameras in the reshaped nose. Like all other models of the F-101, it had provision for both flying boom and probe-and-drogue [in-flight refueling](#) capability, as well as for a [buddy tank](#) that allowed it to refuel other aircraft.^[18] It entered service in May 1957, replacing the [RB-57 Canberra](#).

[USAF](#) RF-101As from the [363d Tactical Reconnaissance Wing](#) at [Shaw AFB](#), SC flew reconnaissance sorties over [Cuba](#) during the [Cuban Missile Crisis](#) in October 1962.

In October 1959, eight RF-101As were transferred to [Taiwan](#), which used them for overflights of the [Chinese](#) mainland. These ROCAF RF-101A with modified C-model vertical fins with air intake. The intake is used to cool the drag chute compartment and

eliminates the 5-minute limit on using the afterburners on the A model. Two were reportedly shot down.

F-101C / RF-101H

The F-101A fighter-bomber had been accepted into [Tactical Air Command](#) (TAC) service despite a number of problems. Among others, its airframe had proven to be capable of withstanding only 6.33 *g* (62 m/s²) maneuvers, rather than the intended 7.33 *g* (72 m/s²). An improved model, the F-101C, was introduced in 1957. It had a 500 lb (227 kg) heavier structure to allow 7.33-*g* maneuvers as well as a revised fuel system to increase the maximum flight time in [afterburner](#). Like the F-101A it was also fitted with an underfuselage pylon for carrying [atomic weapons](#), as well as two [hardpoints](#) for 450-gallon [drop tanks](#). A total of 47 were produced.

Originally serving with the [27th Tactical Fighter Wing](#) at [Bergstrom AFB](#), Texas, the aircraft were transferred in 1958 from TAC to the [81st Tactical Fighter Wing](#), part of [United States Air Forces in Europe](#) (USAFE) which operated three squadrons from the twin RAF air stations [Bentwaters](#) & [Woodbridge](#). The [78th Tactical Fighter Squadron](#) was stationed at Woodbridge, while the 91st and 92nd were stationed at Bentwaters. The 81st TFW served as a strategic nuclear deterrent force, the Voodoo's long range putting almost all of the [Warsaw Pact](#) countries, and targets up to 500 miles deep into the Soviet Union within reach.

Both the A and C model aircraft were assigned to the 81st TFW, and were used interchangeably within the three squadrons. Operational F-101A/C were upgraded in service with [Low Angle Drogued Delivery](#) (LADD) and [Low Altitude Bombing System](#) (LABS) equipment for its primary mission of delivering nuclear weapons at extremely low altitudes. Pilots were trained for high speed, low level missions into Soviet or Eastern Bloc territory, with primary targets being airfields. These missions were expected to be one-way, with the pilots having to eject behind Soviet lines.^[29]

The F-101C never saw combat and was replaced in 1966 with the [F-4C Phantom II](#). Thirty-two aircraft were later converted for unarmed [reconnaissance](#) use under the **RF-101H** designation. They served with [Air National Guard](#) units until 1972.

RF-101C



U.S. Air Force technicians prepare a McDonnell RF-101 Voodoo for a photo reconnaissance mission



 U.S. Air Force McDonnell RF-101C over [Vietnam](#), 1967.

Using the reinforced airframe of the F-101C, the RF-101C first flew on 12 July 1957,^[16] entering service in 1958. Like the RF-101A, the RF-101C had up to six cameras in place of radar and cannons in the reshaped nose and retained the bombing ability of the fighter-bomber versions. 166 RF-101Cs were built, including 96 originally scheduled to be F-101C fighter-bombers.

The 1964 Project "Toy Tiger" fitted some RF-101C with a new camera package and a centerline pod for photo-flash cartridges. Some were further upgraded under the Mod 1181 program with automatic control for the cameras.

The RF-101C saw service during the [Cuban Missile Crisis](#) and soon followed the [F-100 Super Sabres](#) into combat when RF-101s from the 67th Tactical Reconnaissance Wing deployed to [Vietnam](#) in October 1961. The RF-101C saw heavy service during the [Vietnam War](#), with the first F-101 being lost in November 1964 to ground fire. From 1965 through November 1970, its role was gradually taken over by the [RF-4C Phantom II](#). In some 35,000 sorties, 39 aircraft were lost, 33 in combat,^[30] including five to [SAMs](#), one to an airfield attack, and one in air combat to a [MiG-21](#) in September 1967. The RF-101C's speed made it largely immune to MiG interception. 27 of the combat losses occurred on reconnaissance missions over North Vietnam. In April 1967, ALQ-71 [ECM](#) pods were fitted to provide some protection against SAMs. Although the Voodoo was again able to operate at medium altitudes, the added drag decreased the speed enough to make RF-101 vulnerable to MiGs and thus requiring fighter escort.

On 27 November 1957 during Operation Sun Run, an RF-101C piloted by then-Captain Robert Sweet set the [Los Angeles-New York](#)-Los Angeles record in 6 hours 46 minutes, and the New York to Los Angeles record in 3 hours, 36 minutes. Another RF-101C, piloted by then-Lieutenant Gustav Klatt, set the Los Angeles to New York record in 3 hours 7 minutes.

After withdrawal from Vietnam, the RF-101C continued to serve with USAF units through 1979.

In service, the RF-101C was nicknamed the "Long Bird;" it was the only version of the Voodoo to see combat.

F-101B / CF-101B / EF-101B



A two-seat McDonnell F-101B Voodoo of the [Oregon Air National Guard](#)



CF-101 Voodoo 101060 from [409 "Nighthawk" Squadron, CFB Comox](#) on the ramp at [CFB Moose Jaw](#) in spring 1982.

In the late 1940s, the Air Force had started a research project into future [interceptor aircraft](#) that eventually settled on an advanced specification known as the [1954 interceptor](#). Contracts for this specification eventually resulted in the selection of the [F-102 Delta Dagger](#), but by 1952 it was becoming clear that none of the parts of the specification other than the airframe would be ready by 1954; the engines, weapons and fire control systems were all going to take too long to get into service. An effort was then started to quickly produce an interim supersonic design to replace the various subsonic interceptors then in service, and the F-101 airframe was selected as a starting point.

Although McDonnell proposed the designation F-109 for the new aircraft (which was to be a substantial departure from the basic Voodoo), the USAF assigned the designation F-101B. It was first deployed into service on January 5, 1959, with the [60th Fighter Interceptor Squadron](#). The production ended in March 1961. The Voodoo featured a modified cockpit to carry a crew of two, with a larger and more rounded forward fuselage to hold the [Hughes MG-13 fire control radar](#) of the F-102. It had transponders linking it to the [Semi-Automatic Ground Environment \(SAGE\)](#) system, allowing ground controllers to steer the aircraft towards its targets by making adjustments through the plane's autopilot. The F-101B had more powerful Pratt & Whitney J57-P-55 engines, making it the only Voodoo not using the -13 engines. The new engines featured a substantially longer afterburner than J57-P-13s. To avoid a major redesign, the extended afterburners were simply allowed to extend out of the fuselage by almost 8 ft (2.4 m). The more powerful engines and aerodynamic refinements allowed an increased speed of Mach 1.85.

The F-101B was stripped of the 4 × [M39 cannons](#); instead, it carried four [AIM-4 Falcon air-to-air missiles](#), arranged two apiece on a rotating pallet in the fuselage weapons bay. The initial load was two GAR-1 (AIM-4A) [semi-active radar homing](#) and two GAR-2 (AIM-4B) [infrared-guided](#) weapons with one of each carried on each side of the rotating pallet.^[35] After the first two missiles were fired, the door turned over to expose the second pair. Standard practice was to fire the weapons in SARH/IR pairs to increase the likelihood of a hit. Late-production models had provision for two 1.7-kiloton MB-1/[AIR-2 Genie nuclear rockets](#) on one side of the pallet with IR-guided GAR-2A (AIM-4C) on the other side. "Project Kitty Car" upgraded most earlier F-101Bs to this standard beginning in 1961.



The AIM-4 Falcon side of the F-101B missile door

From 1963 through 1966, F-101Bs were upgraded under the Interceptor Improvement Program (IIP; also known as "Project Bold Journey"), with a fire control system enhancement against hostile [ECM](#) and an [infrared sighting and tracking](#) (IRST) system in the nose in place of the [in-flight refueling](#) probe.

The F-101B was made in greater numbers than the F-101A and C, with a total of 479 being delivered by the end of production in 1961. Most of these were delivered to the [Air Defense Command](#) (ADC) beginning in January 1959. The only foreign customer for the F-101B was [Canada](#). For more details on the history of the Voodoo in Canada, see [CF-101 Voodoo](#).

The F-101B was withdrawn from ADC service from 1969 to 1972, with many surviving USAF aircraft transferred to the [Air National Guard](#) (replacing F-102s), serving until 1982. The last Voodoo in US service (F-101B-105-MC 58-300) was finally retired by the 2nd Fighter Interceptor Training Squadron at [Tyndall AFB](#) in Florida on 21 September 1982.

TF-101B / F-101F / CF-101F

Some of the F-101Bs were completed as dual-control operational [trainer](#) aircraft initially dubbed **TF-101B**, but later redesignated **F-101F**. Seventy-nine new-build F-101Fs were manufactured, and 152 more existing aircraft were later modified with dual controls. Ten of these were supplied to Canada under the designation **CF-101F**. These were later replaced with 10 updated aircraft in 1971.



The prototype RF-101B (s/n 57-0301).

RF-101B

In the early 1970s, a batch of 22 ex-RCAF CF-101Bs were returned to the [USAF](#) and converted to **RF-101B reconnaissance** aircraft with their radar and weapons bay replaced with a package of three KS-87B cameras and two AXQ-2 TV cameras. An [in-flight refueling](#) boom receptacle was fitted. These aircraft served with the [192nd Tactical Reconnaissance Squadron](#) of the Nevada Air National Guard through 1975. They were expensive to operate and maintain and had a short service life.

Variants



RF-101C-55-MC (56-0220), assigned to 18th TRS, 460th TRW. This aircraft was shot down by a [SAM](#) over North Vietnam on 7 March 1966, killing the pilot.

Section source: Angelucci and Bowers 1987. [The American Fighter](#)

F-101A

initial production fighter bomber, 77 produced.

NF-101A

one F-101A used by [General Electric](#) for testing of the [General Electric J79](#) engine.

YRF-101A

two F-101As built as prototype reconnaissance models.

RF-101A

first reconnaissance version, 35 built.

F-101B

two-seat interceptor, the most numerous version with 479 built (including CF-101B)

CF-101B

112 F-101Bs transferred to [Royal Canadian Air Force](#) (RCAF).

RF-101B

22 ex-RCAF CF-101B modified for reconnaissance use.

TF-101B

- dual-control trainer version of F-101B, redesignated **F-101F**, 79 built.
- EF-101B
single F-101B converted for use as a radar target and leased to Canada.
- NF-101B
F-101B prototype based on the F-101A airframe; the second prototype was built with a different nose.
- F-101C
improved fighter-bomber, 47 built.
- RF-101C
reconnaissance version of F-101C airframe, 166 built.
- F-101D
proposed version with [General Electric J79](#) engines, not built.
- F-101E
another J79 proposal, not built.
- F-101F
dual-control trainer version of F-101B; 79 re-designated TF-101Bs plus 152 converted F-101B.
- CF-101F
RCAF designation for 20 TF-101B/F-101F dual-control aircraft.
- TF-101F
24 dual-control versions of F-101B, re-designated F-101F (these are included in the -F total).
- RF-101G
29 F-101As converted for ANG reconnaissance.
- RF-101H
32 F-101Cs converted for reconnaissance use.

Operators



 McDonnell F-101B of the 18th Fighter-Interceptor Squadron, [Grand Forks AFB](#), ND
 [Canada](#)

- [Royal Canadian Air Force](#)
- [Canadian Forces](#)

 [Republic of China \(Taiwan\)](#)


- [Republic of China Air Force](#)

[United States](#)

- [United States Air Force](#)

Aircraft on display



 F-101F AF Serial Number 58-0311, located at [Devils Lake Regional Airport, North Dakota](#)
Main article: [F-101 Voodoo on display](#)

Below is a list of F-101s on display, including museums with an F-101 (CF-101) in their collection:

Canada

- [CFB North Bay \(22 Wing\), North Bay, Ontario](#) (CF-101)
- [Abbotsford International Airport, Abbotsford, British Columbia](#) (CF-101B CAF S/N 101035, former USAF Ser. No. 57-0363)
- [Air Force Heritage Park, Winnipeg, Manitoba](#) (CF-101B)
- [Alberta Aviation Museum, Edmonton, Alberta](#) (CF-101B)
- [Atlantic Canada Aviation Museum, Halifax, Nova Scotia](#) (CF-101)
- [Bagotville Commemorative Park, Saguenay, Quebec](#) (CF-101)
- [Aero Space Museum, Calgary, Alberta](#) (CF-101B)
- [Canadian War Museum, Ottawa, Ontario](#) (CF-101F)
- [Canada Aviation Museum, Ottawa, Ontario](#) (CF-101B)
- [Canadian Warplane Heritage Museum, Hamilton, Ontario](#) (CF-101)
- [Carolinas Aviation Museum, Charlotte, North Carolina](#) (F-101B)
- [Comox Air Force Museum, Comox, British Columbia](#) (CF-101)
- [CFB Chatham, Miramichi, New Brunswick](#) (CF-101 S/N 101053)
- [CFB Cornwallis, Cornwallis, Nova Scotia](#) (CF-101 S/N 101006)
- [North Atlantic Aviation Museum, Gander, Newfoundland](#) (CF-101B)
- [Reynolds-Alberta Museum, Wetaskiwin, Alberta](#) (CF-101B S/N101038)
- [Shearwater Aviation Museum, Dartmouth, Nova Scotia](#) (CF-101B S/N101063 - in storage)
- [Western Canada Aviation Museum, Winnipeg, Manitoba](#) (CF-101B)

Taiwan

- ROCAF Hualien AFB, RF-101A (Tail no. 41499; ROCAF no. 5654) Serving as gate guard. Hualien.

- ROCAF Academy Museum, RF-101As KangShan (Tail no. 54-1506).
- [Chung Cheng Aviation Museum](#), Taoyuan, next to Taoyuan International Airport, RF-101A (Tail no. 54-1505).

United Kingdom

- [Midland Air Museum](#), [Coventry](#). F-101B-80-MC, AF Ser. No. 56-0312)

United States

- [Air Power Park](#), [Hampton, Virginia](#) (F-101F)
- [Aerospace Museum of California](#) (former [McClellan AFB](#)), [Sacramento, California](#) (F-101B AF Ser. No. 57-0427)
- [Air Mobility Command Museum](#), [Dover AFB](#), [Delaware](#) (F-101B AF Ser. No. 59-0428)
- [Air Force Armament Museum](#), [Eglin AFB](#), FL (F-101B AF Ser. No. 56-0250)
- Former [Bergstrom AFB](#), [Austin, Texas](#) (RF-101C AF Ser. No. 56-0119) (current disposition not known)
- [Buffalo and Erie County Naval & Military Park](#) (F-101F, AF Ser. No. unk)
- [Callaway, Florida](#) (F-101B AF Ser. No. 57-0417), located on a baseball field, near East Highway 22 and Callaway Park Way.
- [Cannon AFB](#), [Clovis, New Mexico](#) (F-101A AF Ser. No 53-2426)
- [Carolinas Aviation Museum](#), [Charlotte, North Carolina](#) (F-101B AF Ser. No. unk)
- [Castle Air Museum](#) (former [Castle AFB](#)), [Atwater, California](#) (F-101B AF Ser. No. 57-0412)
- [Combat Air Museum](#), [Forbes Field](#), [Topeka, Kansas](#) (F-101B-100-MC AF Ser. No. 57-0410)
- [Devils Lake Regional Airport](#), [North Dakota](#) (F-101F AF Ser. No. 58-0311) [North Dakota Air National Guard](#), The Happy Hooligans
- [Dyess AFB](#), [Abilene, Texas](#) (F-101B AF Ser. No. 57-0287)
- [Grissom Air Museum](#), [Grissom ARB](#), [Peru, Indiana](#) (F-101B AF Ser. No. 58-0321)^[42]
- [Florissant Valley Park](#), [Florissant, Missouri](#) F-101B 58-0269
- [Hill Aerospace Museum](#), [Hill Air Force Base](#), (AF Ser. No. 57-0252)
- [Joe Davies Heritage Airpark](#) at USAF Plant 42, Palmdale, [California](#) (F-101F AF Ser. No. 58-0324)
- [Lackland AFB](#), [San Antonio, Texas](#) (F-101F AF Ser. No. 56-0241)
- [Little Rock AFB](#), [Little Rock, Arkansas](#) (RF-101C AF Ser. No. unk)
- [National Museum of the United States Air Force](#), [Wright-Patterson AFB](#), [Dayton, Ohio](#) F-101B (AF Ser. No. 58-0325); served with the 18th Fighter Interceptor Squadron, [Grand Forks Air Force Base](#) and with the 142nd Fighter Interceptor Group, [Oregon Air National Guard](#). It was flown to the museum in February 1981.
- [National Museum of the United States Air Force](#), [Wright-Patterson AFB](#), [Dayton, Ohio](#) RF-101C (AF Ser. No. 56-0166) participated in Operation Sun Run in 1957. It also flew vital low-altitude reconnaissance during the [Cuban Missile Crisis](#) in

October 1962 and helped confirm that offensive missile sites in [Cuba](#) were being dismantled. It also served in Southeast Asia with the 45th Tactical Reconnaissance Squadron. It was flown from the 186th Tactical Reconnaissance Squadron, [Mississippi Air National Guard](#) at [Key Field, Mississippi](#), to the museum on 27 October 1978.

- [Malmstrom AFB Museum](#), Great Falls, MT, F-101F, AF Ser. No. 59-0419
- [MAPS Air Museum, North Canton, Ohio](#) (F-101 in storage, AF Ser. No. unk)
- [March Field Air Museum, March ARB, Riverside, California](#) (F-101B AF Ser. No. 59-0418)
- [McChord Air Museum, McChord AFB, Washington](#) (CF-101F S/N 101022 [former AF Ser. No. 57-0322])
- [Museum of Aviation, Robins AFB, Georgia](#) (F-101F and RF-101C, AF Serial Nos. unk)
- [Octave Chanute Aerospace Museum](#), (former [Chanute AFB](#)), [Rantoul, Illinois](#), (F-101B AF Ser. No. 56-0273)
- [Panama City, Florida](#) (F-101F, AF Ser. No. 59-0478 and F-101B, AF Ser. No. 57-0438) [Panama City](#) has two Voodoos. [Tail number](#) 90478 is part of a Veterans' Memorial in front of [City Hall](#) near the south end of Harrison Avenue. Tail number 70438 is at [Gulf Coast Community College](#) on [US-98](#), east of the [Hathaway Bridge](#).
- [Peterson Air and Space Museum, Peterson AFB, Colorado Springs, Colorado](#) (CF-101B, S/N 101044 [former USAF Ser. No. 57-0381]& F-101B, AF Ser. No. 58-0274)
- [Pueblo Weisbrod Aircraft Museum, Pueblo Memorial Airport, Pueblo, Colorado](#) (F-101A, AF Ser. No. 53-2418)
- [Pima Air & Space Museum, Tucson, Arizona](#), (F-101B AF Ser. No. 57-0282, RF-101H AF Ser. No. 56-0011, RF-101C AF Ser. No. 56-0214)

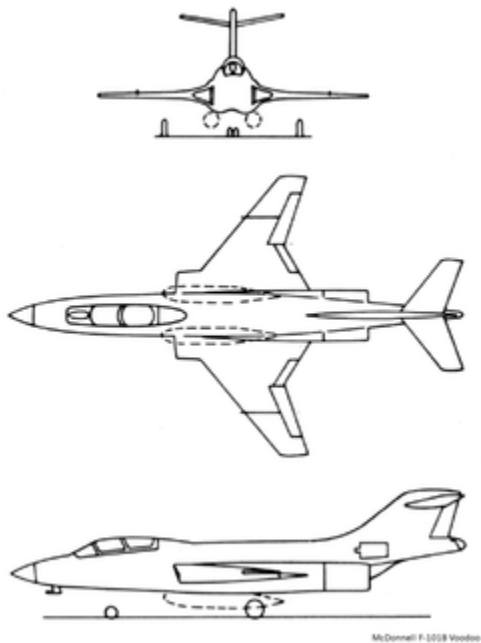



 F-101B at Wings Museum, 2007.

- [Selfridge Military Air Museum and Air Park, Mount Clemens, Michigan](#), RF-101 served with the Michigan ANG
- [Sheppard AFB, Wichita Falls, Texas](#) (F-101C AF Ser. No. 56-0009)
- [Strategic Air and Space Museum](#), adjacent to [Offutt AFB, Ashland, Nebraska](#), (F-101B AF Ser. No. 59-0462)
- [Travis Air Museum, Travis AFB, California](#) (F-101B AF Ser. No. 58-0285)

- [Valiant Air Command Warbird Museum, Space Coast Regional Airport, Titusville, Florida](#) (F-101B AF Ser. No 59-0400); this aircraft was previously located at the [Sun 'n Fun](#) aviation complex at [Lakeland Linder Regional Airport](#) in [Lakeland, Florida](#)
- [Wings Over the Rockies Air and Space Museum](#)^[48] (former [Lowry AFB](#)), [Denver, Colorado](#),(F-101B AF Ser. No. 58-0271)
- [Yankee Air Museum, Belleville, Michigan](#), (F-101B AF Ser. No. 56-0235) This aircraft was assigned to Wright-Patterson AFB from July 1960 until its retirement to the [National Museum of the United States Air Force](#) in 1970. Prior to 1970, it was used extensively for ejection seat testing. It was moved to Michigan on loan from the National Museum of the U.S. Air Force in the early 1980s.
- Harry Ollrich American Legion Post #4, [Mount Clemens, Michigan](#) has a F-101, AF Ser. No. 57-430?, on static display on its front lawn.
- [Chattanooga Metropolitan Airport, Tennessee Air National Guard](#), 241st Engineering Squadron has a F-101, AF Ser. No. Unknown, on static display by the front entrance to the base.

Specifications (F-101B)



 Line drawings for the F-101B.
Data from *The Great Book of Fighters*

General characteristics

- **Crew:** 2
- **Length:** 67 ft 5 in (20.55 m)
- **Wingspan:** 39 ft 8 in (12.09 m)
- **Height:** 18 ft 0 in (5.49 m)
- **Wing area:** 368 ft² (34.20 m²)

- **Airfoil:** [NACA 65A007 mod](#) root, 65A006 mod tip
- **Empty weight:** 28,495 lb (12,925 kg)
- **Loaded weight:** 45,665 lb (20,715 kg)
- **Max takeoff weight:** 52,400 lb (23,770 kg)
- **Powerplant:** 2 × [Pratt & Whitney J57-P-55](#) afterburning [turbojets](#)
 - **Dry thrust:** 11,990 lbf (53.3 kN) each
 - **Thrust with afterburner:** 16,900 lbf (75.2 kN) each
- **Internal fuel capacity:** 2,053 gal (7,771 l) or 2,953 gal (11,178 l) with two external tanks

Performance

- **Maximum speed:** [Mach](#) 1.72 (1,134 mph, 1,825 km/h) at 35,000 ft (10,500 m)
- **Range:** 1,520 mi (1,320 nm, 2,450 km)
- **Service ceiling:** 58,400 ft (17,800 m)
- **Rate of climb:** 49,200 ft/min (250 m/s)
- **Wing loading:** 124 lb/ft² (607 kg/m²)
- **Thrust/weight:** 0.74

Armament

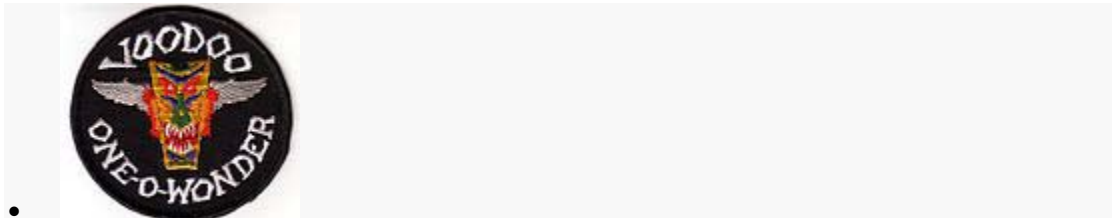
- **Missiles:**
 -
 - 4× [AIM-4 Falcon](#), *or*
 - 2× [AIR-2 Genie](#) nuclear rockets, plus 2× [AIM-4 Falcon](#)
 - Falcon missile variants: AIM-4A, AIM-4B, AIM-4C only. The range was about 5 mi (8 km).

Avionics

- Hughes MG-13 fire control system

Aircraft type badges

All models of the aircraft were known by the nickname "One-oh-Wonder" and this was reflected on the aircraft type patches worn by crews.



Voodoo One-O-Wonder badge worn by USAF and RCAF/Canadian Forces Voodoo pilots



•

Voodoo Scope Wizard badge worn by USAF and RCAF/Canadian Forces
Voodoo navigators



•

Voodoo Medicine Man badge worn by USAF and RCAF/Canadian Forces
Voodoo maintenance personnel