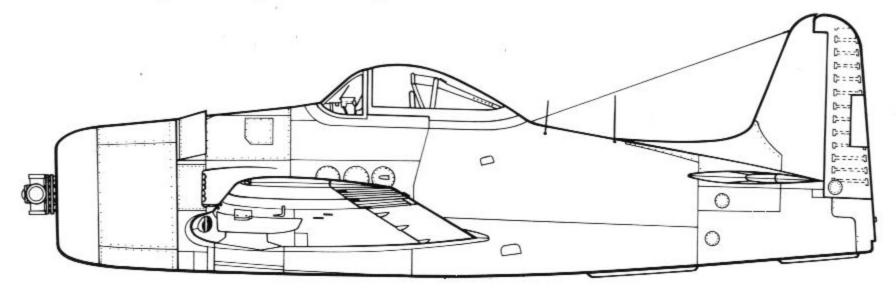


F8F BEARCATin action

By Charles L. Scrivner

Color By Don Greer
Illustrated By Perry Manley







An F8F-1 Bearcat, flown by Navy ace, Cecil Harris of VF-18, takes off from USS RANGER in a maximum climb. The Bearcat was the fastest climbing, propeller driven fighter to see service and held the record for climb to 10,000 feet (94 seconds), for its entire operational career.



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Dedication

To the late Richard M. Hill, one of the Bearcat's most ardent fans, who flew the F8F with VF-72.

Acknowledgements

The author gratefully acknowledges the support he received from his many Navy "Airdale" friends. To all of you, "BRAVO ZULU."

LCDR Louis M. Clark ADC Charles D. Clemens, Jr. LT Fred C. Dickey, Jr. CAPT Robert M. Elder MAJ John Elliott, USMC Ret. LCDR Donald C. Epp CAPT Gordon E. Firebaugh LT Frank Fitzgibbon LCDR Arnold M. Granat PHOMCS Robert L. Lawson Rare Bear Race Team

David Lucabaugh (USAF-honorary USN) LCDR Robert L. McClure CDR Howard S. Packard YNC William A. Riley PHOMC A. W. Scarborough LT Joe Scarborough CAPT Wm. E. Scarborough LT Spencer Scheckter Jim Sullivan Richard A. Wells Nicholas J. Waters III

And a special thanks to Lois Lovisolo, the Grumman historian; Bob Hall, former Grumman chief test pilot; and my Swiss compatriot, Hans-Heiri Stapfer. "BRAVO ZULU" Lois, Bob and Hans.

"To carrier pilots, it was the 'Jelly Bean' and we loved it with all the passion of innocent youth ... it was the hottest thing in the sky for a brief period in history, and we made the most of it on any and every occasion." CAPT Jerry O'Rourke (from Naval Institute "Proceedings" with permission)



INTRODUCTION

During 1943, Grumman was producing large numbers of F6F-3 Hellcats for service in the Pacific; however, both Grumman and the Navy realized that, although the F6F was the answer to the Navy's immediate needs, a successor with even higher performance would be required if the war continued. Both Boeing and Curtiss had proposed fighter designs to replace the Hellcat that were both larger and heavier than the F6F. Boeing had submitted the XF8B-1, while the entry from Curtiss was designated the XF14C-1.

During this same time, Grumman engineering test pilot Bob Hall was sent to England to test fly and evaluate a captured German Focke Wulf 190 fighter. He was so impressed with the lightweight German fighter that he hurried back to report to Leroy (Roy) Grumman, founder and president of Grumman.

His reports convinced Grumman that their entry in the competition for an F6F successor should be a small, light weight fighter, designed for optimum performance. From the outset, Roy Grumman took a strong interest in Design 58. The aircraft was to be his "hot rod" and he personally set the design criteria for the new fighter. It was to be small, light weight, highly maneuverable and with enough power to ensure that its performance would exceed anything flying or under design at that time. On 28 July 1943, in a memo to his chief designer, Bill Schwendler, Grumman outlined the design's specification.

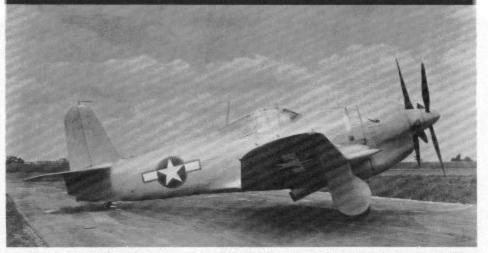
Cloaked in wartime secrecy, Schwendler and his design team took Roy Grumman's memo and ran with it. It was decided that Design 58 would be powered by the proven 2,100 hp Pratt & Whitney R-2800 Double Wasp radial engine. The fighter would use the Hellcat's NACA 230 airfoil and would feature a first for Navy fighters — a full-blown bubble canopy, which would give the pilot excellent visibility in all directions.

On 29 November 1943, the Navy awarded Grumman a contract (NOa(s)2419) for two prototypes under the designation XF8F-1. The Grumman experimental shop set to work and built the two prototypes in record time, with the first prototype being rolled out of the experimental shop on 21 August 1944. The aircraft emerged as an all metal, stressed skin fighter with a semi-monocoque fuselage. The fuselage utilized flush riveting and spot welding, and featured a heavy gauge 302W aluminum alloy skin, which gave the XF8F-1 prototype the smoothest finish of any U.S. WW II fighter.

Every effort had been made to save weight, and while armor protection was provided for the pilot, engine and oil cooler, the internal fuel capacity was limited to 160 gallons as a weight saving measure. The landing gear, flaps, oil cooler doors and gun chargers were hydraulically operated, the tailhook and wing fold mechanisms were manually operated, while the cowl flaps were electrical. Trim tabs were provided for the fabric covered rudder, elevators and ailerons. The proposed armament was two .50 caliber Browning machine guns in each wing, mounted between the landing gear and the wing fold.

The Navy wanted the first XF8F-1 powered by the readily available 2,100 hp Pratt & Whitney R-2800-22W engine with a two-speed supercharger and the second to be powered by the new "E" series R-2800-30W with a variable speed supercharger. The -30W engine was not yet available and both XF8F-1s were powered by the R-2800-22W engine driving a 12 foot 7 inch diameter, four blade Aeroproducts Model A642-G1 constant-speed propeller.

The large propeller dictated that the landing gear legs had to be long. To give the necessary length, and still allow the landing gear to be retracted into a well enclosed totally in the wing, the hydraulically operated landing gear featured an articulated trunnion. The trunnion extended the gear leg's length in the down position and folded back along the gear leg to shorten the leg to fit into the wheel well. Since the landing gear folded inboard, the long legs produced a wide track, which helped combat torque during takeoff and gave the XF8F-1 good ground handling.



The Curtiss XF14C-2 suffered from a protracted development and its performance offered no improvement over the F6F Helicat. The project was cancelled shortly after the aircraft made its first flight during July of 1944. (David W. Lucabaugh Collection)

One unique design feature which was eventually abandoned, was the provision for break points in the wings. These were provided so that if the airplane was over stressed, the outboard 40 inches of the wing would fail at a designed point, preventing a catastrophic failure of the entire wing. The resulting short span wing was actually stronger than the original wing because of its reduced leverage. These were known as Safety Wing tips and they were designed to shear off cleanly, clearing the horizontal tail by a considerable distance. Approximately half of the aileron remained and the airplane could be (and was) controlled and landed with either or both wing tips gone.

The sliding bubble cockpit canopy was made from a single piece of molded quarter inch thick plexiglass. The canopy slid to the rear and could be jettisoned in an emergency.

On 21 August 1944, Bob Hall strapped into the XF8F-1 prototype (BuNo 90460) and took off. The first flight was short because Hall was not satisfied with the prototype's control characteristics. One of the Grumman engineers, Walter Scott, soon located the problem. The oil cooler inlet was buried in the leading edge of the wing, with the outlet mounted on the wing uppersurface. The hot air discharged by the oil cooler had disrup-

A contemporary of the XF8F-1, the Boeing XF8B-1 was equipped with contra-rotating propellers. The aircraft had a fifty-four foot wing span and an empty weight of some seven tons. Its rate of climb was only half that of the XF8F-1. (David Lucabaugh)



ted the airflow over the top of the wing, inducing turbulence over the tail surfaces. To solve the problem, the outlet was moved to the bottom of the wing. After the modification was made, Hall took the XF8F-1 up again. This time he really "wrung it out" and returned enthusiastic and convinced that Grumman had a winner in the XF8F-1.

During the early test flights the prototype demonstrated a top speed of 424 mph and a climb rate of 4,800 feet per minute, impressive figures for a substitute engine. The second XF8F-1 joined the test program on 2 December 1944. The first XF8F-1 was then flown to Langley Field, Virginia, for wind tunnel tests at the Ames wind tunnel. After the wind tunnel tests were completed, the first XF8F-1 was lost when it crashed while on the return trip to Bethpage, during March of 1945.

Testing of the second prototype progressed smoothly and during June of 1944, the Navy ordered the XF8F-1 into production with an initial order of twenty-three production aircraft (which was handled as an amendment to the original XF8F contract). Following their now established tradition of naming Grumman fighter aircraft with names ending in ...cat, the Navy named the F8F the Bearcat. A second contract (NOa(s)4799) was awarded to Grumman for an additional 2,000 F8Fs under the designation F8F-1, with a proposed production rate of 100 per month. The Navy wanted all the F8Fs they could possibly get by November of 1945 when Operation OLYMPIC, the invasion of Japan, was scheduled.

Under the production plan, F6F-5 Hellcat production was to be phased out with the F8F going into full production by January of 1946. To augment Grumman production, the Navy turned to Grumman's proven subcontractor, Eastern Aircraft. The extent of General Motors' contribution to the U.S. war effort has never been fully appreciated. GM's Eastern Aircraft division, formed from five East Coast automotive plants idled by the war, produced 77 percent of the Avenger torpedo bombers and 79% of the Wildcat fighters built during WW II.

The subcontract, signed on 5 February 1945, called for production of the FM-2 Wildcat at GM's Linden, New Jersey, plant, to be suspended in favor of production of a total of 1,876 Bearcats (which were to be designated the F3M-1). Eastern was still tooling-up to begin F3M-1 production when the Second World War ended and the contract was cancelled in August of 1945.





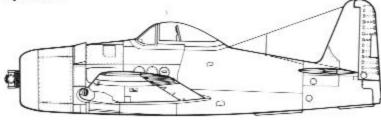


The first two XF8F-1s prototypes lacked the dorsal fin that was installed ahead of the vertical tall on all later pre-production and production Bearcats to improve the aircraft's directional stability. (Grumman)

This early F8F-1 (BuNo 90438) had bomb racks installed on the fuselage centerline and under each wing. These racks were covered with a sheet metal pylon and could carry fuel tanks, bombs or other ordnance. (NAH-003110)



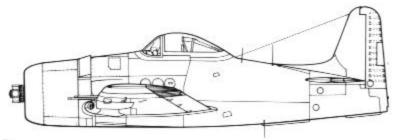
Development



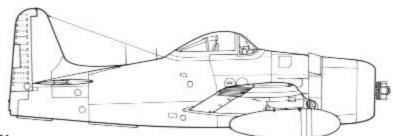
XF8F-1



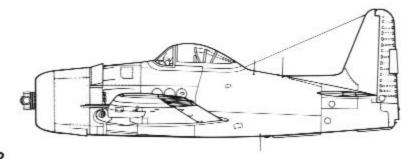
F8F-1



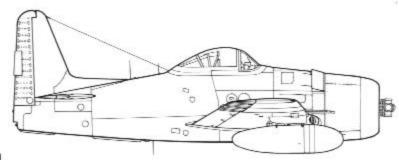
F8F-1B



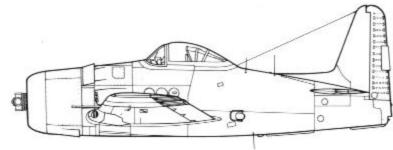
F8F-1N



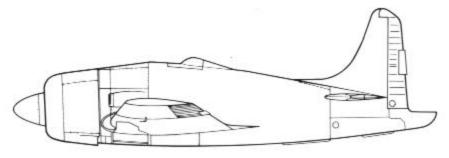
F8F-2



F8F-2N



F8F-2P



Conquest I (Modified F8F-2)

F8F-1

Following the completion of the first two XF8F-1s, Grumman built the first of the twenty-three initial production aircraft in the experimental shop (BuNo 90437), with the aircraft rolling out on 31 December 1944. These aircraft, along with the remaining initial production aircraft which now came off the main production line, were designated as F8F-1s. Early production F8F-1s were assigned BuNos 90437 to 90461, with the last two numbers, 90460 and 90461, being assigned to the two XF8Fs.

The production F8F-1 differed from the two XF8F-1 prototypes in a number of ways. To improve directional stability, a dorsal fin was added to the leading edge of the vertical stabilizer, and the span of the horizontal stabilizer was increased by twelve inches to improve longitudinal stability. Because of delays with the R-2800-30W engines, production F8F-1s were powered by the 2,100 hp (2,400 hp with water injection) R-2800-34W engines.

Some of the earliest problems encountered during flight testing concerned the landing gear. Landing gear retraction was felt to be slow and an effort was made to speed up the retraction sequence. The F8F's landing gear retraction sequence was unique — the port gear retracted first, followed by the starboard gear.

Roy Grumman's original memo had specified 160 gallons of fuel; however, the Navy wanted additional range/endurance and the space under the cockpit floor was used to install a larger fuel tank. Production F8Fs had a self-sealing fuel cell of 183 gallons installed in place of the 160 gallon tank of the prototypes.

The second production F8F-1 (BuNo 90438) was used as a test aircraft at Bethpage during February of 1945 to test various external stores. A Mk-51 bomb rack was installed under the fuselage on the centerline and an additional Mk-51 bomb rack was installed in a streamlined pylon under each wing. The Bearcat was authorized to carry the following external stores on the centerline rack: one Mk-4 100 gallon drop tank, one Mk-5 150 gallon drop tank, one 500 pound bomb or one 1,000 pound bomb. The underwing racks could accommodate up to a maximum of 1,000 pounds on each rack. The racks were cleared for Mk-4 100 gallon drop tanks, 500 pound bombs, 1,000 pound bombs, and Mk-1 Gun Pods (with two .50 caliber guns) or two Mk-3 11.75 inch "Tiny Tim" rockets. As a result of the tests conducted with BuNo 90438, it was recommended that all external stores mounted under the wings be symmetrical.

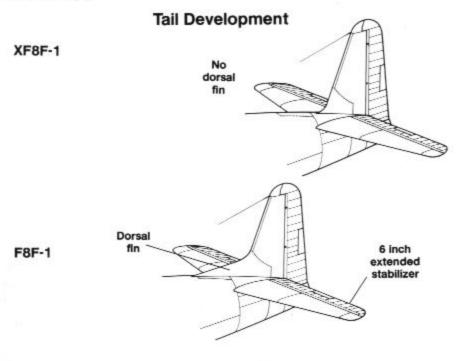
Beginning with the fourth production F8F-1 (BuNo 90440), two Mk-9 Rocket Launchers were installed under each wing, outboard of the wing pylon. These launchers could carry 3 inch AR rockets, 5 inch AR rockets (5 inch warheads mounted on 3 inch rocket motors) or 5 inch HVAR rockets.

The real test of a carrier-based aircraft is "getting on and off the boat," and on 17 February 1945 the Bearcat's first shipboard operations took place aboard USS CHARGER (CVE-30). CAPT (then LCDR) Robert M. Elder flew the Bearcat's first Carrier Suitability Trials.

According to Log Book entries, my first Bearcat flight was in XF8F-1 BuNo 90460 at Mustin Field, Philadelphia, on 10 December 1944. This initiated the accelerated Carrier Suitability Trials of the Bearcat. The pressure to get that fighter deployed in combat was really high, and on 17 February 1945 I was in the groove with F8F-1 BuNo 90438 for the initial carrier landing of the Bearcat. The Carrier Suitability Trials were conducted aboard USS CHARGER in Chesapeake Bay. The weather was absolutely awful, intermittent snow, sleet and a buildup of ice on the wings. Not very representative conditions, but with the reserve power in that rascal it was somewhat incidental. I completed 15 arrested landings successfully.



This early production F8F-1 was assigned to Carrier Aircraft Service Unit 1 (CASU-1) at Ford Island, Hawaii, in May of 1945. The aircraft was used in the proficiency training role. (USN via David Lucabaugh)



The F8F-1 passed its Carrier Suitability Trials with flying colors, exhibiting good landing, takeoff and deck handling characteristics, and was cleared for operations from all classes of U.S. Navy carriers, including small escort carriers (CVEs).

Navy Technical Order No. 50-45 of May 1945 placed few restrictions on the operation of the Bearcat. The only maneuvers prohibited were prolonged and inverted spins. All control forces were relatively light and finely balanced over a wide range of speeds and full, abrupt and steady rolls could be made up to 375 knots (430 mph). The maximum permissible speeds for retracting and extending the landing gear was 175 knots (200 mph) and 220 knots was specified as the maximum speed for lowering the flaps. Because the Bearcat accelerated so rapidly, pilots had to be especially alert on takeoff, since the maximum landing gear retraction speed could be exceeded quickly.

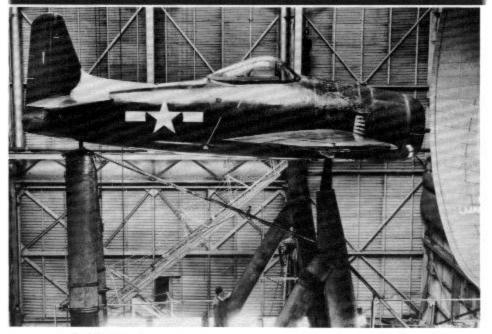
The Pilot's Manual emphasized caution at the top end of the Bearcat's airspeed envelope. It was in high-performance aircraft, such as the Bearcat, that the phenomenon of compressibility was first encountered. In a high speed dive, the first warning of compressibility effects came in the form of buffeting. While the Bearcat's airframe was strong enough to withstand considerable buffeting, if speed was not reduced immediately the airplane would begin to oscillate and start to tuck-under. This was the final warning and if power was not reduced and the dive recovery flaps (small speed brakes fitted just behind the wheel wells) extended, the aircraft would nose over into a dive from which there was no recovery.

To aid the pilot in surviving a crash, the cockpit was modified with the addition of a rollover pylon mounted just behind the pilot's armored seat back. This pylon kept the pilot from being crushed if the aircraft flipped over on its back. Grumman produced a modification kit to enable Navy maintenance personnel to retrofit earlier F8Fs with the rollover pylon.

The last ten production F8F-1s (BuNo 90450 to 90459) were ferried to NAS North Island and NAAS Santa Rosa, California, in order to bring VF-18 and VF-19 up to full aircraft complement and expedite their training. The Navy was anxious to get their new fighter into combat.

An early F8F-1 (BuNo 90438) is positioned on the H-2-1 catapult at Philadelphia Navy Yard on 23 February 1945 for ground catapult tests. The Bearcat had one of the smoothest finishes of any Second World War fighter. (USN via Grumman)





This F8F-1 was used for full size wind tunnel testing of the dorsal fin modification at the huge NACA Ames Wind tunnel at Langley Field, Virginia. The propeller has been removed for the tests. (Joe Lippert via Grumman)

The second production F8F-1 (BuNo 90438) was retained by Grumman and used as a test bed during February of 1945. The aircraft was used primarily for armament tests and is configured with two 1,000 pound GP bombs on the underwing bomb racks and a Mk 5 150 gallon drop tank on the centerline station. (Grumman)

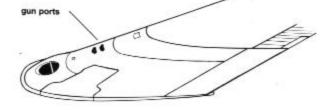




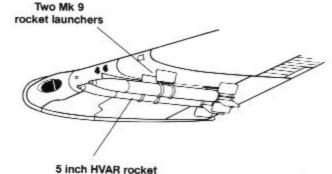
This F8F-1 (BuNo 90438) is configured with the maximum fuel load that could be carried by the Bearcat; two Mk 4 100 gallon drop tanks on the wing pylons and one Mk 5 150 gallon tank on the centerline station. This external tank configuration, along with 183 gallons of internal fuel, gave the Bearcat a maximum range of 2,200 miles. (Grumman)

Mk 9 Rocket Launchers

F8F-1 (Early)



F8F-1 (Late)

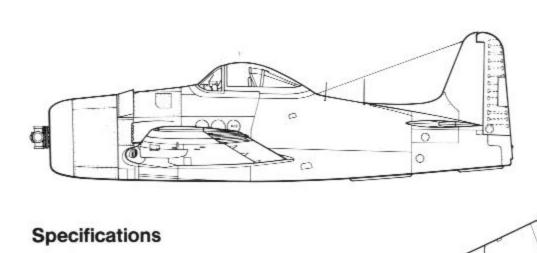




This F8F-1 (BuNo 90438) is configured with the largest rocket load to be carried by a Second World War fighter; two 11.75 inch diameter "Tiny Tim" unguided, air-to-ground rockets. (Grumman)

The outstanding aircraft engine of WWII — the Pratt & Whitney R-2800. It was never reluctant, produced lots of brute power, was just as happy running on one magneto as two and, unlike liquid-cooled engines, could absorb an unbelievable amount of battle damage and continue to run. (United Technolgies Archive)





Grumman F8F-1 Bearcat

 Wingspan
 35 feet 6 inches

 Length
 27 feet 6 inches

 Height
 13 feet 9 inches

 Empty Weight
 7,170 pounds

 Maximum Weight
 12,947 pounds

Powerplant One 2,100 hp Pratt & Whitney R-2800-34W

radial engine

Armament Four .50 caliber machine guns.

Performance

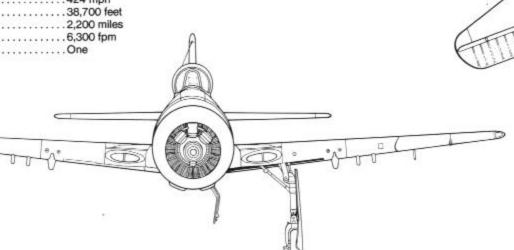
 Maximum Speed
 .424 mph

 Service ceiling
 .38,700 feet

 Range
 .2,200 miles

 Climb
 .6,300 fpm

 Crew
 .0ne







This F8F-1 is undergoing landing gear retraction tests at the Grumman plant. The articulated trunion is folding outward, to shorten the length of the landing gear leg to allow it to fit into the wheel well. (Grumman)



On 17 February 1945 the Bearcat conducted its first carrier trials. The second production F8F-1 (BuNo 90438) was flown by LCDR Bob Elder for the trials and made fifteen arrested landings aboard USS CHARGER (CVE-30) in Chesapeake Bay. (USN via David Lucabaugh)

F8F-1 (BuNo 90438) is chocked aboard USS CHARGER awaiting its next deck takeoff. The weather was bad with sleet and snow causing a slick deck; however, the Bearcat passed the trials with no major problems. (USN via David Lucabaugh)



Bert Bertoglio, Air Group 18's LSO (Landing Signal Officer), guides an F8F flown by LTJG Spencer Scheckter aboard USS RANGER (CV-4) during VF-18's Carrier Qualifications (Carquals) during May of 1945. (USN via Spencer Scheckter)

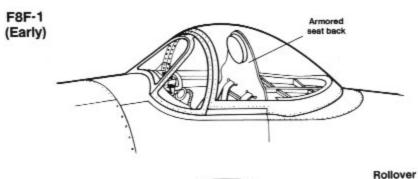


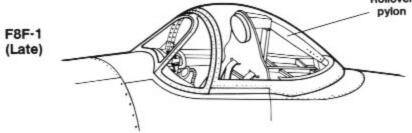


ENS Ben Sanderson lost his port wing tip during an 11 G pullout from a high speed dive. He later reported that he experienced little difficulty in controlling the F8F-1 and was able to make a safe landing at NAS Charlestown, Rhode Island, touching down at about 90 knots. (Grumman)

This late production F8F-1 is on a delivery flight during 1946. The large number on the nose is a delivery/test flight number which was painted on the aircraft in Temporary White paint. This Bearcat has all the late F8F-1 changes; Mk 9 rocket launchers and the rollover pylon behind the pilot's seat. (Roger Besecker via Jim Sullivan)

Rollover Pylon







Into Service

The first squadron to be equipped with the Bearcat was VF-19 under the command of LCDR J.G. Smith. VF-19 was reforming during late 1944 at NAAS Santa Rosa, California, after a successful tour of duty flying F6F Hellcats aboard USS LEXINGTON. Few of the veteran pilots were retained, however, with most of the squadron roster consisting of Ensigns direct from operational training. One of the few veteran pilots remaining was LT Bill Masoner, who had scored twelve victories flying Hellcats.

Rumors were flying that VF-19 was to be the first Bearcat squadron, and these rumors were confirmed during early 1945 when a group of squadron enlisted men were transferred to the Grumman plant at Bethpage, New York, for a course in Bearcat maintenance. During April, twenty-five pilots were transferred to Bethpage for transition training in the Bearcat. Upon completion of their training, they ferried new production F8F-1s cross-country to Santa Rosa. An intensive training syllabus was undertaken and, although some mechanical and hydraulic problems were experienced and solved, the training program progressed smoothly with the F8F-1 exhibiting no serious defects.

The squadron engaged in all phases of fighter training; aerial and air-to-ground gunnery, glide/dive bombing and rocket firing. From 25 to 27 July the squadron conducted its "Carquals" (carrier qualifications) aboard USS TAKANIS BAY (CVE-89). By 1 August the squadron was declared combat ready and deployed aboard USS LANGLEY (CVL-27) at NAS Alameda, California. On 16 August, LANGLEY, her decks loaded with F8F-1s, was steaming across the Pacific when the message was received that the Second World War had ended — the Bearcat had come close to seeing combat, but would have to wait for another war to fire its guns in anger.

VF-18 was the second Bearcat squadron and their training cycle closely followed VF-19's. VF-18 had returned to NAS North Island from a tour of duty aboard USS INTREPID (CV-11). Their tour of duty had ended abruptly on 25 November 1944 when INTREPID was hit by two Kamikazes and put out of action for two months. The reformed VF-18 was under the command of LCDR E.J. Murphy and the squadron Operations Officer was the Navy's second-ranking ace, LT Cecil E. Harris. As Bearcats were received at North Island, the squadron began an accelerated training syllabus in an effort to get the Bearcat into combat as soon as possible. To expedite their training, VF-18 even received some of the initial production F8F-1s. Spencer Scheckter's log book reveals that he flew BuNo 90458 in VF-18. In May of 1945, VF-18 Carqualed on USS RANGER (CV-4). Two weeks after the end of the Second World War, Air Group 18 deployed aboard USS RANGER at San Diego, sailed through the Panama Canal, through a hurricane and into the Gulf of Mexico. They arrived in New Orleans in time for the Navy Day celebrations held there. VF-18's Bearcats were launched at the mouth of the Mississippi River and flew inland to NAS New Orleans. CAPT (then LT) Bob Davis was VF-18's Executive Officer during 1945 and recalls their stay in New Orleans:

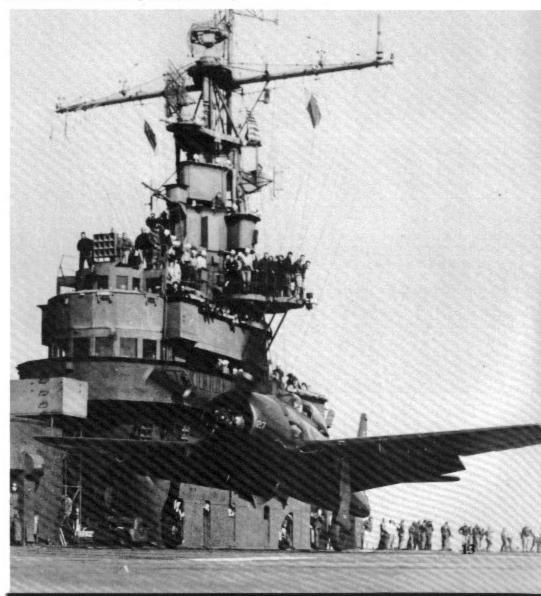
We took advantage of any spare time away from being entertained royally by the city to enjoy flying and to prepare for a fly-over. To the north of New Orleans we discovered an area used by Army P-51s and we had a field day, every day, with them. There wasn't a P-51 there that we couldn't beat in a dogfight...and we did it for four days. I'm only sorry that we didn't do a victory roll by their tower, but they sure got the message!

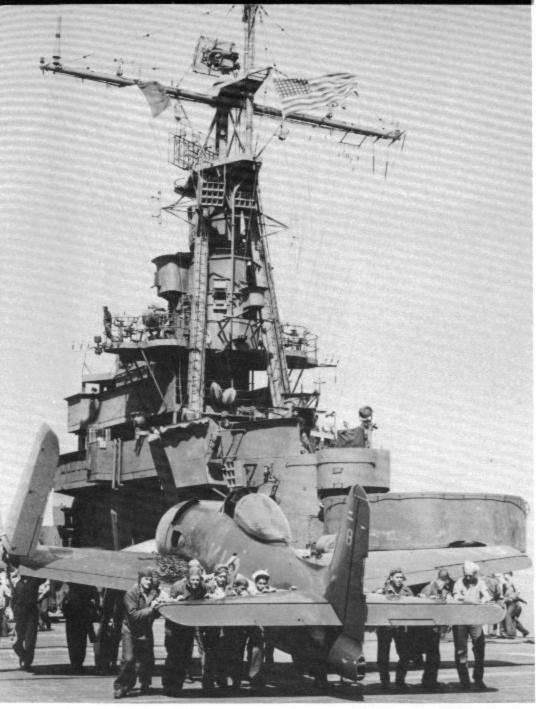
After participating in the Navy Day air show (200 feet above Canal Street at over 400 mph — Spencer Scheckter termed it "legalized flathatting"), USS RANGER recovered VF-18's F8F-1s in the Gulf of Mexico and sailed for Pensacola, FL, for another air show.

Upon completion of this show the ship set sail for the Philadelphia Navy Yard. On 17 November 1945, the last VF-18 Bearcat took off from USS RANGER's deck bound for the squadron's new home, NAS Norfolk, Virginia.

The formation of new Bearcat squadrons suffered from the post-war reduction of the Navy as the men who flew and maintained the airplanes left the Navy to return to civilian life. By November 1946, however, nine VF squadrons had re-equipped with F8F-1s. In November of 1946 all Navy squadrons underwent redesignation and renumbering, with VF-18 becoming VF-18A under the new system. The suffix letter "A" indicated that the squadron was assigned to an "Attack" carrier while the suffix letter "L" indicated assignment to a "Light" carrier of the INDEPENDENCE class.

An F8F-1 of VF-18 begins a deck takeoff from USS RANGER. During VF-18's Carquals conducted in May of 1945, the Island aboard USS RANGER was crowded with "bird watchers" anxious to see the new fighters. (Grumman)





Plane handlers push an F8F-1 of VF-18 aft to its spot aboard USS RANGER (CV-4) during September of 1945. The Yellow "K" on the fuselage side was the identification letter assigned on 27 July 1945 to USS LANGLEY. USS RANGER was assigned the letters "PP". (Grumman)

Attention was focused on a controversial and misunderstood feature of the Bearcat in December 1945 when a fatal crash was attributed to the breakaway safety wingtips. Service tests had demonstrated that control was possible with one wingtip gone and a number of Navy pilots had made safe landings after losing one or both wingtips. ENS Benjamin Sanderson, while making near vertical bombing runs on a target off Gardiners Island in an F8F-1, shed his left wingtip after pulling out at 1,000 feet. The first indication that something was wrong was when he noticed he needed more than normal right aileron to keep the left wing up. Then he saw that the left wingtip was gone, but had no indication of when it had come off. The accelerometer had registered 11Gs in the pull-out. The wingtip and half of the aileron had come off cleanly and he proceeded back to NAS Charlestown, Rhode Island, where he was able to land without incident. A VF-61 pilot lost both wingtips while pulling out of a high speed rocket/strafing run. He was able to make a normal recovery, reporting that he had adequate aileron control, and was able to land aboard his carrier without incident.

The investigation which followed the fatal accident recommended a design change to provide an explosive charge in each wingtip. If only one wingtip separated, the installation provided a means for detonating the charge in the other wingtip to balance the aircraft. In 1947 it was decided that the disadvantages of the explosive charge outweighed its advantages, and BuAer Change No. 90 directed all units to remove the explosives and reinforce the wingtip. The tip was reinforced with additional, heavier riveting on all F8Fs during their next major overhaul. All new production Bearcats featured reinforced wings and the safety wingtips were deleted.

Bearcats were often launched by catapult from the carriers, but it was not really necessary. There were numerous instances where F8Fs took off successfully, even after the catapult failed! With any kind of wind across the deck, a Bearcat could make a deckrun take off in less distance then the catapult track. CDR Howard Packard, who flew F8F-1s from three different carriers, reported that he had never had a catapult shot at sea.

Bearcats equipped Reserve squadrons at Naval Air Stations throughout the United States. These squadrons received new production F8Fs, not the usual "hand-me-downs"

This F8F-1 of VF-882 was flown by LT Robert L. McClure at NAS Olathe, Kansas, during 1948. LT McClure had flown F6F Hellcats with VF-1 during the Second World War. VF-882 was a Reserve squadron composed mostly of TWA pilots who had been Navy pilots during WW II. (LCDR Donald C. Epp)



from the fleet. VF-882 at NAS Olathe, Kansas, was equipped with F8F-1s from 1947 to 1951. After they were replaced with F9F-2 Panthers, these same Bearcats were transferred to the French *Armee de l'Air* for use in Indochina during 1951. Bearcats lasted in other Reserve squadrons until 1955, when they were all withdrawn from active service.

Without exception, Bearcat pilots were quick to praise the performance of the F8F. Captain Gorden E. Firebaugh, Skipper of VF-5A during 1946 and 1947, had this to say about the Bearcat:

I think it is the finest aircraft I ever flew. The airplane would do everything Grumman said it would do. I had over a dozen green pilots with less than 400 hours total and we made a four month cruise with no trouble ... a testimonial to the handling qualities of the F8F-1.

Commander Howard S. Packard, who flew F4F-4 Wildcats at the Battle of Midway and later flew Bearcats with VF-9A, logging 540 hours and 75 arrested landings on three carriers in F8F-1s, recalls what it was like to fly the Bearcat. He certainly had a basis for comparison. In his twenty years as a Navy pilot, Howard had flown twelve different fighter aircraft, from F4B-4 biplanes to F-86 Sabres (as an exchange pilot with the US Air Force):

It was a great pleasure to fly and leaves a fond memory as few other aircraft have. It was great for aerobatics. The two most important statistics which determine a fighter aircraft's performance are rarely given — wing and power loadings. For the Bearcat they were impressive at 38.4 pounds/square foot and 3.8 pounds/horsepower.

LCDR Arnold M. Granat, who flew F8F-1s with VF-3 had these comments on the Bearcat's performance:

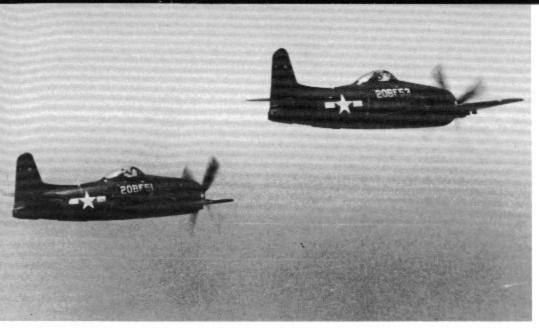
The Bearcat was a very responsive aircraft and carrier approaches required delicate control movements to prevent over controlling. A wave-off required a gentle application of power. "Panic" throttle could result in torque roll. Accelleration was a celebrated feature and the record from a standing start to 10,000 feet stood for many years, even after the jets came on the scene. Gunnery runs were a true joy. Initiating runs from 25,000 feet required judicious use of power and many a Bearcat pilot came close to beating Yeager to the sonic record.



This F8F-1 was assigned to VF-3 during 1946. VF-3 transitioned from F6F-5 Hellcats to F8F-1s at NAS Oceanna, Virginia, during early 1946 and painted their famous "Felix the Cat" squadron insignia on the cowling of their Bearcats. (USN via Jim Sullivan)

Bearcats of Air Group 17 are parked on the ramp at RCAF Air Base, Rockcliffe, Ontario, Canada, during 1946. The aircraft visible under the port wingtip of Bearcat number 30 is a Republic Seabee amphibian. (W. Eckeraley via Jim Sullivan)



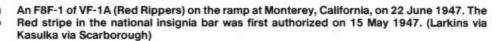


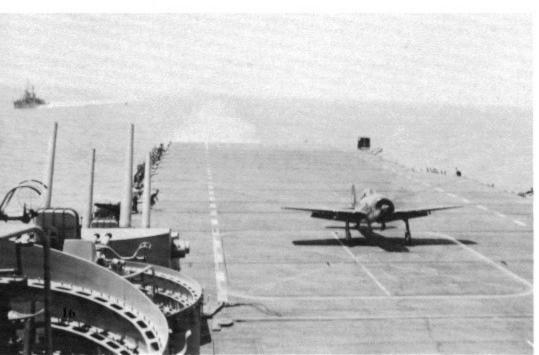
A pair of F8F-1s of VBF-20 (Bomber Fighter squadron 20) in flight during early 1946. These are early production aircraft, without the rollover pylon behind the pilot's seat. The squadron identification code on the fuselage side was in White. (Grumman)



This F8F-1 was flown by LCDR Gordon Firebaugh, the commander of VF-5A. The high gloss of the Bearcat's Gloss Sea Blue finish is highlighted by the way the fuselage number (101) is reflected in the wing surface.

This VF-3A F8F-1 has just caught the fifth wire aboard USS RANDOLPH. The tailhook men (one on each side) are coming up out of the catwalks to begin their dash across the deck to release the tail hook. (LCDR A.M. Granat)

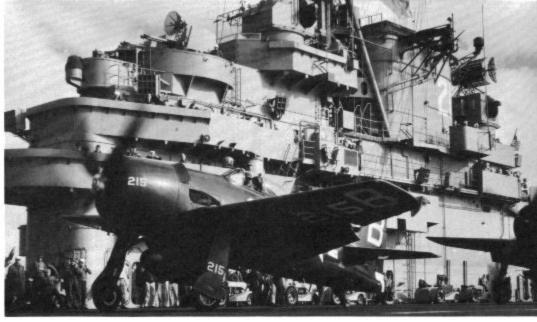






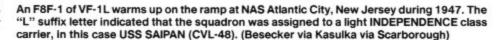


This F8F went into the barrier aboard USS LEYTE (CV-32) during July of 1947 and flipped over onto its back. The rollover pylon behind the pilot's seat saved the pilot from serious injury and he was able to crawl out of the cockpit. (USN via CAPT W.E. Scarborough)



An F8F-1 of VF-192 awaits the launch signal to begin a short deck run takeoff from USS BOXER (CV-21) during 1948. Depending on the wind over the deck, the Bearcat could often take off in a shorter distance than the catapult track. (A.W. Scarborough)

An F8F-1 of VF-15A catches an arresting cable aboard USS ANTIETAM (CV-36) during 1948. VF-15A Bearcats featured Red and Yellow stripes on the rudder trim tab and tall cone panel. Visible on the starboard wing bomb rack is a Mk 47 Practice Bomb Rack. (USN via Fred C. Dickey, Jr.)









This F8F-1 was assigned to the Naval Ordnance Test Station, Inyokern, California, for rocket testing. The wings are Yellow with the wingtips, ailerons and Mk 9 rocket launchers in Glossy Sea Blue. NOTS Inyokern later became NAF China Lake, the home of the Navy's ordnance test complex. (Roger Besecker via Jim Sullivan)



LCDR Gordon Firebaugh, commander of VF-5A, taxls his Bearcat out of the arresting gear aboard USS SHANGRI-LA (CV-38) during 1947. (USN via CAPT Gordon E. Firebaugh)

Bearcats of VF-3A warm up their engines in preparation for launch from USS RANDOLPH (CV-15). The propeller arc is visible because of a four inch Yellow band which was painted on each propeller blade tip. This was done to ensure that the arc of the spinning blades would be visible to the flight deck crew. (LCDR A.M. Granat)

A Bearcat of VF-3A has just been catapulted off USS RANDOLPH's starboard catapult while another is positioned on the port side catapult and a third is moved into position for the starboard catapult. The wires lying on the deck between the catapults are the catapult bridles which attached the Bearcat to the catapult. (LCDR A.M. Granat)





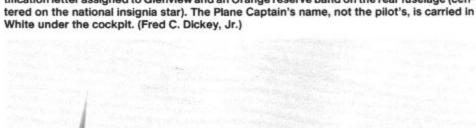


This Bearcat flown by LCDR D.C. "Whiff" Caldwell, commander of VF-20A, carried unusual personal markings. Caldwell had the medals and campaign ribbons that he was authorized to wear painted on the cowling of his Bearcat. (Larkins via CAPT W.E. Scarborough)



An F8F-1 of VF-12 on the rain soaked ramp at Wilmington, North Carolina, during 1948. The top of the vertical stabilizer and the rudder trim tab are painted White as are the 'T' and aircraft number. (Paul McDaniel via Jim Sullivan)

This Bearcat of VF-726 at NAS Glenview, IL (in the suburbs of Chicago), carries the "V" Identification letter assigned to Glenview and an Orange reserve band on the rear fuselage (cen-White under the cockpit. (Fred C. Dickey, Jr.)





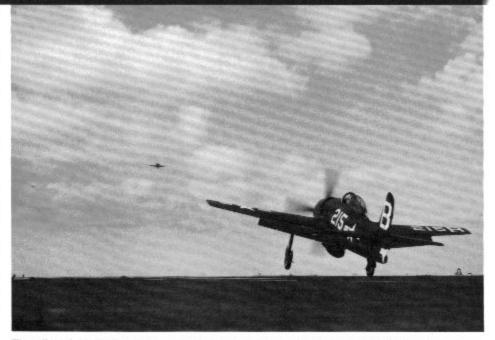
The Bearcat assigned to CDR H.E. Cook, Jr., Commander Air Group Nineteen aboard USS BOXER (CV-21), carried rather unusual and colorful markings. The Red and White national insignia bars were extended both in front and to the rear of the insignia. (USN via Jim Sullivan)





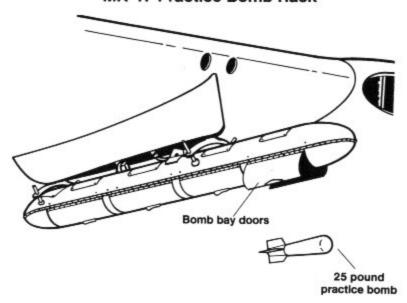
CDR J.M. DeVane, Commander Carrier Air Group Fifteen (CVG-15), and LCDR R.E. Brown, commander of VF-151, fly their F8F-1s in close formation over the San Francisco Bay area during 1948. (A.W. Scarborough via CAPT W.E. Scarborough)





The pilot of this F8F-1 of VF-192 uses plenty of opposite rudder to fight the torque of the powerful Pratt and Whitney R-2800 engine as he takes off from USS BOXER (CV-21) during 1948. (A.W. Scarborough)

MK 47 Practice Bomb Rack



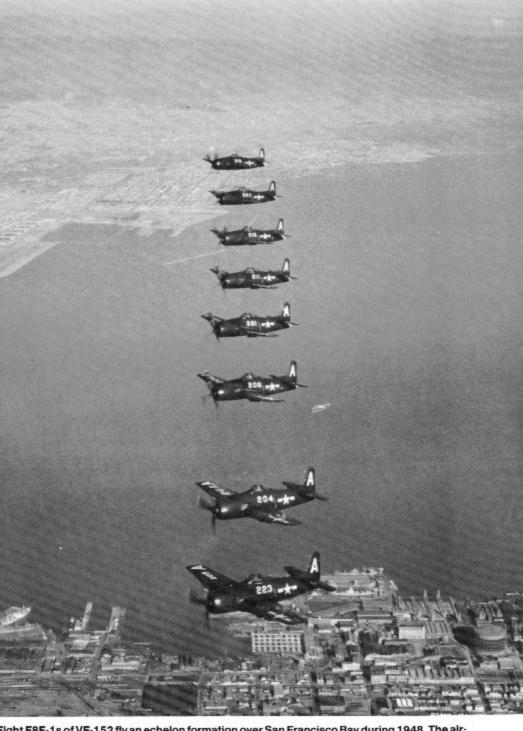
This formation of a Bearcat and Hellcat was conducted during June of 1950 to symbolize the replacement of the F6F-5 by the F8F-1 in Advanced Training Unit Two (ATU-2) at NAS Corpus Christi, Texas. The Bearcat carries a Mk 47 practice bomb rack on the starboard wing pylon. (NAH-003108)



This flight of F8F-1s of VF-726 displays a variety of markings. The lowest F8F-1 has no Reserve Orange band, while the next two in the formation do. The upper Bearcat has the break in the band, with NAVY and GLENVIEW carried in the break. VF-726 was a reserve squadron based at NAS Glenview, IL. (Grumman)

A close formation of Bearcats of Advanced Training Unit One (ATU-1) over Jacksonville, Florida, during 1953. During this time frame the Bearcat was used as an advanced fighter trainer to prepare pilots for high performance jet fighters. (Grumman)





Eight F8F-1s of VF-152 fly an echelon formation over San Francisco Bay during 1948. The alrcraft were based at Naval Air Station Alameda, which can be seen in the background just ahead of the formation. (A.W. Scarborough)

F8F-1B

At the 1944 Joint Fighter Conference, the F8F-1 Bearcat had been flown in mock combat against such formidable competitors as the Republic P-47D and P-47M, North American P-51D and Vought F4U-4. The pilots attending the conference (six Army, five Navy and twelve contractor test pilots) were all enthusiastic about the Bearcat's performance and overwhelmingly voted it the best all-around fighter below 25,000 feet. Their most frequent criticism concerned the inadequate firepower of the four .50 caliber Browning machine guns and the small cockpit.

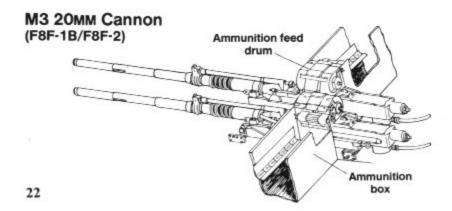
During 1946, the Navy recognized that the Bearcat's firepower was inadequate. When initially designed, it had been felt that the four .50 caliber machine guns were sufficient to deal with the lightly armored and constructed Japanese aircraft. With the war over, however, it was now felt that the Bearcat's firepower needed to be increased, so the Navy ordered two F8F-1s to be modified with the installation of four rapid fire M3 20MM cannons replacing the four .50 caliber machine guns. Grumman redesigned the wing structure to accommodate two M3 cannons and 410 rounds of ammunition in each wing, with the ammunition compartments being part of the wing structure. In order to accommodate the ammunition feed drums, it was necessary to add two teardrop shaped bulges on the gun access doors. These bulges and the protruding cannon barrels were to become the primary identification features of the cannon armed Bearcat, which was given the designation F8F-1B. Other than the cannon armament, the F8F-1B was externally identical to the earlier F8F-1.

CAPT Gordon Firebaugh, who conducted weapons tests with the F8F-1B, firing over 10,000 rounds without a stoppage, found the F8F-1B to be:

A steady, firm gun platform. However, a stoppage by one cannon could cause a skid — nothing disturbing but if you were firing at an airborne target, it might cause a miss.

The 20MM M3 cannon was 78 inches long, weighed 112 pounds (vs. 64 pounds for the .50 caliber machine gun), had a muzzle velocity of 2,850-2,950 feet per second, a range of 5,500 yards and rate of fire of 500 to 800 rounds per minute. The cannon fired a high explosive projectile of nearly an inch in diameter, weighing 0.29 pound, while the armor piercing projectile weighed 0.39 pound.

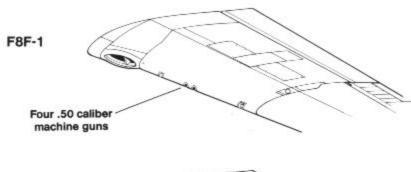
From March of 1946 until January of 1948, Grumman built a total of 224 F8F-1Bs. Every fourth Bearcat produced after March of 1946 was an F8F-1B and its production overlapped that of the next variant, the F8F-2.

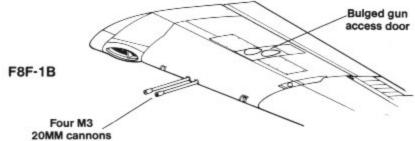




This F8F-1B is on a delivery flight during 1947. The F8F-1B differed from the F8F-1 in the armament carried. The -1B carried four 20mm cannons in place of the four .50 callber machine guns of the earlier -1. The gun muzzles on this Bearcat have been taped over to keep out dirt and moisture. (USN via Jim Sullivan)

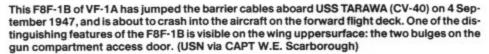
Armament







This F8F-1B of VF-32 is flown by ENS J.L. Brown, although ENS Peddy's name is carried on the fuselage under the cockpit. Carrier pilots flew whichever aircraft was spotted for them. The logistics of spotting the deck was complicated enough and arrangement so that each pilot could fly "his" aircraft was not possible. (USN via David Lucabaugh)





The catapult tow bridle is being hooked up to this F8F-1B for field catapult tests. It was rarely necessary to catapult launch the Bearcat, since with only a little wind over the deck, the Bearcat could make a deck run takeoff in about the same distance as the catapult track.

ENS Richard M. Hill poses on the wing of his F8F-1B of VF-72 aboard USS LEYTE (CV-32) during 1950. The markings on the fuselage are in White. (Nancy B. Hill)



F8F-1N

During 1946, Grumman produced twelve Bearcats modified for the night fighter role under the designation F8F-1N. These aircraft differed from the standard F8F-1 in having the following additional internal equipment installed: a GR-1 automatic pilot, a radio altimeter, a windshield degreasing system and a Mk 20 gunsight. Externally, the F8F-1N could be identified by the exhaust flame damper shroud fitted over the exhaust stubs and the AN/APS-19 radar, (mounted in a pod known as a "Rabomb") carried on the starboard wing bomb rack. The radar scope was installed in the center of the instrument panel. Armament was the same as the standard F8F-1, four .50 caliber machine guns.

On 15 November 1946, VCN-1 and VCN-2 were commissioned at NAS Barbers Point, Hawaii, and NAS Miami, Florida, respectively. The two Composite Night squadrons were charged with night fighter deployment aboard the carriers and normally had detachments serving on several carriers simultaneously. VCN-1 was assigned to the Pacific Fleet, while VCN-2 was the Atlantic Fleet squadron. LT Joe Scarborough was a VCN-1 pilot during 1947 and reported that:

An F8F-1N of VCN-1 taxies forward aboard USS VALLEY FORGE (CV-45) during 1947. VNC-1 was responsible for supplying night flighter detachments to Pacific Fleet carriers. The rear of the Rabomb radar pod is barely visible under the 2 on the starboard wing. (Joe Scarborough)

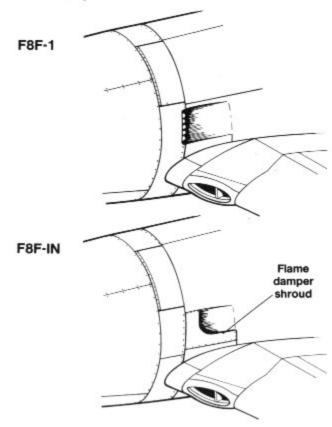
The F8F was a very solid, rugged, and swift bird. Clancy Rich of VCN-1 flew through a tree (he had a limb protruding from front to back of the engine, and had a complete loss of oil) and managed to land safely. We (VCN-1) deployed with the F8F-1N aboard USS VALLEY FORGE during November of 1947. The only accident I can remember was Frank Moody, who went into the catwalk on a night landing. There were no baffles in the main fuel tank and the movement of the fuel in the tank would induce vertigo at night on instruments — especially during turns and dives.

The Navy conducted an operational evaluation of the F8F-1N and concluded that the maneuverability of the F8F-1N was only slightly effected by the Rabomb radar pod installation; however, the aircraft's trim was critical, especially at higher speeds. One problem encountered with the F8F-1N concerned spent cartridge cases and links, which ricocheted off the Rabomb, striking the trailing edge of the wing and flaps. In some cases, it was found that these cases and links had caused structural damage to the flaps. The evaluation also found that the intercept characteristics of the AN/APS-19 radar was inadequate as was the aircraft's firepower of only four .50 caliber machine guns.

In conclusion, the evaluation stated that due to the reduced speed and range of the F8F-1N, it was not viewed as an effective night fighter. The F7F-3N Tigercat, which was also in squadron service at the time, was viewed as a superior night fighter with greater range, firepower, a SCR-720 radar with the antenna mounted in the nose and a second crewman — a radar operator who freed the pilot for flying and fighting.

This was the only critical evaluation ever made of the Bearcat, and it concerned only the night fighter variants.

Flame Damper Shroud





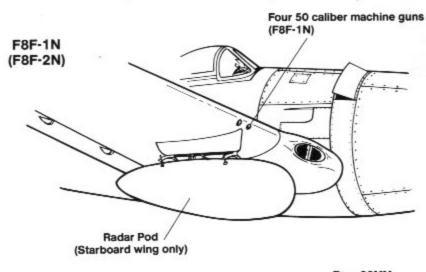




This F8F-1N of VCN-1 is undergoing weight and balance tests at NAS Barbers Point, Hawaii, in May of 1947. The radar pod, known as the Rabomb, has been removed from the starboard wing for the tests. (Joe Scarborough)

An F8F-1N night fighter of VCN-1 on the ramp at NAS Barbers Point, Hawaii, during early 1948. VCN-1 and VCN-2 flew the night fighter variant of the Bearcat operationally, with VNC-2 being assigned night fighter responsibility for the Atlantic Fleet. (VADM P.H. Ramsey via Bob Lawson)

AN/APS-19 Rabomb (Radar Pod)



Four 20MM cannons with flash hiders (F8F-2N)

The two Grumman night fighters used by the fleet were the F8F-1N Bearcat and F7F-3N Tigercat. The F7F-3N was rated as a superior night fighter because of its long range, radar antenna carried in the nose instead of a pod, better radar and a second crewman (the radar operator). The Marines made extensive use of the F7F-3N in Korea until they were replaced by F3D Skyknights. (Grumman)



F8F-2

By 1947, the engine which the Navy had originally wanted for the Bearcat, the 2,250 hp Pratt & Whitney R-2800-30W, finally became available in quantity. Grumman retained one production F8F-1 and one F8F-1B, which were used to build two XF8F-2 prototypes. The main difference between the F8F-1 and XF8F-2 being the installation of the R-2800-30W engine (which was the same size and dimensions as the -34W engine). A unique feature of the R-2800-30W engine was the Automatic Engine Control (AEC) which connected the throttle and variable speed supercharger in one control.

Because of the increased torque of the more powerful engine, it was necessary to increase the height of the vertical tail by twelve inches. The National Advisory Committee on Aeronautics (NACA) had recommended a sixteen inch increase; however, such an increase would have required a complete redesign of the vertical tail. The tall tail configuration became the principal identification feature of the F8F-2, although the aircraft also featured a revised engine cowling, four M3 cannon armament and a reinforced canopy with an additional frame installed near the rear of the canopy.

CAPT Bob Elder compared the performance of the F8F-1 and F8F-2 and stated that:

Iflew both the F8F-1 and F8F-2 models of the beloved Bearcat and only wish that the little jewel had been in the Navy's fighter inventory early in WW II. I recall only somewhat minor degredations in the F8F-2's performance, due mostly to some weight increase and an equal margin of improvement over the F8F-1 in laterial/directional control and general flying qualities.

Another unlikely source, COL George I. Ruddell, USAF, Ret. (then a MAJ) commented on the F8F-2. COL Ruddell served as an exchange pilot with VF-73 during 1948.

This F8F-1 (BuNo 95049) was one of two retained by Grumman to serve as prototypes for the XF8F-2s. The Pratt & Whitney R-2800-30W engine has been installed, but the fin and rudder have not been modified at this time, 18 September 1947. (Grumman)

Although I was already in Heaven, flying as a member of the only jet group in the Air Force, I just couldn't resist such an opportunity. Nine of us were sent to Pensacola to start the exchange program. We graduated to the F8F-2 in August. What a wonderful airplane! I loved it.

In September of 1948, only two years after adopting a new squadron designation system, a completely different system was introduced. The 1948 system tied the squadron number to the Carrier Air Group (CVG) to which the squadron was attached. Air Group Seven's two fighter squadrons were designated VF-71 and VF-72, while CVG-19's were designated VF-191 and VF-192.

The Marine Corps received a few Bearcats, mostly F8F-2s. The Bearcats were used to equip advanced training units at three Marine Corps Air Stations (MCAS): Quantico, Virginia; Cherry Point, North Carolina; and El Toro, California.

Grumman delivered the first production F8F-2 in October of 1947 and production ended on 31 May 1949 with a total of 282 F8F-2s being manufactured. Bearcat equipped squadrons with the fleet peaked during 1948 when twenty-four squadrons were equipped with F8Fs (F8F-1, F8F-1B and F8F-2). But the career of the Bearcat was to be limited, as jet fighters were coming on into service and new fighter squadrons were forming with them. A few Bearcats soldiered on as drone controllers, designated F8F-1Ds and F8F-2Ds. During 1950, Bearcats replaced the F6F-5 Hellcats in the Advanced Training Units (ATUs) as advanced fighter trainers until they too were finally replaced by jets.

By July of 1955, the last Reserve squadrons had replaced their Bearcats with jet fighters. During 1956, the last F8F-2s were stricken from the Navy inventory and transferred to storage facilities. The fantastic little Bearcat was now only a fond memory in the Navy — a victim of the advancing technology of the jet age.

The F8F-2 had a twelve inch extension to the vertical stabilizer to help counteract the torque of the more powerful Pratt & Whitney R-2800-30W engine. NACA had recommended a sixteen inch extension; however, this would have required a complete redesign of the vertical fin. (Grumman)

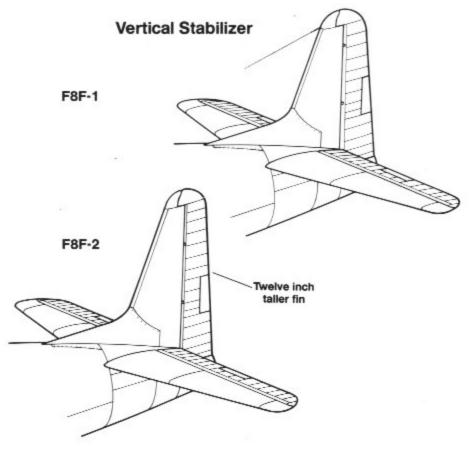




F8F-2N

The unsatisfactory operational evaluation of the F8F-1N had concluded that unless an intercept radar superior to the AN/APS-19 became available, the night fighter variant of the F8F-2, the F8F-2N, would have its procurement curtailed. Despite this recommendation, Grumman produced thirteen F8N-2N night fighters between December of 1947 and April of 1949. The same additional equipment which had been installed in the F8F-1N was installed on the F8F-2N, except that a GR-2 automatic pilot was used instead of the earlier GR-1 autopilot. The aircraft carried the standard armament of the F8F-2, with the cannons being equipped with BuOrd designed flash hiders on the gun muzzles.

An operational evaluation of the F8F-2N reached the same conclusions as had the earlier evaluation of the F8F-1N; additionally, the F8F-2N offered no significant improvement in performance over the earlier fighter. Hanging external stores on any low aspect, short coupled aircraft invariably adversely effects its performance and flying qualities. When these stores are mounted asymmetrically, these problems were severely compounded. After a short period, the VCN squadrons operating the F8F-1N/2N had the aircraft replaced with F4U-5N Corsair night fighters.





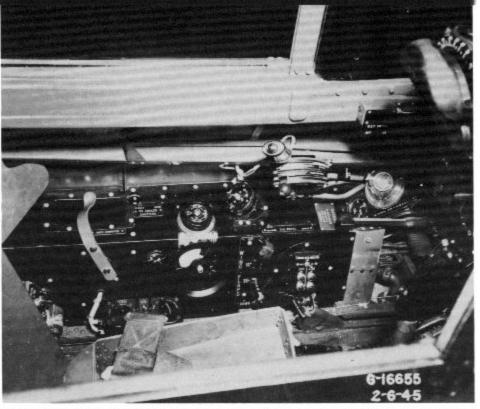
This F8F-2N is equipped with an AN/APS-19 radar installed in the Rabomb pod on the starboard wing pylon. The guns are fitted with conical BuOrd flash hiders on the gun muzzles to cut down on the gun flash at night. (H.G. Martin - NAH-003109)

A new production F8F-2 on a factory test flight over Long Island, New York, during 1948. The last three digits of the BuNo (122612) were used for identification during predelivery tests and ferry flights and were painted in large numbers on the cowl in Temporary White paint. (NAH-003111)





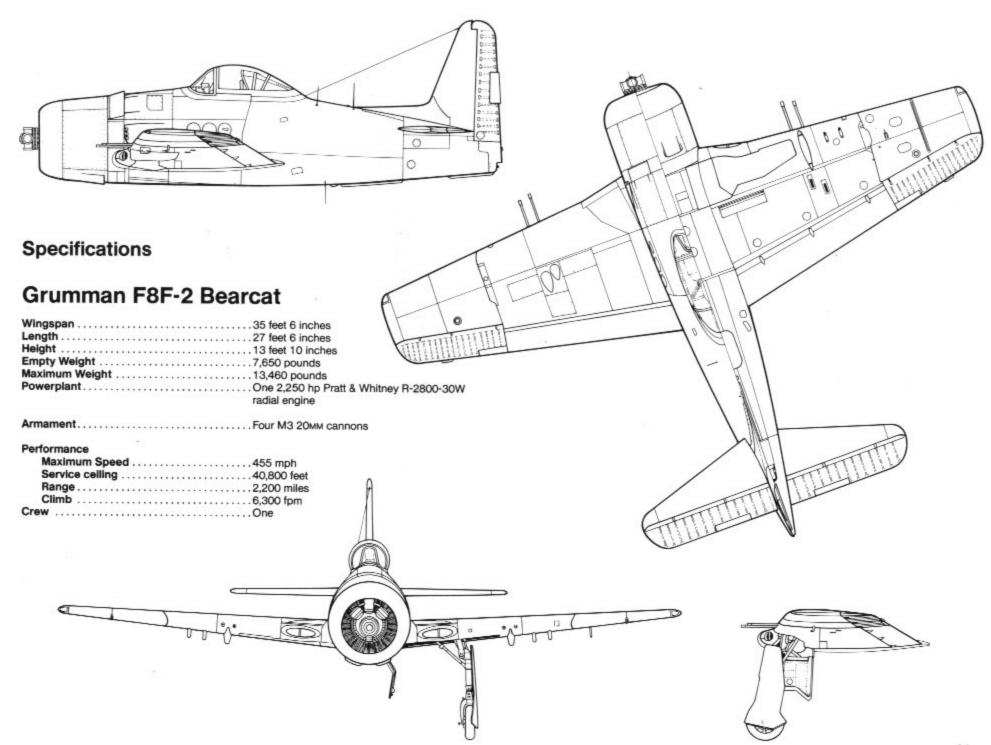
The cockpit of the Bearcat remained the same for all variants except for the night fighters (F8F-1N and -2N). The right console contained electrical and radio controls, while the lever to the right of the pilot's seat was the emergency hydraulic hand pump. (Grumman)



The left instrument console contained the landing gear lever, flap lever, tailhook and trim tab controls, as well as the throttle quadrant. (Grumman)

During 1948 a new system of unit color coding was introduced. This F8F-2 of VF-72 has the tip of the vertical stabilizer and propeller hub painted in White to denote the second squadron in Carrier Air Group Seven (CVG-7). Their sister squadron, VF-71, had the fin tip and prop hub in Red, denoting the first squadron in the Group. (USN via Jim Sullivan)







The pilot of this F8F-2 (BuNo 121654) of VF-62 runs his engine up to full military power before being catapulted from USS CORAL SEA (CVB-43) on 14 September 1948. (USN via David Lucabaugh)

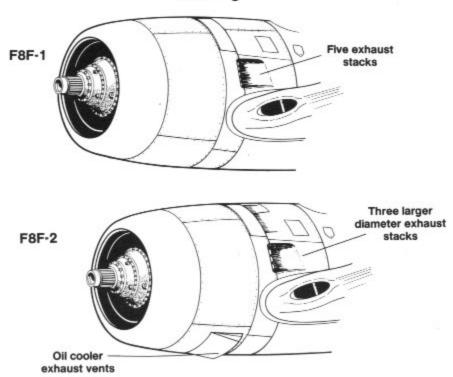
F8F-2s of VF-83 start their engines in preparation for takeoff from USS MIDWAY (CVB-41) during the carrier's 1949 Mediterranean Sea cruise. The crewman in the foreground is signaling the pilot to hold, while other crewmen remove the chocks from the Bearcat's wheels. (Grumman)





This F8F-2 (BuNo 121599) was used for various test programs at the Naval Air Test Center (NATC), NAS Patuxent River, Maryland, during May of 1949. The aircraft identification and NATC were repeated under the wing in White. (USN via David Lucabaugh)

Cowling





This F8F-2 (Number 0) is assigned to the commander of Air Group Fifteen (CVG-15) and is on display at San Francisco airport during October of 1949. The guard is going around to see what the civilians are doing up in the fighter's wheel well. The tip of the vertical tail, tail cone fairing and propeller hub are painted Red. (Wm T. Larkins)



This F8F-2 of VF-72 is parked on the transit ramp (for visiting aircraft) at NAS Glenview, Illinois, during 1948. The aircraft in the background are Douglas R4D (C-47/DC-3) transports. (Fred C. Dickey, Jr.)

F8F-2s of VF-62 parked on the grass at NAS Norfolk, Virginia, after returning from USS CORAL SEA's 1948 Mediterranean cruise. With the wings folded, the F8F's wingspan was reduced from 35 feet 6 inches to 23 feet 3 inches. (USN via Jim Sullivan)



An F8F-2 of VF-151 is holsted aboard USS BOXER (CV-21), moored at the carrier pier at NAS Alameda, California, during January of 1950. Just three months earlier BOXER had helped seal the Bearcat's fate when she conducted the first operational deck landings of the F9F Panther. (Grumman)





In August of 1952, VF-82 with its F8F-2s deployed aboard USS MIDWAY (CVB-41) and took part in Operation MAINBRACE, a North Atlantic Treaty Organization (NATO) exercise in the North Sea. (D. Welsh via Jim Sullivan)

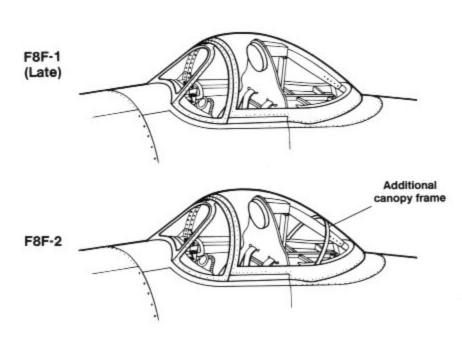


This F8F-2 of VF-82 aboard USS MIDWAY during August of 1952 displays unusual exhaust stains running the entire length of the fuselage. Normally, exhaust stains did not trail back past the wing trailing edge. (D. Welsh via Jim Sullivan)

A Marine Corps F8F-2 runs up its engine on the ramp at MCAS Quantico, Virginia, during June of 1951. The aircraft carries a Mk 47 Practice Bomb Rack on the starboard wing pylon and SCAR practice rockets on the Mk 9 rocket launchers. (USMC via Jim Sullivan)

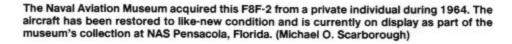


Canopy





Bearcats equipped three Marine Corps fighter-trainer units. The 20MM cannons have been removed from the wings of this F8F-2 assigned to VMFT-10, a training unit assigned to MCAS Quantico, Virginia, during 1951. (USMC via Jim Sullivan)

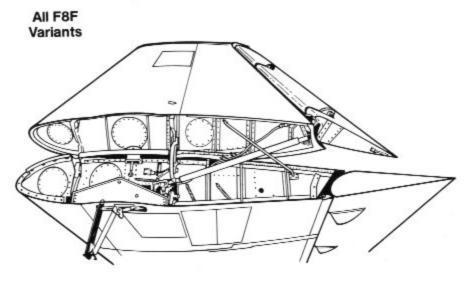






This new production F8F-2 waits on the Grumman ramp at Bethpage for delivery to a Navy fighter squadron during 1948. The last three digits of the BuNo (121653) have been painted in water base Temporary White paint on the cowl and the cannon muzzles have been taped. (USN via Jim Sullivan)

Wing fold



F8F-2P

Seventy Bearcats were produced by Grumman for the photo-reconnaissance role under the designation F8F-2P. These aircraft differed from the F8F-2 in having camera doors installed on each side of the fuselage to the rear of the wing trailing edge for the mounting of oblique cameras and another camera port on the fuselage centerline for a vertical camera. Internal mounts were provided for three K-17 or K-18 aerial cameras for vertical and oblique photographs. To save weight, only one M3 cannon was installed in each wing, with the outboard cannon and its ammunition being deleted, which saved a total of nearly 500 pounds. Besides the camera doors, the F8F-2P featured oil deflector fairings mounted in front of the camera port to keep oil and dirt off of the camera lens.

Captain Gordon Firebaugh consulted his log book to confirm flying a F8F-2P (BuNo 121585) and stated:

I did three cat shots and three arrested landings before and after exposing the film in high-speed runs. This Bearcat flew just like all of them — light on the controls. TOPS!

During January of 1949, two VC (Composite) squadrons were commissioned with the primary mission of carrier based photo reconnaissance. VC-61 was assigned to the Pacific Fleet, while VC-62 was the Atlantic Fleet squadron. Photo detachments flying F8F-2Ps were deployed on various carriers and the Bearcat's only involvement in the Korean War is believed to have been in the photographic reconnaissance role.

LT Frank Fitzgibbon was a VC-62 pilot with USS LEYTE's photo detachment during 1952. He recalls that fighter pilots would frequently recognize the large PL tail code on his Bearcat (Photo Lant, Photo Atlantic Fleet) and slide into close formation, slightly behind and below his Bearcat. They would hand signal, "take my picture" and Frank always obliged, giving them the "high sign" when he had snapped their pictures. They would then bank away. He does not know if they ever received their prints.

The F8F-2Ps were the fastest of the Bearcat series and the last F8Fs to be retired from fleet squadrons, with the last being transferred to the Reserve during late 1952.

Of the 1,263 Bearcats produced by Grumman, from the XF8F-1 of 1944 to the F8F-2P of 1949, all were delivered to the U.S. Navy in one standard paint scheme: overall Glossy Sea Blue with White Star and Bar national insignias in four positions and all service markings in White. The propellers were Black with four inch Orange Yellow tips.

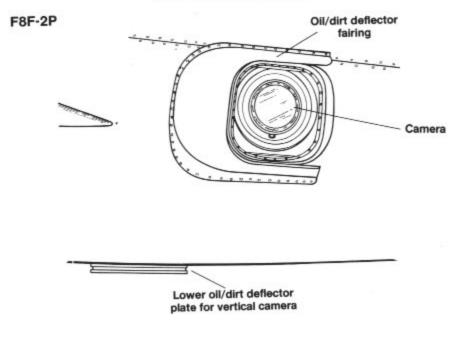
The first F8F-2P (BuNo 121580) photo reconnaissance aircraft runs-up on the ramp at the Grumman plant during February of 1948. The closed oblique camera door is visible on the fuselage side, but the oil deflector fairing has not yet been installed. (Grumman)





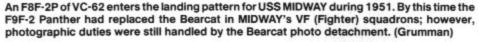
This F8F-2P tied down on the ramp at NAS Pensacola, Florida, during-1949 reveals one of the F8F-2Ps identification features: the single 20мм cannon in each wing. The oblique camera door and oil deflector fairing are visible under the trailing edge of the wing. (Bill Crimmins via Jim Sullivan)

Camera Installation





This F8F-2P of VC-62 was flown by LT Frank Fitzgibbon as part of USS LEYTE's photo detachment. The aircraft is carrying Mk-4 100 gallon drop tanks on the wing pylons as it flies over the ocean near Sarolnai during November of 1951. (Frank Fitzgibbon)







These F8F-2Ps were assigned to Naval Air Technical Training Unit (NATTU) at NAS Pensacola, Florida, during 1949. All fleet photo reconnaissance training was conducted by the NATTU. The horseshoe shaped fairing in front of the oblique camera door is the oil deflector fairing, designed to keep the camera lens clean. (Bill Crimmins via Jim Sullivan)

An F8F-2P of VC-61 flies formation with the jet that would eventually replace it in fleet photographic squadrons, the Grumman F9F-2P Panther. (Grumman)



THE BLUE ANGELS

The U.S. Navy Flight Demonstration Squadron, known world wide as the Blue Angels, was conceived during early 1946 (just a few months after the end of the Second World War) at the Advanced Training Unit (ATU), Naval Air Station Jacksonville, Florida. The ATU formed a team of veteran WW II combat pilots to demonstrate precision formation flying for a series of air shows scheduled for the Southeastern United States during the Summer of 1946. LCDR Roy "Butch" Voris, Chief Flight Instructor at the ATU, was in charge of the operation.

Four of the F6F-5 Hellcats assigned to the ATU were selected and repainted by the team members and volunteers. Originally the aircraft were painted a Blue color which was somewhat lighter than Gloss Sea Blue, but darker than the current Blue Angels Blue. The non-standard markings, U.S. NAVY in large block letters on the fuselage and wings, were carried in a metallic Gold paint.

The Blue Angels performed their first public show at Jacksonville's Craig Municipal Airport on 15 June 1946. The show was so well received by the public that the team was made a full-time Navy activity. In the weeks that followed, the team performed at air shows at Corpus Christi, Texas; Des Moines, Iowa; Pensacola, Florida; and Omaha, Nebraska. From Omaha the team flew to Bethpage, Long Island, New York for a show at the Grumman plant. Waiting for them at Bethpage were five brand new F8F-1 Bearcats. The Grumman paint shop had painted the F8F-1s in what has become known as Blue Angels Blue, with Gold lettering — U.S. NAVY in block letters on the fuselage sides and the under surfaces of the wing. Sometime later "Blue Angels" was painted in Gold script on the cowling. With few modifications, this paint scheme has remained as the team's trademark for over forty years.

The team flew their F8F-1s back to NAS Jacksonville and began working with their new mounts, flying a number of training and familiarization flights. Within a month, they flew their first public show with the Bearcat at Denver, Colorado. The Bearcat was the team mount through the remainder of the 1946 season and for all of the 1947 and 1948 show seasons. LCDR Bob Clarke replaced Butch Voris as team leader and under his leadership the four plane diamond formation and many of the team's present day maneuvers were developed using the Bearcats.

During 1949, under LCDR R. E. "Dusty" Rhodes, the Blue Angels began to transition into the Grumman F9F-2 Panther. Until mid-1949, the team flew the F8F-1s in their public shows, while working with the Panthers during the week. The last show flown with the Bearcat was in August of 1949 at Madison, Wisconsin; however, the overall Yellow F8F-1, known as "Beetle Bomb," continued as the team's solo aircraft even after the team began doing shows with the Panther.

The same degree of discipline, teamwork and professionalism exhibited by Blue Angels pilots is also reflected in performance of the elite maintenance crew, known as the "Troops," assigned to the team. For more than forty years, the "Troops" have achieved a highly enviable maintenance record. The Blue Angels have never had to cancel a flight demonstration because of a maintenance problem.

Today there are many formation teams, but it was the "Blues" that developed, refined and perfected the art of precision formation aerobatics, long before any of their counterparts even existed. For example, the team predates the USAF "Thunderbirds" team by some seven years.



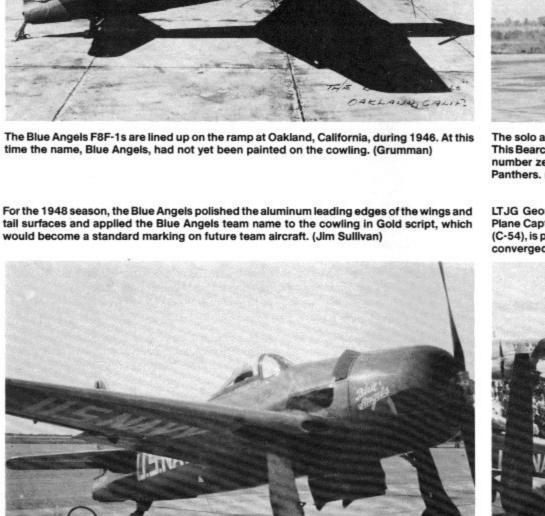
The first Blue Angels demonstration team; Al Taddeo, Butch Voris, Wick Wickendoll and Mel Cassidy, pose with one of their new F8F-1 Bearcats at the Grumman plant during 1946. (Harry Gann via Grumman)

The Blue Angels man their F8F-1s at the start of a show during 1946. Butch Voris chose only bachelors for the first team, a requirement that was later relaxed. The original "Beetle Bomb," an overall Yellow SNJ-5, is visible under the far right F8F-1. (Grumman)





The Blue Angels F8F-1s are lined up on the ramp at Oakland, California, during 1946. At this time the name, Blue Angels, had not yet been painted on the cowling. (Grumman)



would become a standard marking on future team aircraft. (Jim Sullivan)



The solo aircraft, known as "Beetle Bomb", on the ramp at NAS Glenview, IL, during 1948. This Bearcat was painted overall Glossy Orange-Yellow with Blue lettering and carried the tail number zero. "Beetle Bomb" continued with the team even after they transitioned to F9F Panthers. (Fred C. Dickey, Jr.)

LTJG George Hoskins dismounts after a performance at Denver during May of 1949. His Plane Captain, AD1 D.R. Miller, is standing on the port wing. The first "Fat Albert," an R5D-3 (C-54), is parked behind the Bearcats. Security was lax in those early days and the crowd has converged on the Bearcats. (Grumman)



SOUTHEAST ASIA

The Bearcat was to finally see combat in Southeast Asia, but not with the service for which it was intended and not in the role for which it was designed. Instead, it was used in the ground support role by the French Armee de l'Air, which utilized its power, maneuverability and short takeoff capabilities to lift bombs, rockets and napalm from short, forward area airstrips — The very type of attack mission which the U.S. Navy decided was unsuitable for the Bearcat during the Korean War.

Armee de l'Air

By 1951, the French had become involved in heavy fighting against the insurgents of the Communist Viet Minh in Indochina (later Vietnam). During this same time period, jets were replacing the Bearcat in U.S. Navy carrier based squadrons, and to assist the French, the United States, through the Mutual Defense Assistance Program, agreed to supply surplus F8F-1s and F8F-1Bs to the Armee de l'Air for service in Indochina.

Prior to delivery to the French, the F8Fs were overhauled and the fuel system was modified to meet French standards. Shortly after delivery the French further modified the aircraft with SCR-300 radios to improve air-to-ground communications. With these modifications, the aircraft were re-designated as F8F-1Ds. Another French modification was the addition of a locally manufactured camera pod, (made from a drop tank) which was carried on the centerline station of the Bearcats assigned to Escadrille de Reconnaissance d'Outre-Mer 80 and Escadrille de Reconnaissance Photographique 2/19, both based at Bac Mai airfield.

Initially, the French pilots suffered a number of problems during transition training. The pilots had been flying nose gear equipped Bell P-63 Kingcobras and often made their landing approach in a tail high attitude. Since the Bearcat was a tail wheel aircraft with a large diameter propeller, this type of approach led to a number of F8Fs being severely damaged in the resulting crash landing. Once the transition problems were overcome, the French pilots soon learned to make the most of the F8Fs short takeoff capability and high performance. Both these characteristics were highly regarded by the French, who were flying missions from small forward airstrips.

Eight Armee de l'Air units flew Bearcats in combat for some three years. By 1954, as many as 100 were based on the airfields around Hanoi. The Bearcat's most serious liability as a fighter-bomber was its limited range. This was an especially serious drawback during the battle for Dien Bien Phu, where the nearest airfields from which the Armee de l'Air could mount operations were in the vicinity of Hanoi.

On the airstrip at Dien Bien Phu itself, the French had stationed a number of Bearcats to supply close air support for the outpost. Seven of these, along with nine other aircraft, were destroyed on 12 March 1954, when the Viet Minh began their artillery barrage of the outpost. Over the course of the battle, Bearcat units from the south were transferred to airfields around Hanoi to make up for the heavy losses suffered from Viet Minh anti-aircraft fire. The exact number of Bearcats lost during the battle is unknown; however, the French had lost a total of some sixty-four aircraft destroyed and another 167 damaged. With the fall of Dien Bien Phu, the combat career of the Bearcat in French service ended.

Vietnamese Air Force

After the fall of Dien Bien Phu, the Armee de l'Air withdrew from Vietnam. An F8F conversion training program was set up at Vung Tau with French contract personnel (under American sponsorship) for members of the newly created South Vietnamese Air Force (VNAF). Twenty-five former Armee de l'Air Bearcats, which had been returned to American control, were transferred to the South Vietnamese under the Mutual Defense Assistance Program (MDAP) to give the VNAF its first combat element.

These aircraft were assigned to the 1st Fighter Squadron based at Bien Hoa, being officially activated on 1 June 1956. Throughout the Bearcat's career in VNAF service, the aircraft suffered from a lack of spare parts and proper maintenance. Serviceability rates were low and the squadron never really achieved a true combat ready status. The VNAF flew the Bearcats until August of 1959, when, one month before the Viet Cong launched their insurgency against the Diem government, the aircraft were grounded. The grounding order came from President Diem after the fatal crash of a 1st Fighter Squadron Bearcat due to suspected structural problems. Although the VNAF had hoped for jet fighters to replace the Bearcats, they were replaced with yet another ex-U.S Navy propeller driven aircraft, the Douglas A-1 Skyraider.

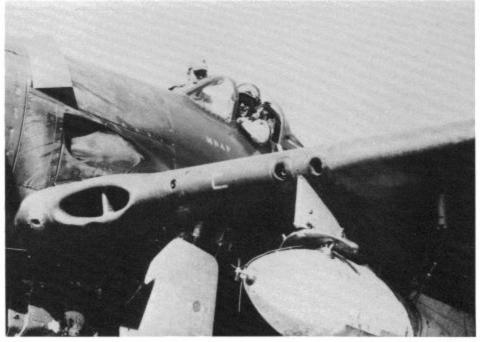
Royal Thai Air Force

With the French departure from Southeast Asia, neighboring Thailand felt threatened by the Communists in North Vietnam and sought assistance from the United States. A U.S. Military Advisory Group arrived to assist in the expansion of the Royal Thai Air Force. Along with the advisors was a group of fifty surplus F8F-1s, which arrived in Thailand aboard USS CAPE ESPERANCE (CVE-88). These were followed by another group of seventy-nine F8Fs to equip the tactical fighter-bomber squadrons of the 1st and 2nd Fighter Bomber Wings. The Royal Thai Air Force received a total of 100 F8F-1s and twenty-nine F8F-1Bs. It is believed that only the F8F-1s served in operational units, with the F8F-1Bs being held in reserve as a source of spare parts to keep the F8F-1s flying. The Bearcat served in the Royal Thai Air Force well into the 1960s, finally being replaced by F-84G Thunderiets and F-86 Sabres.

Jean Salis, a French aircraft restorer, has rescued one F8F-1B from Bangkok, Thailand, and returned it to France. The aircraft is being restored at La Ferte, Paris, France and it is planned that the aircraft will be finished in the markings of an Armee de l'Air F8F-1B used during the Indochina war.

An F8F-1B being unloaded from a U.S. aircraft carrier in Indochina. The men on the deck are French, but there is an American sailor on the wing unhooking the hoisting sling. The aircraft has been painted in a fresh coat of Glossy Sea Blue, which removed all traces of its earlier U.S. markings. (Grumman)





A French pilot and his crew chief pose with their F8F-1. The letters MDAP in White under the windscreen is the abbreviation for Mutual Defense Assistance Program. This Bearcat is armed with a French 500 pound bomb on the wing pylon. (Musee de l'Air via Stephane Nicolau)



French Bearcats carry out a low level napalm attack against a Viet Minh position during 1953. The tumbling napalm tank is visible against the smoke under the Bearcat. (SIRPA/ECPA-France via Hans-Heiri Stapfer)

This F8F-1 of Groupe de Chase 21 Artola is carrying napalm tanks and 5 inch HVAR rockets for a strike against Viet Minh targets during 1952. (SIRPA/ECPA-France via Hans-Heirl Stapfer)



French ground crews warm up a mixed group of F8F-1s and F8F-1Bs of GC1/22 Saintonge at Tonkin during 1953 as French pilots walk out to man their aircraft. The aircraft are armed with napalm tanks for another strike against Viet Minh targets. (SMRPA/ECPA-France via Hans-Heiri Stapfer)





Three CG1/22 Saintonge pilots enjoy a cigarette break between missions from the forward airstrip at Dien Bien Phu during 1954. After the Viet Minh had completed their encirclement of the base, these Bearcats were destroyed on the ground by artillery fire. (SIRPA/ECPA-France via Hans-Heiri Stapfer)

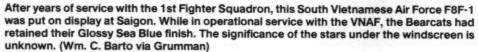


A French F8F-1B of *Groupe de Combat I/9 Limousin* on the ramp at Tan Son Nhut Air Base during 1953. The aircraft is armed with four 5 inch HVAR rockets. Throughout their service in Indochlna, the Bearcats retained their U.S. Navy overall Sea Blue paint scheme. (Muse de l'Air via Stephane Nicclau)

An Armee de l'Air F8F-1B of GC/l/21 Artcis armed with two 1,000 pound bombs prepares to take off from a forward area airstrip during 1952. The runway is made of pierced steel planks known as Marston matting. The French found that the hard tall wheel of the F8F had a tendency to damage these planks. (Musee de l'Air via Stephane Nicolau)

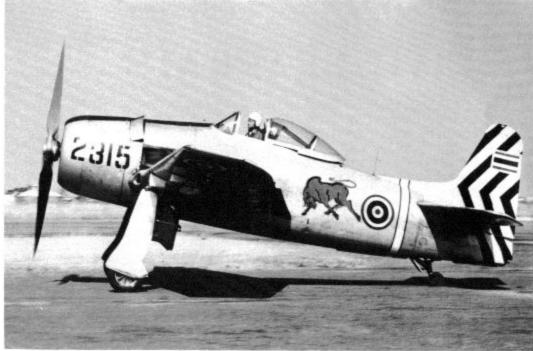






This F8F-1 of the 2nd Fighter Bomber Wing, Royal Thai Air Force retains the U.S. Navy overall Glossy Sea Blue paint scheme. The water buffalo emblem is White, indicating the squadron within the group and the White checker board on the vertical stabilizer is repeated on the horizontal stabilizer uppersurfaces. (Merle Olmsted via Fred C. Dickey, Jr.)





This natural metal F8F-1 of the 2nd Fighter Bomber Wing at Nakorn-Sawan Air Base, Thailand, has the water buffalo marking in Red. The striping on the tail was Blue and White and the aircraft number and anti-glare panel were in Black. (Merle Olmsted via Fred. C. Dickey, Jr.)

A flight of four F8F-1Bs of the 1st Flighter Bomber Wing, Royal Thai Air Force. It is believed that the winged Tiger insignia consisted of a Red tiger head with Yellow wings. The stars on the tail are also believed to be Yellow. (Fred C. Dickey, Jr. via Jim Mesko)



CIVIL BEARCATS

Ironically, it was as an air show aircraft and air racer that the Bearcat achieved its greatest fame and popularity in the United States, first with the Navy Blue Angels demonstration team, and later as a civil aircraft on the airshow circuit.

During 1947 Grumman, with Navy approval, built one special civilian Bearcat (Grumman designation G-58A) for MAJ Al Williams and the Gulf Oil Corporation. Named "Gulfhawk 4," the civil Bearcat made its first flight in June of 1947 and was a top attraction at air shows throughout the United States. All military systems, armor plate, armament, wing fold mechanism, radio systems and the tailhook were deleted from the G-58A. With these systems eliminated, Gulfhawk 4 tipped the scales at almost 3,000 pounds less than a standard military F8F-1 and Al Williams stated that it would do 500 mph at 19,000 feet. Grumman delivered the aircraft in Zinc Chromate primer and a private firm applied the aircraft's distinctive Orange, White and Black paint scheme. Gulfhawk 4's career was short and it was destroyed in a landing accident when the landing gear was extended but did not lock. On touchdown, the gear folded and the aircraft settled onto the drop tank which burst into flames. The Bearcat was destroyed in the resulting fire; however, Al Williams escaped unharmed.

During 1958, the War Assets Administration advertised for bids on thirty-two Bearcats held at the Navy's storage facility at Litchfield Park, AZ. The Confederate Air Force purchased two, each with less than 250 hours on the engines, by submitting a bid of \$800 apiece. Scrap dealers were bidding about \$750. For the bargain price of \$800, the Confederate Air Force was able to rescue two classic warbirds from becoming pots and pans.

Foremost among the civilian Bearcat operators was the late Bill Fornof. Bill was a Second World War Naval Aviator who had flown F8Fs in the Navy and he dedicated himself to demonstrating the Bearcat to the world. He flew his F8F-2 at every air show or open house he could find, for nothing more than expenses. His routine of short (less than 200 feet) takeoffs, vertical climbs and spectacular maneuvers thrilled thousands at air shows all across the United States. Later, he purchased another F8F-2 and brought his son, "Corky," into the routine. The twin Bearcats were finished in a striking Bronze/Gold and Brown paint scheme which was sealed with many coats of wax. This highly visible finish allowed the two F8Fs to be seen from great distances. Bill died in the crash of his Bearcat at Quonset Point, Rhode Island, during 1971.

During the early 1960s another group of Bearcats were offered for public sale. These were F8F-2s and most of the Bearcats flying today are from this group. Unlimited air racing had been revived at Reno, Nevada, during 1964 and Mira Slovak flew an F8F-2 to victory in the first Unlimited Air Race. For the next several years Bearcats dominated the Unlimited category. Lockheed test pilot, Darryl Greenamyer, won the Unlimited races from 1965 through 1971, retiring his Bearcat after his 1971 win and donating it to the National Air and Space Museum. The F8F-2 that carried Darryl to his first victory in the 1965 unlimited division of the National Air Races was in nearly stock configuration. He covered the ten lap, 8 ½ mile course at an average speed of 375 mph and had a four mile edge over his nearest rival, Chuck Lyford, who was flying a P-51 Mustang. "I never had it wide open," Darryl later said.

In 1939 Fritz Wendel, a German test pilot, had established a new world speed record for propeller-driven aircraft by flying an experimental Messerschmitt Me-208VI over a three kilometer (1.8 mile) course at a speed of 469.22 mph. Amazingly, for over thirty years no one was able to officially beat Wendel's record. Several attempts had been made after the Second World War, but each had been unsuccessful.

On 16 August 1969, Darryl Greenamyer, flying his F8F-2 Bearcat Conquest I (BuNo 121646), brought the World Land Plane Speed Record back to the United States. Over a 1.8 mile closed course at Andrews Air Force Base, he established a new record of 483.041 mph. The record, certified by the Federation Aeronautique International, easily broke Wendel's record. With the help of Grumman vice president C. H. "Corky" Meyer, Darryl had made several modifications to his Bearcat to increase its speed. A small "Cosmic Wind" canopy was fitted replacing the large bubble canopy, a tail cone fairing was added to improve the aircraft's overall streamlining, a paddle bladed propeller (borrowed from an A-1E Skyraider) helped absorb all the power from the engine, and a propeller spinner from a P-51H was installed. The wings were clipped at the original safety wingtip locations and were neatly capped with "Horner" speed tips. Finally, the landing flaps were rendered inoperative, sealed and faired over. The engine used in the speed dash was a standard Pratt & Whitney R-2800 — although a nearly new one. In a letter thanking Corky Meyer for his assistance and support, Darryl wrote:

"I seemed to detect a note of pride for the F8F in your letter which is certainly shared by me and my crew... We used to get some ribbing about the austere appearance of it, but since the performance figures are out nobody seems to mention it." The record stood for some fifteen years until broken on 30 July 1983, by a highly modified P-51 Mustang known as the RB-51 Red Baron Mustang, which set a record of 499 mph."

The Reno National Championship Air Race has become the longest running air racing event in history. Closely following Darryl with Bearcat wins at Reno is Lyle Shelton, with four victories in 1973, 1975, 1988 and 1989. Lyle, in his F8F-2 "Rare Bear," won the 1989 Reno race at an average speed of 450.910 mph. In 1988, the Bearcat set a new Reno qualifying record of 474.622 mph, closely followed by another Bearcat, Don Whittington's F8F-2 "Precious Bear," which qualified at 453.437 mph.

The fact that Rare Bear won Reno in 1988 and 1989 is not surprising, since Rare Bear was used on 21 August 1989 to establish a new land plane speed record for propeller driven aircraft of 528.329 mph capturing the record from the Red Baron RB-51 Mustang by over twenty-nine mph. Rare Bear also holds the time to climb record for propeller aircraft, 3,000 meters (9,842 feet) in 91.9 seconds.

MAJ AI Williams and his highly colorful civil Bearcat named Guifhawk 4. MAJ Williams stated that Guifhawk 4 could do 500 mph at 19,000 feet and climb to 10,000 feet in 98 seconds. (Grumman)





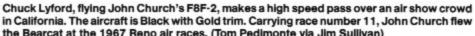
The G58A Gulfhawk 4 shares the ramp with the earlier Gulfhawk 2, a modified Grumman F3F-2. Gulfhawk 2 is now part of the National Air and Space Museum collection, while Gulfhawk 4 was destroyed in a landing accident. (Grumman)

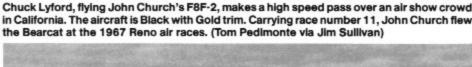


Named the Red Ship, this Bearcat was built from spare parts by Grumman and used by the company as a demonstrator. The aircraft had the airframe of an F8F-2 and the R-2800-34W engine of the F8F-1. The 150 gallon drop tank usually carried tools and spare parts. It is currently owned and flown by Planes of Fame in Minnesota. (Grumman)

Many of the few remaining airworthy Bearcats have been lost over the years in the racing circuit. Some raced without modifications, some with various modifications: however, all were competing against Mustangs, Corsairs and Sea Furies which were extensively modified with clipped wings, bigger engines, etc. The Bearcat remains one of the all-time favorites in unlimited racing - and the most successful.

Only about thirty of the 1,263 Bearcats built remain, and only about half of these are still flying. Their proud owners speak of the power, performance and durability of the rugged little fighters, the true measures of a classic warbird. Even though the Bearcat was destined to miss combat in the Second World War by just days, it still made a significant impact on aviation history and continues to make an impact even today.



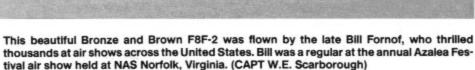


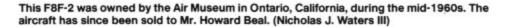


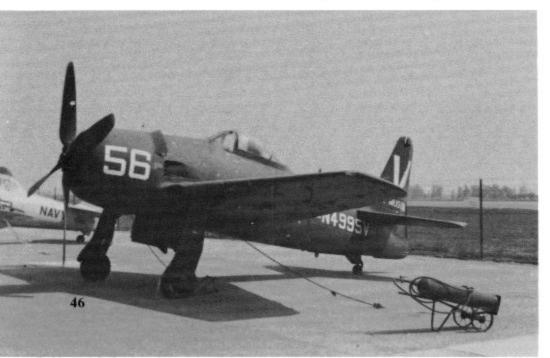
Mira Slovak, in this nearly stock (a tail cone fairing has been added) F8F-2, won the 1964 Reno Unlimited air race at a speed of 355.52 mph. The aircraft was sponsored by Smirnoff Vodka and named "Miss Smirnoff." (Jim Sullivan)













Bill Fornof flew this F8F-2, while his son "Corky" flew a P-51 Mustang painted in the same colors as the Bearcat, at one of the NAS Norfolk, Virginia, Azalea Festival air shows held during the mid-1960s. (Nicholas J. Waters III)

Chuck Lyford, in John Church's Bearcat, performed a short takeoff during an airshow. The Bearcat normally became airborne in approximately 150 feet or less. (Tom Pedimonte via Jim Sullivan)





Darryl Greenamayer in his F8F-2 Bearcat (civil registration N1111L) warms up his engine prior to the 1966 Reno race. Darryl won the race at a speed of 396.221 mph. The Bearcat was modified with a small "Cosmic Wind" canopy replacing the original bubble canopy. (CAPT W.E. Scarborough)

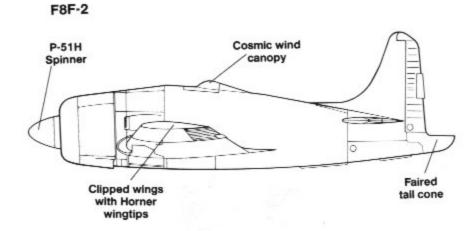
This is the F8F-2 (BuNo 121646) in which Darryl Greenamayer brought the world land-plane speed record back to the United States. A year later, but in the same configuration, Greenamayer raced the aircraft at the Unlimited Air Races held in Reno, Nevada, on 17 September 1970. (Roger Besecker via Jim Sullivan)





This Bearcat was part of the National Air and Space Museum collection until traded to Darryl Greenamayer for his record setting Bearcat, Conquest One. (John H. Truesdale)

Conquest I Modifications





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The only remaining F8F-2P lands at Roanoke, Virginia, during 1978. The F8F-2P was restored in the United States and sold during 1982 to Fighter Collections, Duxford, Cambs, England, the current owner and operator. (Jim Sullivan)

This Natural Metal finish F8F-2 was owned by Jack Sliker, of Wadley, Georgia. The aircraft was destroyed in a fatal crash at Flagstaff, AZ, on 16 September 1975. (J.W. Hawkins via Jim Sullivan)

C.F. "Chet" Christopher, an Eastern Airlines Captain, flew this F8F-2 at the Pesonic Air show in 1966 celebrating the 20th anniversary of the Blue Angels. He regularly flew the Bearcat at air shows throughout the Eastern United States and one of his routines was performing very short takeoffs. (Grumman via W.E. Scarborough)

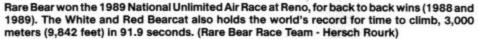
Bob Kucera modified his White and Blue trimmed F8F-2 by installing two side-by-side seats and windows in the radio/baggage compartment. Other modifications included the addition of a propeller spinner and tail cone fairing. (CAPT W.E. Scarborough)







One of the most beautifully restored Bearcats is the F8F-1 owned and flown by Howard Pardue of Breckenridge, Texas. This Bearcat is the tenth F8F-1 built and is the oldest Bearcat flying. All of Howard's Navy warbirds carry the tail code P. (Nicholas J. Waters III)





Lyle Shelton's record setting modified F8F-2 "Rare Bear" warms up its engine before the world speed record attempt on 21 August 1989. Lyle set a new world's speed record of 528.329 mph, beating the old record by some twenty-nine mph. (Rare Bear Race Team - Hersch Rourk)



Grumman "Cats"

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