

The pilots and ground crews for the "Black Jet" maintain both the hardware and the mystique.

Training

for Stealth

Photography by Guy Aceto, Art Director, and Paul Kennedy

Because there are no two-seat F-117 trainers, a pilot's first flight in the stealth fighter is also his first solo. Though by that time he's had nearly a dozen hours in a high-fidelity simulator. Help is only a wingtip away. Flying chase in a T-38, instructors must have an excellent hand on the stick to juggle teaching technique while piloting a very dissimilar airplane.





Retaining an air of mystery despite being "out of the black" for more than a decade, the stealthy and exotically shaped F-117 Nighthawk also remains one of the most potent weapons in the US arsenal. A stellar performance in the Gulf War only added to the mystique, making it one of the capabilities most requested by theater commanders, with almost nonstop taskings in Saudi Arabia, Kuwait, and exercises worldwide. The 49th Fighter Wing at Holloman AFB, N.M., has three squadrons of F-117s. The wing's 7th Fighter Squadron is the one charged with training "Black Jet" pilots and maintainers. At left, a student on a training sortie cuts through the Holloman skies on his best behavior: It's the squadron commander's airplane.

While the standard mechanical elements of the F-117 are fairly easy to keep up, maintaining the jet's stealthy low observables requires more work. Applying, removing, and patching the linoleum-like Radar-Absorbent Materials on the F-117's surfaces is an exacting, labor-intensive job. Maintenance repair specialists like A1C Kenneth Sheppa at right must keep the RAM in perfect condition and alignment or the F-117's stealth could be compromised. Frustrations are common: Even if the job is done flawlessly, there's no guarantee it will stay that way. If something inside the airplane breaks, the RAM will have to come off to provide access to a panel, then be reapplied after the fix is made.



No matter how standard the guts of the F-117 may be, maintainers of the Black Jet know they are part of a unique wing. At left, A1C Erin Kipp opens a panel on her airplane. One of the few women on the maintenance line, she has her name on the nose gear door, along with that of the two other specialists who work on this particular fighter.



Photo by Paul Kennedy

F-117 pilot training soon will change. The 7th FS will take on academic as well as flying training, but its airplanes will become part of the operational 8th and 9th Fighter Squadrons—a move designed to make more aircraft available for real-world missions. The 7th will retain its T-38 companion trainers and use F-117s from the two other squadrons as necessary.

Above, a pilot prepares to strap on a Nighthawk under the watchful eyes of the crew chief. F-117s have their own hangars to facilitate the care of these extremely limited and precious assets.

Arranged in two rows along the ramp leading to the flight line, the hangars form the "canyon" through which a pilot taxis en route to takeoff at right. A pilot's first flight in the F-117 may be a challenging solo, but it comes only after 10 simulator rides and 45 days of ground school, not to mention the experience in other aircraft necessary just to get here.

Gear up, and the mission begins. Training sorties take pilots all over the Southwest. The White Sands Missile Range nearby is a common workout spot.



Staff photos by Gory Aceto

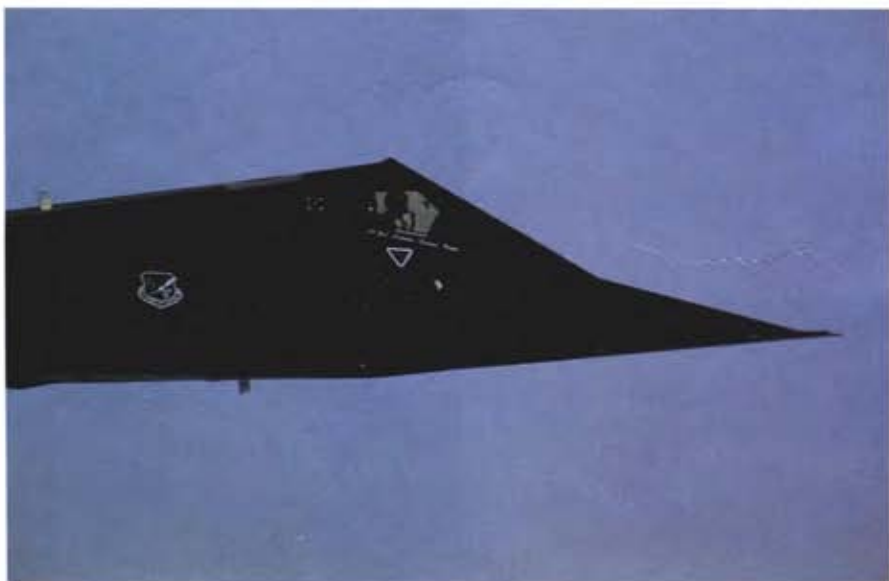




Mission planning: vital in any system but especially critical with the F-117. The physics of its unique stealth shaping require an exact and precise approach to or around threat radars, and at the 7th FS, mission planning is emphasized in the curriculum. At left, Instructor Pilot Capt. Chris Babbidge looks on as SrA. Nick Zimmerman signs off on his part of the pre-brief. Daytime flying is the rule during training, but once a pilot joins his operational squadron, nighttime operations begin, as he learns employment and tactics. About 60 percent of operational sorties are flown at night.

Painted black like their stealthy wing mates, sleek T-38 Talons are used by IPs to fly chase on their students. Instructors may have as many as three or four students, but all training is a one-on-one affair.

IPs must be masters of the T-38 as well as experts in the F-117. According to 7th FS Commander Lt. Col. Andy Papp, "You've got to get instructors who are very good instructors, because they're instructing from another airplane. You can't see exactly what the guy's doing, you can't hear what he's saying to himself, and you don't get the same feel that you get when you're in the same aircraft."



The price of admission to the F-117 cockpit is 750 hours in fighter aircraft. Only recently were two former B-1B pilots accepted; both had been flying the T-38 in conjunction with their bomber duties. The short training period and direct-to-solo first flight in the F-117 pose little problem for the veterans. Students "dive right in and do very well," said Papp. "It's a very easy aircraft to fly."



Above, Maj. "Tripp" Stallings, an F-117 IP, pops out above some puffy white clouds in a Nighthawk. The thin air and bright sunshine give the fighter a razor-sharp look as it cuts through the air, no longer the awkward-looking jumble of angles it seems on the ground.

After a month-and-a-half of intense academics and simulator rides, it's time for the real thing. When a student in an F-117 begins his takeoff roll, an instructor is already airborne in a T-38, ready to do a "chase pickup." The IP will take up a position above and slightly behind the F-117 and stay glued to the tail of the Black Jet, watching the student's every move. The T-38 is nimble enough to put the IP anywhere he needs to be to give advice and correction.

At right, Capt. Greg Pantle, another IP, keeps the T-38 locked in formation as he flies a typical student training profile with Stallings. Below right, touchdown, but the T-38 maintains its airborne vigil until the F-117 comes to a complete stop. Once a pilot graduates and moves "down the street" to one of the operational squadrons, emphasis shifts away from flying basics to getting the fighter to a target with stopwatch timing and delivering ordnance with breathtaking accuracy.



Given the F-117's track record, even student pilots express confidence in the system. Former F-15 pilot Capt. Larry Guichard commented that if he has to be "in combat, this is the aircraft I want to be in." ■