Judson Brohmer

Judson Brohmer of the F-22 Combined Test Force at Edwards AFB, California, became an aerial photographer circuitously. "As a news producer first for CBS and then later for an ABC affiliate, I often drove by Edwards AFB on my way to and from Los Angeles. Watching the jets streak overhead, I didn't take long to figure out who had a more exciting job than I. So I quit the news and started my career at Edwards."

Well, not exactly. "I spent three years of ground-pound ing to convince the powers-that-be to let me in the back seat. Ever since, I've had the time of my life. Starting with McDonnell Douglas on the C-17 program, I soon found myself working for just about every company in the business, from Embraer to Mitsubishi, Idaho Jet to Boeing. Add in about twenty-seven others, and life got pretty busy. And then came the best opportunity of my life, Lockheed Martin and the F-22 program."

But talking about great aerial photography is one thing. "Truth be known, the pilots are what make it happen. At the F-22 CTF (and down the street at the F-16 test force), we have some of the greatest pilots I've ever flown with. Every picture I'm proud of has a story behind it that describes how the pilot managed to put us in that particular position—and often it was no small feat."

"And I absolutely love to fly. Nothing compares to the feeling of zooming along at forty or fifty thousand feet, skimming over wispy clouds, chasing the world's most advanced fighter. Or being down on the deck, bouncing all around as my F-16 rockets through canyons at two hundred feet above ground level. Reaching speeds pretty darn close to Mach."

The people Brohmer knew from his old news days! "They would love to have my job. Unfortunately for them, it's taken!"

No doubt, many people pick up Code One Magazine only to look at the stunning photos. These images spice up our publication with color and style. Photos compel people to read articles, turning lookers into readers. To acknowledge this symbiotic relationship, we're dedicating this special issue of the magazine to some of the people behind the lenses.

These folks deserve the attention. Capturing quality images is no easy task. The best photographers make the effort look elegant and simple. In this sense, good photography is much like good writing. Anyone who has experienced countless editing cycles appreciates the amount of effort required to create effortless reading. And anyone who has loaded a roll of film after a mind-crushing, nine-g turn appreciates a photo of an F-16 going straight up.

Our only criteria in selecting and selecting the photos was that the subject must involve Lockheed Martin aircraft, preferably fighters. The photographer list was derived from a series of informal calls and by word of mouth. We missed many well-known shooters, but those presented here still represent a cross-section of the profession as well as many of our own corporate photographers, whose work often goes unacknowledged.

To our photo contributors, thanks. To our readers, enjoy.

Eric Hehs, Editor
Katsumi Tokunaga began his aerial photography career in a T-33A jet trainer. Since then, he has covered the high-performance military jets of twenty-six nations, concentrating on air-to-air photography. In addition, he has taken official pictures for foreign aircraft manufacturers, air forces, and navies. He has also worked on the production and direction of many aviation videos. His published work appears in magazines in Japan and in other countries.

Based in Tokyo, he has accumulated over 800 flight hours in high-performance jets, among them the F-16. He has also flown with and photographed USAF Thunderbirds, Japanese Blue Impulse, USN Blue Angels, Canadian Snowbirds, British Royal Air Force Red Arrows, French Patrouille de France, Italian Frecce Tricolori, Swiss Patrouille Suisse, Portuguese Azuis do Portugal, Spanish Patrulla Aguila, Swedish Team 606, Yugoslavian Lionce Zvezda, Soviet Air Force, and Swiss PC-7 Team.

On a recent photo shoot at Misawa, Japan, Tokunaga wanted to photograph an F-16C loaded with air-to-air munitions. But the only chase aircraft available to him was an F-16D loaded with two AGM-88 HARMs, two AIM-9J, an ALQ-167 electronic countermeasure pod, and two drop tanks. Heavier than the C model subject, the photo chase F-16D had a significantly higher drag index as well.

"Resonances from the pilot did not allow my fears about an unsuccessful shoot. But that flight was one of the most enjoyable photo sessions in my life. The powerful F100 engine, a fine-tuned flight control system, and skillful pilots combined to put those two F-16s in perfect formation throughout the entire flight. Those flights show only a very small part of the total capability of the F-16. However, it was enough to impress this aerial photographer."
Luigino Caliaro of Italy traces his aerial photo career to the time when he climbed with camera into the cockpit of a Tucano of Brazil's Royal Air Force. Since then, he has amassed eighty hours in military jets and more than 200 hours in tankers, transports, and helicopters. He is a regular photo contributor to Aeronautica e Difesa, JPA, and L'Armata Aeronautica, the official magazine of the Italian Air Force. He also contributes to France's Air Fana and England's World Air Power Journal. His broad fighter photo experience includes the German MiG-29, F-4F Phantom, Tornado, and Alpha Jet; French Mirage; Portuguese F-16; Slovak MiG-21; and F-16s of the US Air Force and ANG. He has also flown with several air demonstration teams, including the Italian Frecce Tricolori, Spanish Patrulla Aguila, French Patrouille de France, British Red Arrows, and South African Silver Falcons. Caliaro's company, Aerophoto, produces an annual fighter calendar.

"Some of the photos I included for Code One were taken in April 1997 during a flight over central New Mexico in an F-16D Block 40 from the New Mexico ANG. We flew a training sortie over White Sands Missile Range in very poor weather conditions. The Portuguese Air Force photos were taken last June near the Monte Real Air Base. The first part of the mission was dedicated to photos; the remainder was dedicated to a dogfight against two other F-16s. We turned very hard, often pulling more than seven g's. At the end of the flight, I was very tired. But I felt like Maverick in the popular movie 'Top Gun'."
Nick Alvarado, cinematographer, videographer, and aerial photographer for Lockheed Martin Tactical Aircraft Systems in Fort Worth, began his aerial photo career in 1977 after joining the US Air Force. There he served as a motion picture cameraman travelling extensively and documenting USAF activities on the ground and in the air in aircraft varying from UH-1 helicopters to C-5 cargo jets and from the F-101 Voodoo to the F-4 Phantom.

He left the Air Force in 1981 for a job with General Dynamics. With camera, he strapped into the backseat of the company's earliest models of the F-16. He took a hiatus from fighter photography to spend a brief interlude in Hollywood—and Top Gun, Revenge, Firebirds, and Hot Shots—as an aerial unit camera operator. Those urges satisfied, he returned to aerial shooting at General Dynamics.

"The F-16 is a terrific platform for aerial photography. My last F-16 aerial assignment was a little different. I went to Canon AFB, New Mexico, to shoot a formation that included F-16s flown by all of the base's squadron commanders as well as the wing commander. The pilot of the photo jet, also an F-16, had a reputation for bad luck. Twice he had ejected from F-16s, the most recent being the month before. He had also been struck by lightning when at the Air Force Academy. I was a little nervous after hearing those stories. The flight went very well—no glitches. Everyone was happy when we landed, especially me."

Alvarado also experienced a memorable first flight of the F-22. Now he anticipates shooting the first flight of the Joint Strike Fighter in 2000.
Greg Davis started his career in aerial photography a few years ago as a civilian and part-owner of Focal Plane Imagery. Later, he took his interest in aircraft further and joined the Air Force. After passing through rigorous flight training and completing the demanding USAF survival school, he became a qualified crew member. Since then, he has logged hundreds of flight hours in US and foreign aircraft. He has also documented large-scale operations, such as Southern Watch and Allied Force, where he flew over thirty combat missions. Davis is currently expanding his photojournalism knowledge and refining his skills at the prestigious military photojournalism program at the Newhouse School of Public Communication at Syracuse University, New York.

"Almost all of my best aerial photography was shot from an F-16. One of my favorite experiences in the Viper was with the New Mexico ANG during a Southern Watch flight. My pilot, Capt. Thomas Wheeler, put the jet through its paces as we soared upside down spitting out flares with the Iraq/Kuwait border as our backdrop. Awesome!" While in Kuwait, Davis shot an F-117 and two F-16s representing all three bases in New Mexico. "The flight marked the first time that aircraft from all three major USAF and ANG bases in New Mexico deployed and flew combat missions together." Davis was the first combat photographer to fly a combat mission in a fighter from the Kuwaiti theater of operations since the end of the Gulf War.
Ian Black experienced the calling for aerial photography as an F-4 pilot in the British Royal Air Force. It transpired while he was flying low-level air defense of western Germany. After eight years in the RAF, he transferred from the Phantom to the British Lightning and became the RAF's last single-seat fighter pilot. Ironically, this distinction placed him diametrically opposite from the distinction his father garnered in the RAF twenty-five years earlier—as one of the RAF’s first Lightning pilots. When the Lightning was withdrawn from service, Black was posted to the all-new Tornado F3 interceptor. He was based at RAF Leeming and took part in Operation Desert Shield. At the end of five years and some 1,200 hours on the F3, Black spent a month on detachment in the Falkland Islands. Photographically, these five years were his most productive. Books on the Lightning were followed by ones on the Tornado, Desert Storm, and his much-acclaimed work, The Combat Edge.

After his Falklands experience, Black was sent to the RAF’s most prestigious exchange posting, flying the Dassault Mirage 2000 in the south of France. Two-month deployments from Italy flying combat air patrols over Bosnia were interspersed with a two-month stint in Saudi Arabia. Black flew over 150 combat-oriented missions in his time with the French Air Force. During this period, he published Last of the Lightnings, a tribute to Britain’s greatest jet fighter. Black retired from the RAF in 1996 and now flies the Airbus A340 for Virgin Atlantic Airways.
Neville Dawson has been photographing military aircraft for eight years. Having grown up with helicopters in his native New Zealand, his shift to bigger and faster subjects seemed natural after he moved to Australia. As editor and chief photographer for Fighter Tactics Magazine on the Gold Coast, Dawson spends little time at home. He prefers to be out, or up, photographing airborne aircraft. His work has been featured in Aviation Week, Air Fan International, Air Forces Monthly, Air Power International, Air Force Today, Aero International, World Air News, Pacific Wings, and Code One. His photos have won numerous awards, including first and second place from Aviation Week in the general aviation category.

"I had the opportunity to travel to Brazil with a six-ship of F-16s from the 93rd FS out of Homestead AFB, Florida. We were part of a joint exercise called Tiger III at Santa Maria AFB in the southernmost part of Brazil, an eleven-hour ferry flight over the Amazon jungle. The experience resulted in the highest and lowest points of my career. During this ten-day trip, I had a number of flights in one of the F-14Ds that deployed from Homestead. I shot some unique formations involving F-16s, F-15s, and A-10s. That was the high point."

"The low point followed soon after during an air-to-air shoot over the Gulf of Mexico. Things went wrong very quickly and we collided with another F-16. A mid-air is undoubtedly a photographer's worst nightmare; the accident brought home how dangerous this job can be."

Dawson also remembers a flight in an F-16 of the Royal Norwegian Air Force. "Using an F-5 as a chase plane, we took Norway's first MLU jet—loaded with live Penguins, AAMs, and Sidewinders—and flew around beautiful snow-covered mountains."

Guy Aceto, art director for Air Force Magazine, made his first "Viper slide" into the backseat of an F-16D from the 66th FS at Moody AFB, Georgia. "The first thing I noticed was the view. Even from the backseat, it is just incredible. The pilot was great, too. He put the airplane just about anywhere, making my job easy. Although easy is a relative term, when I'm trying to rewind and reload while pulling four or five Gs. By the second sortie, I realized I was getting to do something very special. If I had anything to say about it, I wasn't about to stop."

Aceto's magazine, the monthly publication of the Air Force Association, has published a series of photo essays at a number of bases around the world. He likes to get out of his office and into the "real" Air Force to photograph F-16s on base and write about their crews, among them the 388th FW of Hill AFB, Utah. "Still seemed a logical choice for an up-close look at the Block 40 and the LANTIRN. The guy up front had to get his training done, too, so we dropped our bombs and did our required strafing passes just like the rest of the jets. I learned more about air-to-ground in that photo mission than I did in any other flight. A photo sortie is no easy ride; it's often done as a "noninteruption of training" flight, especially in these busy times. Our photo features show our readers just what it's like for the crews and pilots who perform these jobs day after day. That's really what any good photographer wants to do anyway."
Joe Cupido has flown in the complete US military aircraft inventory as an aerial photographer the past twenty years or so. He has also flown in various foreign military aircraft and in quite a few World War II-type aircraft. During the Vietnam conflict, he flew helicopter gunships with a secondary function as a combat photographer. More recently, he flew as an aerial combat photographer in Operation Allied Force. He maintains his pilot skills as a private pilot with time in over sixty different airframes.

"My first flight in an F-16 was for a photo shot of an F-4 and an F-16 when the Kansas ANG converted to the Fighting Falcon. The visibility from the F-16 was great compared to the back of the F-4s or F-105s I had been flying. The most impressive part of the flight was going vertical. Compared to the other fighters I had flown, the F-16 did not bleed off airspeed as rapidly as other jets. That gave me more photo time and made me more productive."

"My most impressive experience in an F-16 was in a clean big-mouthed D model on a cool morning. Our ground roll was about 2,500 feet. After rotation, the pilot kept the aircraft at about fifty feet above the ground until the end of the runway. Then he began a four-g pull into a vertical climb that lasted up to 35,000 feet. Most impressive!"

"The F-16 is a great aircraft but not always the best photographic platform. Why should it be? It's a fighter."
Kevin Robertson's photo career in the aerospace industry began with Northrop Grumman, where he initially worked on the F-20 Tigershark program. Later, he transferred to the Advanced Tactical Bomber program, what became the B-2 bomber. He then joined Lockheed Martin and began work on the F-22 flight test program at Edwards AFB in California. His aerial photography flights have involved chasing the F-22 from the backseat of F-16 or F-15 aircraft.

"Flying in an F-16 can be an enlightening experience. The forces put on your body are unbelievable. From positive g's to negative g's, aileron rolls to windup turns, vertical climbs to vertical descents—the F-16 provides a ride that outperforms any roller coaster you can imagine. If your stomach can't handle flying, you will want to give up flying for a lifetime. For those who can handle the motions, flying is a pure adrenaline rush."

Bob Lawson served in the US Navy on four aircraft carriers, eight naval air stations, and a guided missile group. Additionally, he was a battlezone photographer in Vietnam in 1968. After retirement, Lawson created The Hook (The Journal of Carrier Aviation) where he acted as editor-in-chief from 1972 to 1991. His photo duties have allowed him to fly in more than eighty types of military aircraft with all five US services and two foreign countries. During his Vietnam tour, he earned two strike-flight air medals. Lawson has logged about 4,500 hours in more than forty-two consecutive years of flying in tactical aircraft and has flown with more than 150 Navy and Marine units.

"On one photo mission with Tiggun, I was to photograph an F-16N in the plankton while in a vertical climb. The standard procedure for making this shot is for the subject aircraft and photo plane to begin the maneuver in parallel straight-and-level flight. Both pilots then commence a four-g pull-up to vertical flight. The subject pilot then rolls ninety degrees to his right, resulting in both aircraft still in vertical flight giving the photographer a view of the top of the subject aircraft.

"Without exception, every time I have attempted this shot, the subject pilot will unconsciously apply slight back pressure on the stick while looking over his shoulder, causing his plane to close into the photo plane. (Kind of like when you are driving and look to one side of the road, then find yourself moving toward that side.) This tendency often creates an interesting situation. A close look at the resulting photo reveals the shadow of the photo F-16 on the left wing of the subject. I took this shot with a Nikon F2 using a 35-135mm zoom lens retracted to the wide angle setting. Yes, we got a little close."

"The Lightning Falcon has an incredible silhouette. It is photogenic and state-of-the-art." His first flight in the F-16 was with the 174th FW in Syracuse, New York. "I experienced nine g's on that first flight. An incredible sensation! I got to fly the aircraft for a short time, which gave me a feel for its superior maneuverability. I love the way the cockpit wraps around a pilot. At McEntireANGB in South Carolina, I flew in the Block 52 F-16. We took off in full military power and shot into the air like a rocket. The F-16 may be small, but it's bad to the bone."
Ken Murray, an aviation photographer with more than fourteen years experience, joined the US Air Force and coupled his love of photography with aviation to produce outstanding military images published worldwide. With a publishing and photography background, Murray was picked by the Air Force to be editor of Torch Magazine, the Air Education and Training Command safety magazine. Murray and his staff won the International Blue Pencil Award for government communications in 1995.

Murray is a veteran of Operation Just Cause, Operation Desert Storm, and Operation Allied Force. His images have been featured in Torch Magazine, Aviation Week, Propes De Vol, and CODE One as well as in calendars including the current LMXAS calendar, postcards, and books. "I have shot more images of the F-16 than I have of any other aircraft in the world. With this platform used in so many different roles and missions, I have binders and binders full of F-16 images."
Ted Carlson specializes in aerial photography of military aircraft. He enjoys capturing the excitement of high-tech military machines and their hardworking crews. His photographs and articles have been published in numerous magazines, including Code One. He has flown in and photographed almost all types of aircraft in the US inventory. But he claims the Viper as "an awesome experience. The fighter is arguably one of the most agile aircraft in the world. With an incredible view and an ergonomically designed cockpit, the F-16 is a pilot's plane—begging to be handled aggressively."

However, Carlson says his most memorable F-16 experience came not in an F-16 but in a KC-135 of the 163rd Air Refueling Wing of the California ANG. "We were flying a practice incursion on the Pacific coast to test the crew and controller skills at the 144th FW. This California ANG unit, based at Fresno, employs F-16s in the air sovereignty role to defend the United States against any invasion into the airspace within the Southwest. Two armed Vipers, ready with live ordnance at all times, can scramble within minutes if called upon.

"With only a handful of pilots privy to the test, we took off from March AFB, California, and headed far west over the Pacific Ocean. Out of controller radar range, without notice, and unannounced, we turned eastbound and sped back towards the coast. The controller queried our KC-135, but the StratoTanker gave no response. Instead, we continued our rapid pace for US soil. Sure enough, we heard controllers scramble the armed Vipers and vector them toward us. Only a few minutes lapsed from the time we violated US airspace to the intercept. With multirole capabilities and versatility given, the low-maintenance Fighting Falcon certainly also makes a superb interceptor."
Lans Stout, once an employee on the A-12 program at General Dynamics in Fort Worth, has been an aerial photographer for seventeen years. Now as a freelance, most of his flights are related to covering stories for magazines. While his primary ride has been the F-16, he has also flown in the A-7, A-4, F-4, and in the F-15. Stout is well known for his beautifully strobe-light ground photos of pilots and maintenance personnel. "I'm no fighter pilot, but I enjoy photographing these aircraft where they live, in the three-dimensional blue. I'm a station wagon guy, along for the ride, but I toss in a few suggestions for good pictures from the back seat.

"The dissimilar aircraft combat missions I have flown are pure sensory overload. The F-16 can turn with the whiplash spin of a car on ice. In high-g pulls, the g-suit waist bladder explodes with compressed air in an attempt to cut me in half. The greatest feeling that never goes away is my first takeoff roll in afterburner. The F-16 pops off the ground and I'm sitting on a telephone pole with unlimited vision, pointing through the skies with the power of Zeus. The afterburner goes off, we bank, and slide beside the lead F-16 in close formation."

One of Stout's most memorable stories comes from an experience at Navy water survival school. "You know you're one of the guys when fighter pilots goof on you. One test involved a seventy-five-yard swim in full flight gear. I was an ocean lifeguard for seven years, so I think, 'No sweat.' Some Marines give me some friendly advice: 'Blow up your g-suit a little and float through the swim.' I do so and give them an insider's nod as I leap into the pool. I'm immediately struggling—suspended in the water upside down since only my legs are buoyed by the air in the g-suit. I struggle out of the pool as the Marines laugh and give me a big thumbs-up."
Henry Hamm grew up as a "military brat" who spent all his money on model airplanes. "Access to all the military bases around the Washington DC area and my father's subsequent assignment to Japan afforded me ample opportunities to see, hear, and smell just about every aircraft in the US arsenal. Eventually, puberty took over and my priorities shifted to girls and fast cars, but my early fascination with military aircraft never waned."

Later, Hamm moved to north central Texas. "While driving down what is now Interstate 30, two smoke-belching Navy F-4 Phantoms blew over my head. Shortly thereafter, I met some fellow aviation enthusiasts who promptly gave me directions to Carswell AFB. I made my initial investment in photography equipment then, too."

Hamm can be seen one or two days a week on the side of Spur 341, the road that leads to the main gate at Lockheed Martin Tactical Aircraft Systems in Fort Worth. On a high area near the last off-ramp, he sets up a ladder and aims his telephoto lens over the fence to capture the activities at NAS Fort Worth JRB. Persistence pays. These photos and others he has taken during his travels to bases (inside and outside the fence) have been featured in a number of magazines and books. "My opportunities to photograph military aircraft have increased as my portfolio has improved. If the sun is out and I'm off work from my day job, you can find me out at NAS Fort Worth JRB 'trolling' for airplanes."
Peter Steinemann claims an early interest in military aviation after being attracted by the magic of the European air show circuit. Camera in hand, he spent most of his free time at the various aviation events across Europe. He was equally fascinated with the East, too, traveling extensively across Asia. He fell in love with the continent, its culture, its people—and especially with his wife, Jeong-Mi, whom he met in Korea. He settled in Australia—his base for trips to Asia, Europe, and the Americas. His work has been featured in Aircraft & Aerospace, Air Power International, Air Forces Monthly, World Air Power Journal, Air Fan, Jets, Areo, Flugzeug, Volo 2000, Koku Fan, and Defense Technology Monthly. His images have also been featured in aviation books, calendars, and advertisements.

“I consider myself very fortunate to have visited more than fifty air forces on six continents, flown in more than 100 different aircraft types, and taken airborne pictures from helicopters to jets. My most memorable F-16 ride came in a two-hour flight around the Himalayas in the backseat of an F-16B from the Pakistan Air Force. We flew with two Sargodha-based F-16As from No. 9 Squadron in the Himalayan foothills. No other aircraft can provide the fantastic visibility of the Himalayas as does the F-16.”
Mark Farmer

An ex-military photojournalist now based in Juneau, Alaska, Mark Farmer makes a living as a writer and photojournalist covering military, space, and science programs. He is a frequent contributor to Popular Science, Jane’s Defence Weekly, and World Air Power Journal. He also shoots as a stringer for Aviation Week, the Associated Press, and various regional, national, and international publications. (Farmer won first place in Aviation Week’s photo contest.) He has provided military consultation services to 60 Minutes, CNN, ABC, NBC, Discovery Channel, and the X-Files. He has experienced nearly every active type of US military aircraft.

“I love aircraft and I live to fly. I want to share my unique and rare experiences along with my passion for flight with as many people as possible. I enjoy illustrating the efforts and sacrifices of the men and women of the US armed forces. I try to show what goes on behind the scenes and put a spotlight on the everyday heroes who serve our country day-in and day-out in the Arctic, on the ocean, in the desert, and in outer space.”

Farmer’s best F-16 flight was with the 414th Combat Training Squadron during Red Flag exercise at Nellis AFB. “I blasted around the Nellis range with the elite Aggressors. I had a big red star on my helmet, and we went by the call sign of MIG 5. The flight was short and hectic with supersonic sprints. We climbed up the tailpipe of a British F3 Tomcat. He was ‘deep’ without knowing we were there.”

Being a big guy (over six feet tall and 220 pounds), Farmer has a hard time getting in the seat. “But I like the feeling of being poured into the back cockpit. The F-16 is so quick, nimble, and responsive—it always feels like an extension of my body.”
Eric Schulzinger has photographed Canadian aviation-related subjects for more than ten years. His work appears in aviation magazines around the world and in brochures, magazine ads, posters, calendars, and air show programs.

While other photographers have experienced missing the back seat of the Viper, Reyno’s experiences have come from the back of the T-Bird. (Canada still maintains a fleet of twenty-seven T-33s.)

At a Canadian NORAD region exercise over northern Labrador, another photographer and I had to flip for the back seat of the T-Bird. I won the toss and he had to ride the jump seat in a Challenger. (CF-101s, B-11s, B-52s, T-Birds and Challengers, and C-137 tanker aircraft were also taking part in the exercise.) Before we could photograph any of the other aircraft, we had to simulate an in-bound cruise missile. Launched off the wing of a Challenger that was simulating a B-52 bomber.

“We go in tight under the wing of the Challenger at 25,000 feet, which then called for the launch. We go negative g and head for the deck. As we descend rapidly, I lose communication with my pilot. No one told me what I should do if I couldn’t speak to him. Do I shake my Wave? I wave my arms. I think you went hypoxic,” he said. "You should have passed me a note. We didn't have enough gas to catch up, so we had to land. I missed the perfect opportunity to shoot all these USAF aircraft with Canadian aircraft all in one place. I may have won the toss, but I lost the photo to the guy in the Challenger.”
Denny Lombard is a promotional photographer at Lockheed Martin Skunk Works in Palmdale, California. His thirty years at the Skunk Works produced photos of most of the company's world-renowned aircraft, such as the F-117, U-2, SR-71, and YF-22 prototypes. At least, those are the projects he can talk about.

Denny was lucky enough to fly F-16 photo chase on the YF-22 flight test program. Those twenty-one Fighting Falcon sorties were the highlight of his career. "Flying in the F-16 was like riding in a very fast sports car. I am a pretty big guy and I fit snugly in the cockpit. By the time I squeezed into the seat with my camera gear, I barely had enough room for my cookies I kept losing."

Denny's photos have graced the covers of magazines all over the world. In the 1980s, Lombard and fellow Lockheed photographer Eric Schulzeinger provided photographs of the then Top Secret F-117 at Tonopah, Nevada, for the Nighthawk's world debut.
Tom Reynolds began his photography career as a part-time photo technical representative at General Dynamics Fort Worth. A few years later, he transferred to the Air Force Flight Test Center at Edwards AFB, California, to be the sole chase photographer on the F-16XL program. Since then, he has photographed every F-16 block upgrade tested at the AFFTC as well as such F-16 variants as the MATEVRISTA aircraft. In 1993, he was chosen as the first civilian contractor photographer to fly in an F-16 at the AFFTC. His photo and video products have been featured in many military publications and aerospace industry magazines. Most recently, one of his photos was featured on the cover of Aviation Week. Reynolds continues to work at the F-16 Combined Test Force at Edwards and spends time on the F-22 and JSF programs. “My first F-16 ride was with then Maj. C.D. Moore, F-16 Operations Officer at the 414th. C.D. is now Col. Moore, director of the F-22 Combined Test Force at Edwards. My favorite ride was on a LANTIRN test, five hundred knots at one hundred feet.” “Some of my more memorable rides include watching the F-16/MATV fly backwards and sideways; any which way the pilot wanted to fly; observing the development of the HARM Targeting System all the way to first HARM launch on an F-16; experiencing tail slides; chasing the F-22 on its first flight at Edwards; and chasing Chuck Yeager on the fiftieth anniversary of supersonic flight and broadcasting the chase live to CNN. I’m also looking forward to other memorable rides shooting the Joint Strike Fighter concept demonstration flights.”
Tony Cassanova traces his interest in aviation photography to a location—he grew up across the street from a Royal Canadian Air Force installation. "I took up photography after acquiring my first camera. With no formal training in the art, my only intent was to own equipment that would allow me to capture reasonable images of aircraft at air shows." He has since flown with the air forces of Canada, Italy, and the United States.

Cassanova credits his start in aviation journalism to Larry Milberry, a Canadian aviation historian and publisher of CANAV Books. "He encouraged me to go the extra mile—or the extra kilometer, as it's measured up here—and write as well as photograph. In taking this advice, I gained greater access to the military and, thus, greater opportunities to fly." He enlarged upon his career by contributing articles and images to several aviation publications, coauthoring a reference work on the B-52 Stratofortress, and logging flight time in the B-52, C-130, CF-18, F-16, and the KC-135. In addition, he has flown with the Snowbirds, Canada's aerobatic team, as well as with Italy's Frecce Tricolori.

The majority of his F-16 images depict the 174th FW of the New York ANG with whom he flew in 1998. "I had flown in fast jets previously, but I was a little apprehensive about a ride in the F-16 given its reputation for performance. When I quizzed an experienced photographer for a photo tip or two, he said, 'Bring lots of Hart paint.' The flight was phenomenal, but the time spent with the personnel of the 174th was the most memorable highlight. The level of experience—the stripes, the gold and silver oak leaves—that abounds within this unit amazes me."
Eric Stijger's work has appeared in a variety of aviation magazines, including Air Forces Monthly, Air International, and the KNILAF magazine, De Vliegende Hollander. He is also a regular contributor to Code One. "Aerial photography from an F-16 adds another dimension because the airplane can attack your senses. The acceleration kick from the afterburner, the loss of consciousness from the massive g onset, the acceleration from the vertical ascent—all these sensations make every F-16 ride a breathtaking thrill."

"During the height of Operation Allied Force, I was taking photos from the back of a USAF KC-10 tanker over Bosnia. Coincidentally or fated, all I shot that day were F-16s. Every type of F-16 appeared behind the tanker on that flight—Spangdahlem HARM shooters, Aviano-based F-16s laden with bombs, and Turkish F-16s equipped for combat air patrols over the Adriatic. Belgian F-16s came by for fuel as well, and Norwegian Fighting Falcons protected our tanker track area. The entire aerial operation looked to me like an all-out F-16 affair. So many nations, so many different missions. It really brought home the message that this aircraft can do it all."

As a civilian artist in residence at the Wisconsin ANG, Joe Oliva produces high-quality photography in exchange for access to aircraft and photo opportunities. His work is used by the Wisconsin National Guard and the Guard Bureau in Washington DC for recruiting, marketing, and international purposes. In addition to being published in Code One, Murray has been published in Aviation Week and in various DoD and international publications. He has flown with F-102 and F-117 Stealth aircraft as well as with the F-16 and other fighter aircraft. He has also done projects with NASA's SR-71 Blackbird and B-2 operators.

"The F-16 fireworks picture happened as depicted. No double exposure, no computer trickery. The planning and test shots that led to the image took three years. My weapon of choice is a medium-format camera that has a film area five times greater than a typical 35mm camera. The format produces ultra-high quality, grain-free pictures. The downside is a lack of motor drives, zoom lenses, and automatic exposure, which makes for a lot of work on my part. While most aviation photographers blast away at five frames per second to make sure they get the one shot, I have to plan each picture carefully and press the shutter precisely."

"Without a doubt, one of the greatest experiences of my life was a flight in an F-16. My instructor pilot demonstrated a maximum performance takeoff and climb, almost 1,000 feet per second at one point. After we leveled off, the jet was mine until landing. I flew aerobatics and pulled eight g's on several occasions. From a pilot's standpoint, the F-16 is an amazing jet. It's highly maneuverable, yet very stable when you want it to be. My proudest accomplishment in the jet was handling the g's and not getting sick!"
Antoine Roels first pointed his camera lens at aircraft in the sky. When his base commander suggested the sky held other subjects of interest besides the feathered friends Roels generally photographed. Good advice. Roels repositioned his lens on aircraft in flight. A few years later, he became the official photographer of the Belgian Air Force public affairs office. That distinction makes him the photographer for all BAF publications and the sole photographer allowed to fly in all BAF aircraft. To date, Roels has accumulated more than 1,100 flying hours in photo missions in more than fifty different aircraft. He has also flown with the British Red Arrows, Italian Frecce Tricolore, French Patrouille de France, Spanish Patrulla Águila, and the Canadian Snowbirds.

Roels' first assignment for the BAF was to capture the first flight of the F-16 in F-16 No. FB-22. "Before the flight, I was helped into my g-suit and told how it connected to the backseat equipment. But a technical problem arose and the first flight was postponed. Impatient to fly, I committed the cockpit to memory. The next day, I suited up again and again the flight was postponed. And again I committed the image to memory. The third day, I suited up and hopped in the backseat of the seat. Two practice runs had boosted my self-confidence, until I began connecting the equipment in my g-suit and discovered I had donned the g-suit inside out."

The third time worked; Roels photographed his first F-16 in flight. But he hadn't seen the last of that particular jet. When Maj. Frank Die Winne was selected for the 1998 Bill Dryden Viper Award, Roels was asked if he might be able to photograph one of the F-16s. Yes. Ten years later, Die Winne's jet was the very same F-16B, No. FB-22.
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His first assignment for the BAF was to capture the first flight of the first F-16 to roll out of the Grassiels assembly plant. He remembers it well. 1-16 No. FB-22. "Before the flight, I was helped into my g-suit and told how it connected to the aircraft equipment. But a technical problem arose and the first flight was postponed. Impatient to fly, I committed the cockpit to memory. The next day, I suited up again and again the flight was postponed. And again I committed the image to memory. The third day, I suited up and hopped in the backseat of the jet. Two practice runs had boosted my self-confidence, until I began connecting the equipment to my g-suit and discovered I had donned the g-suit inside out."

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Eric Stijger's work has appeared in a variety of aviation magazines, including Air Forces Monthly, Air International, and the RNLAIF magazine, De Vliegende Hollander. He is also a regular contributor to Code One. "Aerial photography from an F-16 adds another dimension because the airplane can attack your senses. The acceleration kick from the afterburner, the loss of consciousness from the massive g onset, the acceleration from the vertical ascent—all these sensations make every F-16 ride a breathtaking thrill. "During the height of Operation Allied Force, I was taking photos from the back of a USAF KC-10 tanker over Bosnia. Coincidentally or fate, all I shot that day were F-16s. Every type of F-16 appeared behind the tanker on that flight—Vanguard, HARM shooters, Aviano-based F-16s laden with bombs, and Turkish F-16s equipped for combat air patrols over the Adriatic. Belgian F-16s came by for fuel as well, and Norwegian Fighting Falcons protected our tanker track area. The entire aerial operation looked to me like an all-out F-16 affair. So many nations, so many different missions. It really brought home the message that this aircraft can do it all."

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Tony Cassanova traces his interest in aviation photography to a location—he grew up across the street from a Royal Canadian Air Force installation. "I took up photography after acquiring my first camera. With no formal training in the art, my only intent was to own equipment that would allow me to capture reasonable images of aircraft at air shows." He has since flown with the air forces of Canada, Italy, and the United States.

Cassanova credits his start in aviation journalism to Larry Milberry, a Canadian aviation historian and publisher of CANAV Books. "He encouraged me to go the extra mile—or the extra kilometer, as it's measured up here—and write as well as photograph. In taking this advice, I gained greater access to the military and, thus, greater opportunities to fly." He enlarged upon his career by contributing articles and images to several aviation publications, coauthoring a reference work on the B-52 Stratofortress, and logging flight time in the B-52, C-130, CF-10, F-16, and the KC-135. In addition, he has flown with the Snowbirds, Canada's aerobatic team, as well as with Italy's Frecce Tricolori.

The majority of his F-16 images depict the 174th FW of the New York ANG with whom he flew in 1998. "I had flown in fast jets previously, but I was a little apprehensive about a ride in the F-16 given its reputation for performance. When I quizzed an experienced photographer for a photo tip or two, he said, 'Bring lots of barf bags.' The flight was phenomenal, but the time spent with the personnel of the 174th was the most memorable highlight. The level of experience—the stripes, the gold and silver oak leafs—that abounds within this unit amazes me."
Tom Reynolds began his photography career as a part-time photo technical representative at General Dynamics Fort Worth. A few years later, he transferred to the Air Force Flight Test Center at Edwards AFB, California, to be the sole chase photographer on the F-16XL program. Since then, he has photographed every F-16 block upgrade tested at the AFITC as well as such F-16 variants as the MATV/VISTA aircraft. In 1993, he was chosen as the first civilian contractor photographer to fly in an F-16 at the AFITC. His photo and video products have been featured in many military publications and aerospace industry magazines. Most recently, one of his photos was featured on the cover of Aviation Week. Reynolds continues to work at the F-16 Combined Test Force at Edwards and spends time on the F-22 and JSF programs.

“My first F-16 ride was with then Maj. C.D. Moore, F-16 Operations Officer at the 416th. C.D. is now Col. Moore, director of the F-22 Combined Test Force at Edwards. My favorite ride was on a LANTIRN test, five hundred knots at one hundred feet.”

“Some of my more memorable rides include watching the F-16/MATV fly backwards and sideways—any which way the pilot wanted to fly; observing the development of the HARM Targeting System all the way to first HARM launch on an F-16; experiencing tail slides, chasing the F-22 on its first flight at Edwards; and chasing Chuck Yeager on the fiftieth anniversary of supersonic flight and broadcasting the chase video live to CNN. I'm also looking forward to other memorable rides shooting the Joint Strike Fighter concept demonstration flights.”
Denny Lombard is a promotional photographer at Lockheed Martin Skunk Works in Palmdale, California. His thirty years at the Skunk Works produced photos of most of the company’s world-renowned aircraft, such as the F-117, U-2, SR-71, and YF-22 prototypes. At least, those are the projects he can talk about.

Denny was lucky enough to fly F-16 photo chase on the YF-22 flight test program. Those twenty-one Fighting Falcon sorties were the highlight of his career. “Flying in the F-16 was like riding in a very fast sports car. I am a pretty big guy and I fit snugly in the cockpit. By the time I squeezed into the seat with my camera gear, I barely had enough room for my cookies I kept losing.”

Denny’s photos have graced the covers of magazines all over the world. In the 1980s, Lombard and fellow Lockheed photographer Eric Schulzinger provided photographs of the then Top Secret F-117 at Tonopah, Nevada, for the NightHawk’s world debut.
Eric Schulzinger traces his career back twenty years to the Skunk Works where he worked with such aerospace design leaders as Ben Rich and Kelly Johnson. Originally a flight-test photographer for the Skunk Works, he has literally watched and photographed the evolution of stealth design. His images have appeared on magazine covers around the world featuring such aircraft as the U-2, SR-71, F-117, F-22, B-52, and the DarkStar. Currently, Schulzinger is director of photography for Lockheed Martin Corporation.

"My approach to photographing aircraft is perhaps more theatrical than typical because I apply studio lighting techniques on location to create a dramatic mood. One recent photo shoot of the F-22 Raptor at Edwards AFB required a team of five assistants to coordinate complex light painting of the aircraft. Working with fellow photographers Denny Lombard, Tom Reynolds, Kevin Robertson, and Tom Myrdahl, I choreographed a series of moves for each member of the lighting team. During the ten-minute exposure, one million candle power spotlights (powered by lawn and garden tractor batteries) were used to illuminate the entire scene. Members of the lighting crew, who were clad in black, were actually inside the image while it was being created on the tape; during the wee hours of the morning. I don't think an aircraft has ever been photographed before with this light-painting technique."

Mike Reyno has photographed Canadian aviation-related subjects for more than ten years. His work appears in aviation magazines around the world and in brochures, magazine ads, posters, calendars, and air show programs.

While other photographers have experienced photo missions from the back seat of the Viper, Reyno's experiences have come from the back of the T-Bird. (Canada still maintains a fleet of twenty-seven T-33s.)

"At a Canadian NORAD region exercise over northern Labrador, another photographer and I had to fly for the back seat of the T-Bird. I won the toss and he had to ride the jump seat in a Challenger. (ICF-18s, B-1s, B-52s, T-Birds and Challenge, and CC-137 tanker aircraft were also taking part in the exercise.) Before we could photograph any of the other aircraft, we had to simulate an in-bound cruise missile 'launched' off the wing of a Challenger that was simulating a Bear bomber.

"We go in tight under the wing of the Challenger at 35,000 feet, which then called for the launch. We go negative g and head for the deck. As we descend rapidly, I lose communication with my pilot. No one told me what I should do if I couldn't speak to him. Do I shake the stick in the mirror? So, I do. The furius chicken, wailing in the mirror to let him know I lost comms but that I'm okay. Seeing this, the pilot thinks I've gone hypoxic and declares an airborne emergency. He heads back to Goose Bay. As we near the base, the pilot can finally hear me coming in the back as I look up and see all of the jet streams joining formation at the rendezvous point for the photo shoot. 'I thought you went hypoxic,' he said. 'You should have passed me a note.' We didn't have enough gas to catch up, so we had to land. I missed the perfect opportunity to shoot all these USAF aircraft with Canadian aircraft in front of one another. I may have won the toss, but I lost the photo to the guy in the Challenger."
An ex-military photojournalist now based in Juneau, Alaska, Mark Farmer makes a living as a writer and photojournalist covering military, space, and science programs. He is a frequent contributor to Popular Science, Jane's Defence Weekly, and World Air Power Journal. He also shoots as a freelancer for Aviation Week, the Associated Press, and various regional, national, and international publications. (Farmer won first place in Aviation Week's latest photo competition.) He has provided military consultation services to 60 Minutes, CNN, ABC, NBC, Discovery Channel, and the X-Files. He has experienced nearly every active type of US military aircraft.

"I love aircraft and I live to fly. I want to share my unique and rare experiences along with my passion for flight with as many people as possible. I enjoy illustrating the efforts and sacrifices of the men and women of the US armed forces. I try to show what goes on behind the scenes and put a spotlight on the everyday heroes who serve our country day-in and day-out in the Arctic, on the ocean, in the desert, and in outer space."

Farmer's best F-16 flight was with the 434th Combat Training Squadron during Red Flag exercise at Nellis AFB. "I blasted around the Nellis range with the elite Aggressor. I had a big red star on my helmet, and we went by the call sign of MiG 5. The flight was short and hectic with supersonic sprints. We climbed up the tailpipe of a British F3 Tomcat. He was 'dead' without knowing we were there."

Being a big guy over six feet tall and 220 pounds, Farmer has a hard time getting in the seat. "But I like the feeling of being poured into the back cockpit. The F-16 is so quick, nimble, and responsive—it always feels like an extension of my body."

Mark Farmer
Peter Steinemann claims an early interest in military aviation after being attracted by the magic of the European air show circuit. Later in his life, he spent most of his free time at various aviation events across Europe. He was equally fascinated with the East, too, traveling extensively across Asia. He fell in love with the continent, its culture, its people—and especially with his wife, Jeong-Mi, whom he met in Korea. He settled in Australia—his base for trips to Asia, Europe, and the Americas. His work has been featured in Aircraft & Aerospace, Air Power International, Air Forces Monthly, World Air Power Journal, Air Fair, Jets Aerial, Flugzeug, Vava 2000, Koku Fair, and Defense Technology Monthly. His images have also been featured in aviation books, calendars, and advertisements.

"I consider myself very fortunate to have visited more than fifty air forces on six continents, flown in more than 100 different aircraft types, and taken air-to-air pictures from helicopters to jets. My most memorable F-16 ride came in a two-hour flight around the Himalayas in the backseat of an F-16B from the Pakistan Air Force. We flew with two Sargodha-based F-16As from No. 9 Squadron in the Himalayan foothills. No other aircraft can provide the fantastic visibility of the Himalayas as does the F-16."
Henry Hamm grew up as a "military brat" who spent all his money on model airplanes. "Access to all the military bases around the Washington DC area and my father's subsequent assignment to Japan afforded me ample opportunities to see, hear, and smell just about every aircraft in the US arsenal. Eventually, puberty took over and my priorities shifted to girls and fast cars, but my early fascination with military aircraft never waned."

Later, Hamm moved to north central Texas. "While driving down what is now Interstate 30, two smoke-belching Navy F-4 Phantoms blew over my head. Shortly thereafter, I met some fellow aviation enthusiasts who promptly gave me directions to Carwell AFB. I made my initial investment in photography equipment then, too."

Hamm can be seen one or two days a week on the side of Spur 341, the road that leads to the main gate at Lockheed Martin Tactical Aircraft Systems in Fort Worth. On a high area near the last off-ramp, he sets up a ladder and aims his telephoto lens over the fence to capture the activities at NAS Fort Worth JRB. Persistently pays. These photos and others he has taken during his travels to bases (inside and outside the fence) have been featured in a number of magazines and books. "My opportunities to photograph military aircraft have increased as my portfolio has improved. If the sun is out and I'm off work from my day job, you can find me out at NAS Fort Worth JRB 'trolling' for airplanes."
Lans Stout, once an employee on the A-12 program at General Dynamics in Fort Worth, has been an aerial photographer for seventeen years. Now as a freelancer, most of his flights are related to covering stories for magazines. While his primary ride has been the F-16, he has also flown in the A-7, A-4, F-4, and in the F-15. Stout is well known for his beautifully strobe-lit ground photos of pilots and maintenance personnel. "I'm no fighter pilot, but I enjoy photographing these aircraft where they live, in the three-dimensional blue. I'm a station wagon guy, along for the ride, but I toss in a few suggestions for good pictures from the back seat.

"The dissimilar aircraft combat missions I have flown are pure sensory overloads. The F-16 can turn with the whirl of a car on ice. In high-g pulls, the g-suit waist bladder explodes with compressed air in an attempt to cut me in half. The greatest feeling that never goes away is my first takeoff roll in afterburner. The F-16 pops off the ground and I'm sitting on a telephone pole with unlimited vision, pointing through the skies with the power of Zeus. The afterburner goes off, we bank, and slide beside the lead F-16 in close formation."

One of Stout's most memorable stories comes from an experience at Navy water survival school. "You know you're one of the guys when fighter pilots goof on you. One test involved a seventy-five-yard swim in full flight gear. I was an ocean lifeguard for seven years, so I think, "No sweat." Some Marines give me some friendly advice: "Blow up your g-suit a little and float through the swim." I do so and give them an inside's nod as I leap into the pool. I'm immediately struggling—suspended in the water upside down since only my legs are buoyed by the air in the g-suit. I struggle out of the pool as the Marines laugh and give me a big thumbs-up."
Ted Carlson specializes in aerial photography of military aircraft. He enjoys capturing the excitement of high-tech military machines and their hardworking crews. His photographs and articles have been published in numerous magazines, including Code One. He has flown in and photographed almost all types of aircraft in the US inventory. But he claims the Viper as "an awesome experience. The fighter is arguably one of the most agile aircraft in the world. With an incredible view and an ergonomically designed cockpit, the F-16 is a pilot's plane—begging to be handled aggressively."

However, Carlson says his most memorable F-16 experience came not in an F-16 but in a KC-135 of the 163rd Air Refueling Wing of the California ANG. "We were flying a practice incursion on the Pacific coast to test the crew and controller skills of the 144th FW. This California ANG unit, based at Fresno, employs F-16s in the air sovereignty role to defend the United States against any intrusion into the airspace within the Southwest. Two armed Vipers ready with live ordinance at all times, can scramble within minutes if called upon.

"With only a handful of insiders privy to the test, we took off from March AFB, California, and headed far west over the Pacific Ocean. Out of controller radar range, without notice, and unannounced, we turned eastbound and sped back towards the coast. The controller quoted our KC-135, but the Stratotanker gave no response. Instead, we continued our rapid pace for US soil. Sure enough, we heard controllers scramble the armed Vipers and vector them toward us. Only a few minutes passed from the time we violated US airspace to the intercept. With multiple capabilities and versatility given, the low-maintenance Fighting Falcon certainly also makes a superb interceptor."
Ken Murray, an aviation photographer with more than fourteen years experience, joined the US Air Force and coupled his love of photography with aviation to produce outstanding military images published worldwide. With a publishing and photography background, Murray was picked by the Air Force to be editor of Torch Magazine, the Air Education and Training Command safety magazine. Murray and his staff won the International Blue Pencil Award for government communicators in 1995.

Murray is a veteran of Operation Just Cause, Operation Desert Storm, and Operation Allied Force. His images have been featured in Torch Magazine, Aviation Week, Popes De Val, and Code One as well as in calendars (including the current LMXA's calendar), postcards, and books.

"I have shot more images of the F-16 than I have of any other aircraft in the world. With this platform used in so many different roles and missions, I have binders and binders full of F-16 images."
Giampaolo Agostinelli doesn’t consider his aerial photography work. "It’s pure enjoyment."

"The Fighting Falcon has an incredible silhouette. It is photogenic and state-of-the-art." His first flight in the F-16 was with the 174th FW in Syracuse, New York. "I experienced nine g’s on that first flight. An incredible sensation! I got to fly the aircraft for a short time, which gave me a feel for its superior maneuverability. I love the way the cockpit wraps around a pilot. At McEntire ANGB in South Carolina, I flew in the Block 52 F-16. We took off in full military power and shot into the air like a rocket. The F-16 may be small, but it’s bad to the bone."
Kevin Robertson's photo career in the aerospace industry began with Northrop Grumman, where he initially worked on the F-20 Tigershark program. Later, he transferred to the Advanced Tactical Bomber program, what became the B-2 bomber. He then joined Lockheed Martin and began work on the F-22 flight test program at Edwards AFB in California. His aerial photography flights have involved chasing the F-22 from the backseat of F-16 or F-15 aircraft.

"Flying in an F-16 can be an enlightening experience. The forces put on your body are unbelievable. From positive g's to negative g's, alien rolls to windup turns, vertical climbs to vertical descents — the F-16 provides a ride that outperforms any roller coaster you can imagine. If your stomach can't handle flying, you will want to give up eating for a lifetime. For those who can handle the motions, flying is a pure adrenaline rush."

Bob Lawson served in the US Navy on four aircraft carriers, eight naval air stations, and a guided missile group. Additionally, he was battlephotographer in Vietnam in 1968. After retirement, Lawson created The Hook (The Journal of Carrier Aviation) where he acted as editor-in-chief from 1977 to 1991. His photo duties have allowed him to fly in more than eighty types of military aircraft with all five US services and two foreign countries. During his Vietnam tour, he earned two strike-flight air medals. Lawson has logged about 4,500 hours in more than forty-two consecutive years of flying in tactical aircraft and has flown with more than 150 Navy and Marine units.

"On one photo mission with Topgun, I was to photograph an F-16N in the plankworm while in a vertical climb. The standard procedure for making this shot is for the subject aircraft and photo plane to begin the maneuver in parallel straight-and-level flight. Both pilots then commence a four-g pull-up to vertical flight. The subject pilot then rolls ninety degrees to his right, resulting in both aircraft still in vertical flight giving the photographer a view of the top of the subject aircraft.

"Without exception, every time I have attempted this shot, the subject pilot will unconsciously apply slight back pressure on the stick while looking over his shoulder, causing his plane to close into the photo plane. (Kind of like when you are driving and look to one side of the road, then find yourself moving toward that side.) This tendency often creates an interesting situation. A close look at the resulting photo reveals the shadow of the photo F-16 on the left wing of the subject. I took this shot with a Nikon F2 using a 35-135mm zoom lens retracted to the wide angle setting. Yes, we got a little close."
Joe Cupido has flown in the complete US military aircraft inventory as an aerial photographer the past twenty years or so. He has also flown in various foreign military aircraft and in quite a few World War II-type aircraft. During the Vietnam conflict, he flew helicopter gunships with a secondary function as a combat photographer. More recently, he flew as an aerial combat photographer in Operation Allied Force. He maintains his pilot skills as a private pilot with time in over sixty different airframes.

"My first flight in an F-16 was for a photo shot of an F-4 and an F-16 when the Kansas ANG converted to the Fighting Falcon. The visibility from the F-16 was great compared to the back of the F-4s or F-105s I had been flying. The most impressive part of the flight was going vertical. Compared to the other fighters I had flown, the F-16 did not bleed off as rapidly as other jets. That gave me more photo time and made me more productive."

"My most impressive experience in an F-16 was in a clean big-mouthed D model on a cool morning. Our ground roll was about 2,500 feet. After rotation, the pilot kept the aircraft at about fifty feet above the ground until the end of the runway. Then he began a four-g pull into a vertical climb that lasted up to 30,000 feet. Most impressive!"

"The F-16 is a great aircraft but not always the best photographic platform. Why should it be? It's a fighter."
Neville Dawson has been photographing military aircraft for eight years. Having grown up with helicopters in his native New Zealand, his shift to bigger and faster subjects seemed natural after he moved to Australia. As editor and chief photographer for Fighter Tactics Magazine on the Gold Coast, Dawson spends little time at home. He prefers to be out, or up, photographing airborne aircraft. His work has been featured in Aviation Week, Air Fan International, Air Forces Monthly, Air Power International, Air Force Today, Aero International, World Air News, Pacific Wings, and Code One. His photos have won numerous awards, including first and second place from Aviation Week in the general aviation category.

"I had the opportunity to travel to Brazil with a visit of F-16s from the 93rd FS out of Homestead ARB, Florida. We were part of a joint exercise called Tiger III at Santa Maria AFB in the southernmost part of Brazil, an eleven-hour ferry flight over the Amazon jungle. The experience resulted in the highest and lowest points of my career. During this ten-day trip, I had a number of flights in one of the F-16Ds that deployed from Homestead. I shot some unique formations involving F-16s, F-15s, and A-10s. That was the high point.

"The low point followed soon after during an air-to-air shoot over the Gulf of Mexico. Things went wrong very quickly and we collided with another F-16. A mid-air is undoubtedly a photographer's worst nightmare: the accident brought home how dangerous this job can be."

Dawson also remembers a flight in an F-16 of the Royal Norwegian Air Force. "Using an F-35 as a chase plane, we took Norway's first MLU jet—loaded with live Pengiuns, AMRAAMs, and Sidewinders—and flew around beautiful snow-covered mountains."
Ian Black experienced the calling for aerial photography as an F-4 pilot in the British Royal Air Force. It transpired while he was flying low-level air defense of western Germany. After eight years in the RAF, he transferred from the Phantom to the British Lightning and became the RAF's last single-seat fighter pilot. Ironically, this distinction placed him diametrically opposite from the distinction his father garnered in the RAF twenty-five years earlier—as one of the RAF's first Lightning pilots. When the Lightning was withdrawn from service, Black was posted to the all-new Tornado F3 interceptors. He was based at RAF Leeming and took part in Operation Desert Shield. At the end of five years and some 1,200 hours on the F3, Black spent a month on detachment to the Falkland Islands. Photographically, these five years were his most productive. Books on the Lightning were followed by ones on the Tornado, Desert Storm, and his much-acclaimed work, *The Combat Edge*.

After his Falklands experience, Black was sent to the RAF's most prestigious exchange posting, flying the Dassault Mirage 2000 in the south of France. Two-month deployments from Italy flying combat air patrols over Bosnia were interspersed with a two-month stint in Saudi Arabia. Black flew over 150 combat-rated missions in his time with the French Air Force. During this period, he published *Last of the Lightnings*, a tribute to Britain's greatest jet fighter. Black retired from the RAF in 1996 and now flies the Airbus A340 for Virgin Atlantic Airways.
Greg Davis started his career in aerial photography a few years ago as a civilian and part-owner of Focal Plane Imagery. Later, he took his interest in aircraft further and joined the Air Force. After passing through rigorous flight training and completing the demanding USAF survival school, he became a qualified aircrew member. Since then, he has logged hundreds of flight hours in US and foreign aircraft. He has also documented large-scale operations, such as Southern Watch and Allied Force, where he flew over thirty combat missions. Davis is currently expanding his photjournalism knowledge and refining his skills at the prestigious military photjournalism program at the Newhouse School of Public Communication at Syracuse University, New York.

"Almost all of my best aerial photography was shot from an F-16. One of my favorite experiences in the Viper was with the New Mexico ANG during a Southern Watch flight. My pilot, Capt. Thomas Wheeler, put the jet through its paces as we soared upside down spitting out flares with the Iraq/Kuwait border as our backdrop. Awesome!" While in Kuwait, Davis shot an F-117 and two F-16s representing all three bases in New Mexico. "The flight marked the first time that aircraft from all three major USAF and ANG bases in New Mexico deployed and flew combat missions together." Davis was the first combat photographer to fly a combat mission in a fighter from the Kuwaiti theater of operations since the end of the Gulf War.
Nick Alvarado, cinematographer, videographer, and aerial photographer for Lockheed Martin Tactical Aircraft Systems in Fort Worth, began his aerial photo career in 1971 after joining the US Air Force. There he served as a motion picture cameraman traveling extensively and documenting USAF activities on the ground and in the air in aircraft varying from UH-1 helicopters to C-5 cargo jets and from the F-101 Voodoo to the F-4 Phantom.

He left the Air Force in 1981 for a job with General Dynamics. With camera, he strapped into the backseat of the company's earliest models of the F-16. He took a hiatus from fighter photography to spend a brief interlude in Hollywood—and Top Gun, Revenge, Firebirds, and Hot Shots—as an aerial unit camera operator. Those urges satisfied, he returned to aerial shooting at General Dynamics.

"The F-16 is a terrific platform for aerial photography. My last F-16 aerial assignment was a little different. I went to Canon AFB, New Mexico, to shoot a formation that included F-16s flown by all of the base's squadron commanders as well as the wing commander. The pilot of the photo jet, also an F-16, had a reputation for bad luck. Twice he had ejected from F-16s, the most recent being the month before. He had also been struck by lightning when at the Air Force Academy. I was a little nervous after hearing those stories. The flight went very well—no glitches. Everyone was happy when we landed, especially me."

Alvarado also experienced a memorable first flight of the F-22. Now he anticipates shooting the first flight of the Joint Strike Fighter in 2000.
Luigino Caliaro of Italy traces his aerial photo career to the time when he climbed with camera into the cockpit of a Tucano of Britain's Royal Air Force. Since then, he has amassed eighty hours in military jets and more than 200 hours in tankers, transports, and helicopters. He is a regular photo contributor to Avionautica e Difesa, JF4, and L'Amigo Aeronautico, the official magazine of the Italian Air Force. He also contributes to France's Air Fan and England's World Air Power Journal. His broad fighter photo experience includes the German MiG-29, F-4F Phantom, Tornado, and Alpha Jet; French Mirage; Portuguese F-16; Slovak MiG-21; and F-16s of the US Air Force and ANG. He has also flown with several air demonstration teams, including the Italian Freccie Tricolori, Spanish Patrulla Aguila, French Patrouille de France, British Red Arrows, and South African Silver Falcons. Caliaro's company, AereoPhoto, produces an annual fighter calendar.

"Some of the photos I included for Code One were taken in April 1997 during a flight over central New Mexico in an F-16 Block 40 from the New Mexico ANG. We flew a training sortie over White Sands Missile Range in very poor weather conditions. The Portuguese Air Force photos were taken last June near the Monte Real Air Base. The first part of the mission was dedicated to photos; the remainder was dedicated to a dogfight against two other F-16s. We turned very hard, often pulling more than seven gs. At the end of the flight, I was very tired. But I felt like Maverick in the popular movie Top Gun!"
Katsuhiko Tokunaga began his aerial photography career in a T-33A jet trainer. Since then, he has covered the high-performance military jets of twenty-six nations, concentrating on air-to-air photography. In addition, he has taken official pictures for foreign aircraft manufacturers, air forces, and navies. He has also worked on the production and direction of many aviation videos. His published work appears in magazines in Japan and in other countries.

Based in Tokyo, he has accumulated over 800 flight hours in high-performance jets, among them the F-16. He has also flown with and photographed USAF Thunderbirds, Japanese Blue Impulse, USN Blue Angels, Canadian Snowbirds, British Royal Air Force Red Arrows, French Patrouille de France, Italian Frecce Tricolori, Swiss Patrouille Suisse, Portuguese Azul de Portugal, Spanish Patrulla Aguila, Swedish Team 60s, Yugoslavian Lotec Zvedes, Slovak Bliele Albatoras, and Swiss PC-7 Team.

On a recent photo shoot at Misawa, Japan, Tokunaga wanted to photograph an F-16C loaded with air-to-air munitions. But the only chase aircraft available to him was an F-16D loaded with two AGM-88 HARMs, two AIM-120s, two AIM-9M, an ALQ-167 electronic countermeasure pod, and two drop tanks. However, he said, “Reassurances from the pilot did not allay my fears about an unsuccessful shoot. But that flight was one of the most enjoyable photo sessions in my life. The powerful F110 engine, a fine-tuned flight control system, and skillful pilots combined to put those two F-16s in perfect formation throughout the entire flight. Those flights show only a very small part of the total capability of the F-16. However, it was enough to impress this aerial photographer.”
Judson Brohmer

Judson Brohmer of the F-22 Combined Test Force at Edwards AFB, California, became an aerial photographer circuitously. "As a news producer first for CBS and then later for an ABC affiliate, I often drove by Edwards AFB on my way to and from Los Angeles. Watching the jets streak overhead, I didn't take long to figure out who had a more exciting job than I. So I quit the news and started my career at Edwards."

Well, not exactly. "I spent three years of ground pounding to convince the powers-that-be to let me in the back seat. Ever since, I've had the time of my life. Starting with McDonnell Douglas on the C-17 program, I soon found myself working for just about every company in the business, from Embraer to Mitsubishi, Bae Jet to Boeing. Add in about twenty-seven others, and life got pretty busy. And then came the best opportunity of my life, Lockheed Martin and the F-22 program."

But talking about great aerial photography is one thing, "Truth be known, the pilots are what make it happen. At the F-22 CTF (and down the street at the F-16 test force), we have some of the greatest pilots I've ever flown with. Every picture I'm proud of has a story behind it that describes how the pilot managed to put us in that particular position—and often it was no small feat."

"And I absolutely love to fly. Nothing compares to the feeling of zooming along at forty or fifty thousand feet, skimming over wispy clouds, chasing the world's most advanced fighter. Or being down on the deck, bouncing all around as my F-16 rockets through canyons at two hundred feet above ground level. Reaching speeds pretty darn close to Mach."

The people Brohmer knew from his old news days? "They would love to have my job. Unfortunately for them, it's taken!"

No doubt, many people pick up Code One Magazine only to look at the stunning photos. These images spice up our publication with color and style. Photos compel people to read articles, turning lookers into readers. To acknowledge this symbiotic relationship, we're dedicating this special issue of the magazine to some of the people behind the lenses.

These folks deserve the attention. Capturing quality images is no easy task. The best photographers make the effort look elegant and simple. In this sense, good photography is much like good writing. Anyone who has experienced countless editing cycles appreciates the amount of effort required to create effortless reading. And anyone who has loaded a roll of film after a mind-crushing, nine-g turn appreciates a photo of an F-16 going straight up.

Our only criteria in collecting and selecting the photos was that the subject must involve Lockheed Martin aircraft, preferably fighters. The photographer list was derived from a series of informal calls and by word of mouth. We missed many well-known shooters, but those presented here still represent a cross-section of the profession as well as many of our own corporate photographers, whose work often goes unacknowledged.

To our photo contributors, thanks. To our readers, enjoy.

Eric Hehs, Editor