



Four airmen played vital roles preventing a burning F-15E from causing untold death and destruction.



By Rebecca Grant

T'S not every day a combatloaded F-15E erupts in flames at the end of a crowded runway, but that's what happened when a Strike Eagle caught fire on the flight line at Bagram Airfield, Afghanistan, on Dec. 2, 2015.

The incident began when a pair of F-15Es landed at Bagram late in the morning. The crews "had just returned from a night mission. Everything was going normal," said a 391st Expeditionary Fighter Squadron weapon systems officer who was in the mishap aircraft.

"As we leave the de-arm area, we get a sharp salute from the crew chief, and we normally start taxiing to our parking

At left, the airmen who prevented a catastrophe on the flight line at Bagram Airfield, Afghanistan: SrA. Nash Camden, SrA. Matthew Mayo, SrA. Blake Destasio, and TSgt. Kyle Martin (l-r). They responded quickly when an F-15E—like this one descending after refueling—caught fire on the flight line.

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spot at that point," the major explained in an Air Force news release. Edging forward, the aircraft pilot tapped the brakes.

That's when the crisis began. Orange flames billowed up under the F-15E. Fire reached toward the weapons and fuel tanks.

Suddenly the Bagram flight line was one flaming jet away from a major disaster. The airmen closest to the F-15E had only seconds to prevent it.

SLOPING RUNWAY

Located some 30 miles north of Kabul, Bagram has long been the Chicago O'Hare of coalition air operations in Afghanistan. Nearly 40,000 military, civilian, and contractor personnel work on Bagram's six square miles. First built up by the Soviets in the 1980s, the runway had its oddities. "The whole airfield was on a slight grade," said SrA. Matthew Mayo in an interview. The winter of 2015 found aviators at Bagram holding a steady pace. Sorties supported two overlapping missions: US forces continued counterterrorism operations, while NATO led Operation Resolute Support.

On any day at Bagram the flight line might be dotted with AC-130 gunships, Army AH-64 Apache helicopters, other USAF fighters like F-16s and A-10s, and of course unmanned airplanes like the MQ-9 Reaper. C-130s, C-17s, and C-5Ms routinely landed. Bagram's busy hospital transferred medevac patients via C-17s and KC-135s. Allies rotated F-16s, F/A-18s, and other fighters and military aircraft through Bagram on deployments supporting the NATO mission.

The 391st Fighter Squadron—the "Bold Tigers"—and its F-15Es from Mountain Home AFB, Idaho, had been deploying to Bagram for years. The aircraft's range and ability to carry a diverse and substantial payload of weapons made it a premier choice for coalition ground operations with Afghan allies.

Strike Eagles fly with a crew of two, but on the ground the team expands.

NASCAR has pit crews. Thoroughbred racehorses are bustled off the track by grooms. F-15Es have crew chiefs and weapons loaders. The small team meets the aircraft at the de-arming point before the jet taxis back to park along the flight line.

On this morning, a group of four airmen was in position at the dearming point. SrA. Blake Destasio and TSgt. Kyle Martin were crew chiefs assigned to the 380th Expeditionary Aircraft Maintenance Squadron. When an F-15E taxis in and pauses, crew chiefs chock their jet and plug in a headset to communicate with the pilot and weapon systems officer. Engines continue to run.

Mayo and SrA. Nash Camden, likewise assigned to the 380th EAMXS, were also on duty at the de-arming point.

Weapons loaders like these two load and check weapons for a combat sortie before take off and immediately after the aircraft lands. Typically, the F-15Es carried a mix of GBU-38s and other weapons for a standard load of about 3,000 pounds of ordnance. "We make sure aircraft can drop what it needs to and the bombs are loaded correctly," explained Mayo.

At de-arm, weapons loaders have a series of quick, essential tasks to perform. Pins safe unexpended bombs and missiles slung under the hard points on the jet's belly and wings.

What weapons loaders and crew chiefs have in common, of course, is their dedication. They are the small party on the ground when the aircraft returns. It's a scene repeated countless times per day at bases around the globe.

The F-15E at Bagram spent just a few minutes at the de-arming point as crew chiefs and weapons loaders set about their work. Mayo and Camden approached the jet to safe the weapons, inspect rails, and look over the aircraft quickly. "You are always aware," observed Mayo.

TRAINING KICKS IN

And the jet looked good. With their initial check complete, the weapons loaders stepped back. The crew chiefs pulled out their headset and lifted up the chocks. They signaled with their hands for the airplane to taxi forward. Mayo and Camden were 10 feet from the wingtips of the F-15E.

Briefly the F-15E moved forward. Then a metallic screech split the air. Under the jet, on the right wheel of the landing gear, the brake's bleed port had broken. Hydraulic fluid sprayed the hot brakes.

Suddenly Mayo and Camden saw their jet on fire. "As weapons troops we learn a lot about how long it takes a piece of ordnance to explode once it's enveloped in flames," Camden later said in the Air Force news release.

"The whole underbelly of the aircraft was a fireball," said Mayo. "Fire and bombs don't go well together," he recalled thinking.

"My training kicked in," he said.

Years ago, personnel working on active flight lines didn't always receive that training. Airmen as first responders to fire dates back to a single destructive incident.

On July 29, 1967, a Zuni rocket accidentally fired off from an F-4 Phantom on the deck of the aircraft carrier *Forrestal* while the ship was launching combat missions over North Vietnam. The rocket ruptured the underwing fuel tank of an A-4 nearby.

Leaking fuel and exploding bombs started a conflagration that swept across the deck of the carrier, and what was initially a small fire billowed into a tower of flame.

Overheated bombs blew craters and holes in the armored steel flight deck.

An F-15 taxis on a runway in Southwest Asia with an F/A-18 fighter visible to the left.

USAF photo by TSgt. Jeff Andrejcik

Nine major explosions of fuel and ordnance took place within the first five minutes. Specialized firefighting crews on deck were killed within moments. Sailors rushing topside to fight for survival on the blazing deck had insufficient training in firefighting techniques, the Navy later concluded. Some sprayed the deck with seawater from hoses, sweeping away the firefighting foam.

A total of 134 sailors lost their lives that day, and another 161 were injured. After the *Forrestal* disaster, flight line firefighting changed across the US military. Images of the charred and twisted deck with melted airplanes became a regular feature in military firefighting training.

For USAF, training airmen with flight line jobs in the techniques of firefighting became standard practice. As a result Camden and Mayo, as weapons loaders, and Destasio and Martin, as crew chiefs, were ready to battle the flames.

For these four airmen and the others near them there was never a moment for doubt. "We train for instances like this. Things like this have happened in the past," said Mayo. At the core of the training is the impulse to run toward and combat the fire. "See fire, fight fire" is the mantra, according to Mayo.

Now it was a matter of seconds until the flames heated up the weapons slung on hardpoints under the F-15E's wings.

"Your average time is 1.5 minutes, when the plane is engulfed in flames until the munitions become volatile and could explode," Mayo said.

USAF fire emergency services vehicles need at least a short period of



During the Vietnam War, a malfunction caused a Zuni rocket to fire from an F-4 on the deck of USS Forrestal. Leaking fuel and exploding bombs killed 134 sailors. Afterward, training for the possibility of a flight line fire became standard.

time to reach the incident site. In civil aviation, the FAA stipulates airport fire engines have to reach the scene in three minutes or less. At Bagram, three minutes would have been far too long.

STOP THE DANCING

With fire near the weapons, every second counted. Camden took the front end of a fire extinguisher hose, while Mayo was on the back. "Camden pulled the front end and I started pushing the bottle," said Mayo.

The "bottle" was a 150-pound Halon 1211 flight line fire extinguisher.

Halon as a gas or liquid puts out fires without leaving residue on high-value

equipment like that found in hospitals or data centers—or on an active flight line. In theory, an F-15E could be smothered in halon and return quickly to the flying schedule.

Fires require fuel, air, and ignition heat. "Traditionally, to stop a fire you need to remove one side of the triangle the ignition, the fuel, or the oxygen," stated a research paper by the Halon Alternative Research Corp. "Halon adds a fourth dimension to firefighting breaking the chain reaction. It stops the fuel, the ignition, and the oxygen from dancing together by chemically reacting with them," explained the researchers.

USAF photo by SSgt. Sandra Welch

An F-15E taxis in after an Operation Inherent Resolve mission. Airmen in the foreground have a fluorescent-colored halon fire extinguisher on wheels at the ready. Camden and Mayo doused the flames with halon. The fire abated under the suppressant.

Destasio, the crew chief, now realized there was a fresh danger. Hydraulic fluid had slopped onto the hot tires when the aircrew braked. An exploding tire could "literally cut you in half," Destasio recounted in the Air Force news release.

He saw that Mayo and Camden were perilously close as they handled the hose.

"You're thinking about getting the fire bottle in position, not where your position is," Mayo later explained.

Destasio shouted at Mayo and Camden to move back.

It was just in time. Inside the Strike Eagle, the crew had hit the emergency brakes to stop the aircraft from rolling forward, unwittingly spraying more hydraulic fluid.

Flames flared again. The crew chiefs signaled the aircrew to cut the engines.

"After we shut the engines off we started to roll backwards because of the slight [runway] incline and there's no more thrust coming from the engines," said the WSO, who was not identified for security reasons.

"It rolled 20 feet forward and then 20 feet back again," Mayo recalled. "About the time it started to roll backward we were getting in position and starting to bring the fire down."

"As we start to roll backwards, we feel the crew chiefs throwing the chocks under the tires and we feel a little bump because we have momentum going backwards, and we're rolling over the chocks," the WSO said.

"We couldn't get the chocks under because it was too big of a fire," recalled Mayo.

The F-15E was sliding past the ground crew with the aircrew still in the cockpit.

Now the four airmen and others who joined them were fighting against that tilt in Bagram's tarmac.

With the right brake inoperative, the F-15E veered left. The slight downslope of Bagram's de-arm area caused the burning fighter to pick up speed, rolling toward other aircraft on the flight line.

"At that point I'm thinking, 'Well, I've been on fire before; that wasn't a big deal, but now we have no brakes and The airmen first responders to the F-15E fire each received an Air Force Commendation Medal in a ceremony in February.

we're rolling backwards, possibly into this jet behind us.' That's going to be a pretty big deal," said the WSO. "That's when I unstrapped and I'm sitting in my seat getting ready to jump outside of the jet."

Parked about 50 feet away were F/A-18 fighters belonging to a NATO ally, Spain's Ejército del Aire. On this December morning, the Hornets were fueled and combat-loaded, awaiting a mission later in the day.

ANYTHING TO STOP IT

The flaming F-15E was swerving closer to the Spanish F/A-18s. Within seconds the F-15E could touch off multiple fires if it hit the parked aircraft loaded with fuel and bombs—just as had happened decades before aboard *Forrestal*.

"We were trying to get chocks underneath. Anything to stop it," Mayo said. Still the F-15E rolled backward. Inside, the pilot and weapons systems officer were flipping open the buckles connecting them to the ejection seats, tugging at harnesses, unplugging oxygen lines, and preparing to get out.

Finally a chock lodged under the nose wheel. The F-15E stopped less than 15 feet away from the F/A-18s, but it was still on fire. "The residue still wanted to flare up," according to Mayo. He maneuvered a second 150-pound bottle of halon in place to combat the flames. A good portion of the second bottle was gone by the time the fire emergency services arrived.

At last the fire was out. Cautiously the crew chiefs put a ladder up to the cockpit and out came the aircrew.

With the fire department on scene, the first responders got checked over themselves. "We were coughing," Mayo said. He'd breathed in "a few big puffs of halon." They went to the base hospital where medical staff cleared them.

The runway at Bagram was soon active again.

Airpower takes many forms as it upholds national security. The standout actions of Camden, Destasio, Mayo, and Martin proved it again, and the four were each awarded the Air Force Commendation Medal for their efforts fighting the fire and saving the aircraft.

Lt. Gen. Charles Q. Brown Jr., now deputy commander of US Central Command, described it well during a February 2016 visit to bases in the AOR. "Airpower is everything we do; it's not just the folks in the cockpit dropping bombs. It's all the things that happen to get us to that point, from the folks that keep us safe to those that keep us fed and bed us down," said Brown.

For all the excitement of the burning jet on that December day, routine is better.

"I would not like to have that happen again," concluded Mayo.

Rebecca Grant is president of IRIS Independent Research. Her most recent article for Air Force Magazine, "The Second Offset," appeared in July.