



A B-2 Spirit at RAF Fairford, UK, in June.

## ■ All Bomber Types Deploy to Europe

In June, all three of the Air Force's bomber types deployed to Europe for "theater assurance and deterrence" in the region, marking "the first time in history that all three of Air Force Global Strike Command's strategic bomber aircraft [were] simultaneously in the European Theater," according to the service.

Two B-2s touched down at RAF Fairford, UK, on June 9, joining

three B-52Hs and three B-1Bs already deployed to the area. The B-52s, from Barksdale AFB, La., and the B-1s, from Ellsworth AFB, S.D., were participating in exercises Saber Strike and Baltops across Europe.

The B-2s were not flying in the exercises, but were "in support of recurring bomber assurance and deterrence operations," according to US Air Forces in Europe.

## ■ B-1 Availability Rates on the Rebound

Five years ago, B-1 aircraft availability rates reached a historical low point. But thanks to the maturation of the bomber's upgrade program, the timely assistance of stopgap civilian maintainers, and a recent increase in military manpower, B-1 availability is rebounding.

By the time the Air Force completes the Block 16, or Integrated Battle Station upgrades in 2020, the service expects availability rates for its fastest, heaviest-lifting bomber to improve even more, Col. Robert Lepper, chief of the combat aircraft division at Air Force Global Strike Command, told *Air Force Magazine*.

USAF is now approaching the halfway point of the largest-ever modification of the B-1, which began in 2012.

Twenty-nine of the service's fleet of 62 aircraft have put in their time at Tinker AFB, Okla., where the upgrade work is being done. AFGSC expects to upgrade the remaining 33 B-1s by May 2020, Lepper said.

Other issues had lowered B-1 availability rates as well, but in the last five years the service has "been making consistent improvements to get better in the B-1," he said. First, AFGSC "hired some civilian technicians to help us in the B-1 arena while we were going through low manning," and more permanent help is also on the way. "We have fortunately just added almost 250 maintenance positions to the B-1," Lepper said. "Those people are coming on board right now."

As more rejuvenated B-1s come online, the upgrades are helping the aircraft



A B-1B Lancer from Dyess AFB, Texas.

availability picture because they offer "improvements in aircraft reliability and sustainment," he explained. The hope is that with increased availability and an extended lifespan, the B-1 will remain "a significant deterrent to our adversaries across the globe" for years to come, he said.

## ■ Half the E-4B Fleet Damaged in Tornado

On June 16, a tornado hit Offutt AFB, Neb., and damaged 10 aircraft and caused up to \$10 million in damage.

Two E-4B National Airborne Operations Center aircraft were damaged, along with eight RC-135 Rivet Joints, in the storm. Six of the RC-135s had returned to mission-capable status by



An E-4B is towed out of a hangar at Offutt AFB, Neb.

late June, according to Offutt, which said the base did not lose its combat capability.

The primary E-4B aircraft was off station during the tornado, and there was no impact to the mission, the Air Force said.

The service always keeps one E-4 on 24-hour alert, seven days a week, "with a global watch team at one of many selected bases throughout the world," according to an Air Force fact sheet. The aircraft serves as a key component of the national military command system for the President, Defense Secretary, and Joint Chiefs of Staff by serving as an airborne command, control, and communications center in the event of a national emergency or destruction of ground command centers.

In addition, 18 buildings were damaged, including the Offutt field house, the Aero Club, and other buildings near the parade grounds, Offutt said in a press release. The base's 55th Civil Engineer Squadron responded, with 25 personnel providing about 1,200 man hours.



## ■ Air Force "Strongly Opposes" EELV Restrictions

The Air Force said in June it "strongly objects" to language in the House Armed Services Committee's chairman's markup of the Fiscal 2018 National Defense Authorization Act that would restrict the way the service invests money in the Evolved Expendable Launch Vehicle (EELV) program. Rep. Mike Rogers (R-Ala.), chairman of the HASC strategic forces subcommittee, pushed back on the service's criticisms and clarified that the legislation is intended to limit the EELV program's investments to a more narrow focus on rocket engine development.

In a memo obtained by *Air Force Magazine*, the Air Force argues that HASC's proposal to limit nearly \$300 million of EELV spending to investments only in new engines "handicaps the Air Force's eyes and ears in space." The memo says the bill's restriction, in section 1615, would force the service to end its investment in new launch systems and move forward with only the United Launch Alliance Delta IV and SpaceX Falcon 9 launch systems.

Such a move "would eliminate competition by driving a dual sole-source scenario that results in the highest cost for [Na-



tional Security Space] launch," the memo says. If the Air Force can only develop new engines, and not new launch systems, it will be forced to rely on the Delta IV for heavier payloads, which the Falcon 9 cannot carry. The lack of competition from newly developed launch systems would also mean that "Falcon launch prices would be significantly higher than those achieved by today's competitive awards," according to the service.

Rogers later clarified the motivation behind the legislation and indirectly refuted the Air Force's criticisms. He said the bill focuses investment dollars on engine development to assure "continued focus on the development of a new American-made rocket engine to replace the [Russian-made] RD-180." The bill seeks to preserve competition for the RD-180 replacement, Rogers said, but it intentionally avoids funding a competition for new launch vehicles. (See also "On the Brink of Competition," this issue.)

**A United Launch Alliance Delta IV EELV lofts a National Reconnaissance Office payload into orbit from Space Launch Complex 6 at Vandenberg AFB, Calif.**



## ■ Lost Data Link Caused 2016 Predator Crash

A lost data link and the crew's misperception of a Predator's flight control settings caused an MQ-1 to crash March 8, 2016, in the Middle East. The Predator, operated by the 15th Attack Squadron at Creech AFB, Nev., was flying a combat support mission when the aircraft experienced a "rack lockup" and no return data link, according to Air Combat Command (ACC).

Software and communication anomalies prevented the aircrew from being able to control the aircraft. After going through a checklist procedure, the crew regained control of the aircraft but there were no "discernible indications at the ground control station that the data link had been re-established," ACC said.

As a result, the Predator impacted the ground. An Air Force accident investigation board report found "unclear guidance on emergency procedures and

**An MQ-1B Predator taxis after completing a combat mission in Southwest Asia on July 1. Despite the March 2016 accident that resulted in a crash in the Middle East, Predators continue to perform daily missions in the area of responsibility.**

checklists" contributed to the crash, said an ACC press release. The MQ-1 and its munitions were destroyed, at a loss of about \$4.2 million.

## ■ F-35As Grounded, Return to Limited Flight at Luke

The Air Force on June 9 temporarily grounded F-35As at Luke AFB, Ariz., after five separate incidents where pilots reported hypoxia-like incidents. Between May 2 and June 8, five pilots assigned to the base had "physiological incidents while flying," according to an Air Force press release. Each time, the F-35A's backup oxygen system operated as designed, and the pilot was able to follow procedures and land the aircraft.

Fifty-five F-35As assigned to Luke, including international aircraft, were grounded. "The Air Force takes these physiological incidents seriously, and our focus is on the safety and well-being of our pilots," Brig. Gen. Brook J. Leonard, commander of the 56th Fighter Wing at Luke, said in a statement.

USAF senior leaders were aware of the incidents, and the F-35 Joint Program Office stood up a "formal action team" of engineers, maintainers, and aeromedical specialists to study the cases, but after one week of investigation, the cause of the physiological incidents remained a mystery. The only consistency was that the incidents occurred at about the same "cabin altitude," Leonard told reporters.



**SSgt. Emiliano Canales marshals an F-35 at Luke AFB, Ariz.**

Nonetheless, the Air Force cautiously resumed limited F-35A flying at Luke on June 21 with pilots avoiding the "flight regime"—the altitude and maneuvers—associated with the five incidents, but Leonard declined to identify what those are for fear that it would preclude an open-minded approach to finding the true root cause of the problem.

On June 22, the US Marine Corps also temporarily suspended F-35B flight operations at its Arizona base for an unrelated reason, due to concerns with the jet's logistics systems. Operations resumed a day later.

## ■ Two F-16s Crash in Three Days

An Air Force Thunderbirds' pilot and a member of the Thunderbirds' enlisted team were in "good condition" after the F-16D they were flying in flipped over after landing in Dayton, Ohio, during high winds on June 23. Capt. Erik Gonsalves, Thunderbird No. 8 advance pilot and narrator, remained in the hospital for one night. Thunderbirds Commander Lt. Col. Jason Heard said Gonsalves suffered "some lacerations as well as some injuries to his leg, but he's in stable to good condition and doing very well."

The second passenger, TSgt. Kenneth Cordova, did not suffer any "visible injuries and he's going to be doing just fine," said



**The F-16D after the crash.**

Heard. It took nearly an hour-and-a-half to extract Gonsalves from the aircraft and "another 10 to 20 minutes" after that to extract Cordova, said Heard. The two-seat F-16D took off around 10:30 a.m. on a single-ship familiarization flight prior to the Vectren Dayton Air Show. The mishap occurred after landing around 12:20 p.m.

## ■ Air Force May Retire Three A-10 Squadrons

The Air Force is considering retiring three of its nine A-10 squadrons, but lawmakers are already starting to resist the idea. In testimony to the House Armed Services tactical air and land forces subcommittee in June, Lt. Gen. Arnold W. Bunch Jr., the Air Force's senior uniformed acquisition official, said the Air Force is "committed to maintaining a minimum of six A-10 combat squadrons flying and contributing to the fight through 2030."

But additional A-10 force structure is "contingent on future budget levels and force structure requirements," Bunch said in prepared testimony. While he didn't ex-



**A-10s position for takeoff during an exercise in South Korea.**

plicitly say the remaining three squadrons would be retired, Rep. Martha McSally (R-Ariz.)—herself a former A-10 pilot—said Bunch's statement was the first time the Air Force publicly said it would drop three squadrons, and "I'd really like to know what those planning assumptions are of the six squadrons."

The commitment covers at least 171 combat-coded A-10s, of the 283 fleet. "The A-10s

The Thunderbirds performance at the show was later canceled. Heard said an accident investigation board will determine the cause of the incident, but he noted that the aircraft, which came to a stop some 300 feet off the end of the runway, "met all requirements" for landing in poor weather.

It was the second F-16 to mishap in three days. On June 21, an Oklahoma Air National Guard F-16, assigned to a detachment of the 138th Fighter Wing stationed at Ellington Field, Texas, caught fire and crashed during takeoff. The pilot, who was under direction of the North American Aerospace Defense Command (NORAD) at the time of the mishap, safely ejected from the single-seat aircraft.

are now in the DMZ [demilitarized zone] in South Korea, they're kicking butt against ISIS, they're deploying with the European Reassurance Initiative," McSally said. "I was over in Estonia. They're welcoming them to come back anytime soon with the Russian aggression there. From my view and experience, if we need that capability, until a proven, tested replacement comes along, nine squadrons is the absolute minimum."





First Lt. Brittany Trimble runs a preflight inspection of an F-16 before takeoff at Korat RTAFB, Thailand.

#### ■ Bonus Aimed at Pilot Exodus

The Air Force is switching to a "tiered" pilot bonus system, to retain pilots in the most critically undermanned areas, and is adding more flexibility to service contract lengths.

Under the 2017 National Defense Authorization Act, the maximum pilot bonus goes from \$25,000 to \$35,000, but fighter pilots will get preference for higher amounts versus, for example, mobility pilots because the shortage is more severe in the fighter specialty. The service will conduct a "business case analysis to determine greatest need and appropriate monetary amounts," officials said.

"We hope this new approach will make it easier for more airmen to stay in the service," Secretary of the Air Force Heather A. Wilson said at an Air Force Association-sponsored, Air Force Breakfast.

The 2017 aviation bonuses options include "one-year, two-year, and five-year options for all eligible 11X aviators," along with the tiered payments, the service said. "Bomber, special ops, and mobility pilots have a nine-year contract option, while fighter pilots have nine-year and 24 years of aviation service [13-year maximum] options."

Pilots of remotely piloted aircraft, as well as combat systems operators, "are eligible for five-year contracts at varying amounts, tiered by critical needs."



KC-46A fuels an F-16 during tests in January 2016.

#### ■ USAF Expects Boeing KC-46 Delivery To Be Late

The Air Force now expects Boeing to miss its December 2017 deadline to deliver its first KC-46 aircraft. After completing its annual schedule risk assessment on the program—a standard method by which uncertainties are factored into a baseline schedule to determine if any changes may occur—the service expects "first aircraft delivery beyond Boeing's forecast," moving delivery "into late spring of 2018."

USAF's conclusions about the timeline echo findings by the Government Accountability Office as outlined in a March report about the KC-46 program. "There is risk to the current delivery schedule due to potential delays in Federal Aviation Administration certifications and key test events," according to that report. "Program officials agree that there is risk to Boeing's test completion rate until it obtains Federal Aviation Administration approval for the design of all parts, including the pods, but test mitigation strategies are underway."

### By the Numbers

1,700

The number of fighter aircraft in China's air forces inventory.



Source: "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2017"

# The War on Terrorism

## US Central Command Operations: Freedom's Sentinel and Inherent Resolve

#### ■ Casualties

As of July 11, a total of 41 Americans had died in Operation Freedom's Sentinel in Afghanistan, and 43 Americans had died in Operation Inherent Resolve in Iraq and Syria.

The total includes 81 troops and three Department of Defense civilians. Of these deaths, 39 were killed in action with the enemy while 45 died in noncombat incidents.

There have been 192 troops wounded in action during OFS and 44 troops in OIR.

#### ■ Mattis Says US Is "Not Winning" in Afghanistan

Secretary of Defense James N. Mattis told Congress that "we are not winning in Afghanistan right now" when he appeared before the Senate Armed Services Committee (SASC) in June. "I believe that the enemy is surging right now," Mattis added. The "Taliban had a good year last year, and they're trying to have a good one this year."

In questioning, SASC Chairman Sen. John McCain (R-Ariz.) took the lead in delivering a series of sharp criticisms of the Department of Defense for not turning around what he said were the failures of the Obama Administration's "don't lose" strategy in Afghanistan.

"It's hard for us to act" and give the military what it needs, "when you don't give us a strategy," he told Mattis. "It's now six months," he reminded the Secretary. "We want a strategy, and I don't think that's a hell of a lot to ask."

Mattis told McCain that a new strategy for Afghanistan is coming soon. He also said that even with a victory and withdrawal of its forces, the US must be careful not to leave "ungoverned spaces" in the country where extremism can fester. A key marker of victory would be that "the Afghan government with international help will be able to handle the violence" within its borders, said Mattis. He said political corruption is currently the main challenge US and coalition forces face there.

#### ■ Aerial War Heats Up Over Syria

The skies over Syria heated up in June as the US shot down three regime-backed aircraft that were threatening coalition ground forces fighting against ISIS.

On June 8, an Air Force F-15E shot down a pro-regime drone inside Syria. The drone was a Shahed 129, produced in Iran and

flown by the Iranian Revolutionary Guard, Syrian-allied fighters, and Lebanese Hezbollah.

Army Col. Ryan Dillon, spokesman for Combined Joint Task Force-Operation Inherent Resolve, said the drone was armed and had been firing on coalition forces near the At Tanf Garrison. "The drone did drop a munition," Dillon said. "That munition did not have effects on the coalition forces."

Ten days later, a US Navy F/A-18E Super Hornet shot down a manned Syrian air force jet after it dropped bombs on US-backed fighters. The shutdown came after the US Combined Air Operations Center contacted Russia to try to stop the situation.

"The coalition's mission is to defeat ISIS in Iraq and Syria," a coalition statement said. "The coalition does not seek to fight Syrian regime, Russian, or pro-regime forces partnered with them, but will not hesitate to defend coalition or partner forces from any threat."

The shutdown was the first air-to-air kill for a Super Hornet, though F/A-18 Hornets recorded multiple shootdowns during the Gulf War.

On June 20, an Air Force F-15E again shot down a Shahed 129 flying near US-backed fighters inside Syria. The incident happened at about 12:30 a.m. after the drone displayed "hostile intent" and advanced on coalition forces near At Tanf, said US Central Command.

The drone had "dirty wings," meaning it was armed, and the F-15E pilot made the decision quickly to shoot it down to protect US-backed fighters, Pentagon spokesman Navy Capt. Jeff Davis said.

#### ■ Aircraft Set New High in Air Strikes Against ISIS

US and coalition aircraft in May conducted the highest number of air strikes against ISIS in Iraq and Syria, as US-backed forces worked to clear the group's two largest holdouts. Aircraft with the US-led Combined Joint Task Force-Operation Inherent Resolve released 4,374 weapons in 5,216 sorties with at least one bomb dropped, according to statistics released by Air Forces Central Command.

The amount eclipsed the coalition's second-highest tally, set in March, by about 500 strikes. So far this year, tankers have conducted 28,072 refuelings, and airlift aircraft have flown 3,543 airlift and airdrop sorties.

#### ■ US Strikes al-Shabaab in Somalia

US aircraft struck an al-Shabaab training camp on June 11 about 185 miles southwest of Mogadishu, Somalia, as part of the increased campaign by the US against militants inside that country, Pentagon spokeswoman Dana White said. The operation was conducted "in coordination with ... regional partners as a direct response to al-Shabaab actions, including recent attacks on Somali forces," White said.

The strike came under increased authorities approved by President Donald Trump in March. They allow the military to conduct "legal action" against al-Shabaab in support of partner forces in Somalia. The military said in April these authorities would translate to "additional precision fires" in support of African Union troops. Somalia has been designated an "active area of hostilities."



An F-15E fires flares during a mission for Operation Inherent Resolve in June.