Air Force World **★** screenshot 07.15.2015 An Atlas V rocket boosts GPS IIF-10 into space from Cape Canaveral AFS, Fla. This year marks the 20th anniversary of the GPS system achiev-ing full operational capability. AIR FORCE Magazine / August 2015 12

SpaceX Still in Play

SpaceX is still eligible to compete for national security space missions even though one of its Falcon 9 rockets exploded on June 28, Space and Missile Systems Center boss Lt. Gen. Samuel A. Greaves told Reuters.

"SpaceX remains certified and can compete for the upcoming GPS III launch service," Greaves told the wire service.

The rocket was on a commercial mission carrying supplies to the International Space Station when it experienced an "anomaly," SpaceX officials said. According to SpaceX Chief Executive Officer Elon Musk, a support strut failed in the Falcon 9 and most likely triggered the explosion. SpaceX is also looking at other factors that may have caused the mishap.

The GPS III launch will be the first time United Launch Alliance will face competition for NSS missions since the Lockheed Martin and Boeing consortium was formed in 2006. SpaceX was certified in May after a two-year review.

Ghostrider Grounded

The Air Force's prototype AC-130J Ghostrider gunship was grounded pending investigation of an in-flight incident that occurred during a test sortie from Eglin AFB, Fla., earlier this year, according to Air Force Materiel Command.

United Launch Alliance photo



C-123 Crews Cleared for Compensation

The Department of Veterans Affairs extended compensation coverage to airmen suffering certain conditions linked to repeated contact with contaminated C-123 Provider aircraft used to spray Agent Orange chemicals during Operation Ranch Hand in Vietnam, officials announced.

"Opening up eligibility for this deserving group of Air Force veterans and reservists is the right thing to do," VA Secretary Robert A. McDonald said in a June release.

The decision follows a 2015 report by the Institute of Medicine detailing the health consequences of exposure to dioxin-tainted aircraft, even years after their use in Vietnam, according to the release. "We thank the IOM for its thorough review that provided the supporting evidence needed to ensure we can now fully compensate any former crew member who develops an Agent Orange-related disability," McDonald said.

The inquest found that as many as 2,100 Active Duty and Air Force Reserve Command aircrew, maintainers, and aeromedical personnel could have been exposed to harmful chemicals.

AFRES personnel who served on the aircraft at Lockbourne/Rickenbacker ANGB, Ohio; Westover AFB, Mass.; Pittsburgh Arpt., Pa.; or Active Duty airmen who served on C-123s at several bases between 1969 and 1986 are encouraged to submit compensation claims, according to the VA.

-Aaron M. U. Church

Go Fly a Kite: A1C Jonathan Palacios-Conde and SrA. John Brown cover the engine of a KC-135 tanker at Al Udeid, Qatar, during a windstorm that had gusts of almost 60 mph. Sensitive aircraft engines must be protected from sand and debris and extreme conditions such as the heat that is common at locations in the Middle East.

The aircraft "returned to base and safely landed without further incident or any injuries to the crew" after the April 21 mishap, the command told *Air Force Magazine* in a statement.

AFMC officials on June 15 elevated the accident from a Class C mishap after "structural analysis suggested damage greater than the \$2 million monetary threshold for a Class A incident," reads the statement.

The AC-130J prototype suffered a similar mishap when it departed controlled flight during handling trials in February, exceeding its structural limits and resulting in the addition of two months to flight testing.

Air Force Special Operations Command plans to purchase and convert 37 airframes to the AC-130J configuration as part of its \$2.4 billion program to replace the legacy AC-130U and AC-130W fleets.

Radar Appeal Quashed

The US federal claims court rejected Raytheon's appeal of a May decision permitting the Air Force to reopen review of the Three-Dimensional Expeditionary Long-Range Radar system contract originally awarded to the company.

"Raytheon has not demonstrated either a likelihood of success or a substantial case on the merits of its appeal," federal judge Margaret M. Sweeney concluded in a decision released June 18.

Raytheon initially won the 3DELRR contract to provide airborne and missile threat tracking in 2014. After protests

by competitors Lockheed Martin and Northrop Grumman, the Air Force moved to "correct" its decision, based on advice from the Government Accountability Office.

The GAO found that the Air Force "erred in its technical evaluation of Raytheon's proposal and ... conducted unequal and misleading discussions regarding the parties' cost/price proposals," according to a court summary of the case.

Raytheon argued the original award was sound and that the Air Force's "corrective action was arbitrary, capricious, and unreasonable," based on the GAO's faulty evaluation. The court decision clears the way for the Air Force to reconsider competing bids.

KC-46 Blooms a Boom

A KC-46A Pegasus test airframe flew in the tanker configuration for the first time on a certification flight June 2, manufacturer Boeing announced. Provisioned 767-2C test airframe EMD-1 took off with both the KC-46's planned flying boom and twin, wing-tip mounted refueling pods to check the configuration's airworthiness, according to the company.

The first full-up KC-46 Pegasus tanker (EMD-2) is slated to fly for the first time later this summer, according to Boeing. The company is using four test aircraft—two provisioned 767-2C freighters and, later, two KC-46A tankers—to attain FAA and Air Force certification.

A provisioned airframe flew the program's maiden flight from Paine Field in Everett, Wash., last December. The Air

Pull it Apart, Put it Together: SrA. Clint White, an F-16 maintainer with the 455th Expeditionary Aircraft Maintenance Squadron, takes apart a jet during a phase inspection July 7 at Bagram Airfield, Afghanistan. Inspectors had been at Bagram for more than two months, performing phase inspections on aircraft that have reached 400 flying hours.

Broken Treaties, Closing Skies

Russia is violating provisions of the Open Skies treaty by barring Air Force OC-135s from observing key strategic areas, according to the State Department's 2015 arms control treaty compliance report, released on June 5.

"We have been unable to conduct overflights of either Russia or Ukraine near their shared international border" since the shoot-down of a civilian airliner in the area last year, arms control and international security undersecretary Rose E. Gottemoeller said in a June 10 speech.

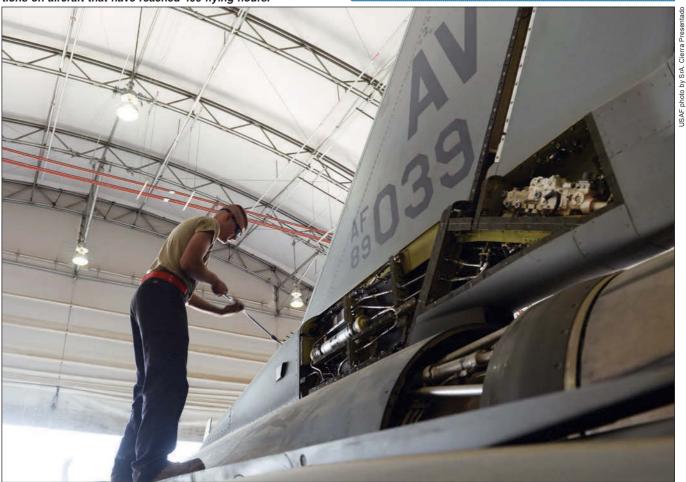
Russia is also blocking access to parts of Kaliningrad (its strategic military enclave wedged between NATO allies Poland and Lithuania), Russian-occupied portions of Georgia, and the conflict zone in Chechnya.

"The United States continued to oppose any airspace restriction inhibiting an observing party's right" under the treaty, and both the US and Poland formerly raised the issue with Russia, the document states.

"Russia has veered off course. We call on Russia to join us in improving security in Europe and to return to full implementation" of Open Skies, Gottemoeller said, addressing the Open Skies treaty review conference in Vienna.

The US cited Russia for violating the Intermediate Nuclear Forces treaty banning mid-range nuclear missiles, last year, and Russia has long been in breach of a conventional arms agreement.

—Aaron M. U. Church



AIR FORCE Magazine / August 2015

Force is planning to purchase 179 new tankers, with 18 airframes slated for delivery over the next two years.

Rude Awakening

The Air Force will activate the 34th Fighter Squadron at Hill AFB, Utah, as part of the base's transition from F-16 to F-35A operations, according to a base news release.

The unit, known as the "Rude Rams," stood down in summer 2010 as part of an Air Force-wide restructuring effort that saw Hill lose 24 of its F-16s, leaving a force of 48 fighters there. Now, with plans to establish the Air Force's first F-35A operational location at Hill with 72 combat-ready jets, the 34th FS is returning.

The squadron will be one of three Active Duty units, along with the 4th FS and 421st FS, within the 388th Fighter Wing that will fly F-35As with the support of members of Air Force Reserve Command's 419th FW.

Hill is scheduled to receive its first F-35A in September and have 15 jets on hand by August 2016 when the Air Force aims to commence F-35A operations.

Lakenheath's Everywhere Eagles

Eagles and Strike Eagles from RAF Lakenheath, UK, fanned out on training exercises in southern Europe while the base's runway was under repair in June.

Fifteen F-15Es and 300 airmen from the 492nd Fighter Squadron relocated to Aviano AB, Italy, for two weeks of dissimilar air combat training with resident F-16s. "Different aircraft allow both crews to accomplish training missions that typically wouldn't happen," 492nd FS Operations Director Maj. Timothy Dowling said in a release.

Meanwhile, a dozen F-15C/Ds and 250 pilots, maintainers, and support personnel from Lakenheath's 493rd FS

took part in Exercise Anatolian Eagle at Konya AB, Turkey, officials announced.

"Anatolian Eagle is a great opportunity for our aircrews to hone their operational skills from a forward operating location," 493rd FS Commander Lt. Col. John Stratton said.

NATO aircraft from Germany, Spain, Turkey, United Kingdom, and Pakistan took part in the June exercise.

Iragi F-16 Crashes in Arizona

An Iraqi Air Force F-16 assigned to the Arizona National Guard's 162nd Fighter Wing for foreign pilot training crashed during a night training sortie near Douglas, Ariz., on the state's southern border, *The Arizona Republic* reported. The sole pilot, Brig. Gen. Rasid Mohammed Sadiq Hasan, was killed.

The jet went down approximately five miles from the small Douglas Municipal Airport near the US-Mexican border at 8 p.m. local time, June 25, according to an ANG news release.

Emergency responders controlled a brush fire started by the crash, according to the *Republic*.

The aircraft was reportedly a Block 52 F-16D—the first delivered to Irag.

Iraq ordered 36 F-16C/Ds. The cause of the incident is under investigation.

Bomber Bustle

Air Force Global Strike Command B-2 and B-52 bombers staged deterrent operations from RAF Fairford, UK, supporting NATO and US Strategic Command exercises in the region in June.

The B-2s conducted hot-pit refueling and crew changes, demonstrating rapid regeneration from a forward location on their brief stopover at Fairford on June 7. Three B-52s from Minot AFB, N.D., simultaneously operated from Fairford for exercises Baltops and Saber Strike, officials stated.

The 5th Bomb Wing B-52s were originally slated to fly nonstop sorties from the United States to take part in a scenario off the Swedish coast during Baltops. The bombers expanded

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The War on Terrorism

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

Casualties

As of July 17, three Americans had died in Operation Freedom's Sentinel in Afghanistan and seven Americans had died in Operation Inherent Resolve in Iraq and Syria.

The total includes nine troops and one Department of Defense civilian. Of these deaths, two were killed in action with the enemy while eight died in noncombat incidents.

There have been 33 troops wounded in action during OFS and one in OIR.

Troop Swell for Iraq

President Obama authorized up to 450 additional US military personnel to train, advise, and assist Iraq security forces at Taqaddum military base in Anbar province, the White House announced June 10.

"These new advisors will work to build [the] capacity of Iraqi forces, including local tribal fighters, to improve their ability to plan, lead, and conduct operations against [ISIS] in eastern Anbar under the command of the Prime Minister," according to the statement.

The training site will complement the four previously established sites in al-Asad, Besmaya, Erbil, and Taji, where some 9,000 Iraqi troops have already been trained and another 3,000 are currently in training.

"These additional troops will not serve in a combat role and will augment the 3,100 US troops who have already deployed to Iraq."

The Pentagon emphasized the "decision does not represent a change in mission," but will enable Iraqi forces "to better defend its citizens and retake its territory" from ISIS, according to a June 10 Defense Department statement.

The President asked military leaders to examine areas that have been successful and those that "may have been moving at a pace that's late-to-need or where certain units have not stood and fought," said Army Gen. Martin E. Dempsey, Chairman of the Joint Chiefs, referencing the recent fall of Ramadi, where many Iraqis left the city without a fight despite outnumbering ISIS forces.

JSTARS Does it Again

E-8C JSTARS, staging from Al Udeid AB, Qatar, recently surpassed 100,000 flying hours in direct support of US Central Command operations. "The tasking in the CENTCOM theater during the last 13 years is a clear indication of the value and capabilities that the E-8C brings to the manned command and control, battle management, intelligence, reconnaissance, and surveillance mission," said Col. Kevin D. Clotfelter, Georgia Air National Guard 116th Air Control Wing commander, in a June 2 news release.

Members of the ANG's 116th ACW and the Active Duty 461st ACW from Robins AFB, Ga., as well as the Army JSTARS 138th Military Intelligence Company, amassed the flying hours over six CENTCOM operations—Southern Watch, Enduring Freedom, Iraqi Freedom, New Dawn, Inherent Resolve, and Freedom's Sentinel—according to the news release.

JSTARS clocked 100,000 post-9/11 combat flying hours in all theaters last May.

Predators Down

An MQ-1 Predator remotely piloted aircraft crashed in southeastern Iraq on June 22 during a combat air patrol, announced Air Forces Central Command. The incident was "not due to enemy fire," according to AFCENT's press release.

Controllers lost "positive control" of the RPA during a sortie supporting anti-ISIS operations, and the aircraft hit the ground at approximately 8:30 a.m. local time, without injuring civilians or damaging property, AFCENT stated.

The Air Force also confirmed in June that an MQ-1 Predator lost over Syria in March was indeed shot down by Syrian forces.

The shootdown was the first reported RPA loss during Operation Inherent Resolve and possibly the first time Syrian air defenses have been activated against coalition aircraft since the operation began.

the mission to fly ground-support training over Estonia, Latvia, Lithuania, and Poland as part of the US Army in Europe-led Saber Strike exercise that ran through June 19.

"This deployment to RAF Fairford was specifically designed ... to ensure maximum opportunities to synchronize and integrate our bomber capabilities with [allied] military assets," explained Adm. Cecil D. Haney, STRATCOM commander.

Stressed, But not Broken

Lockheed Martin completed 25,000 simulated flight hours on an F-16C Block 50 aircraft as part of its full-scale durability test designed to stress the aircraft to identify potential fatigue issues, according to a June 11 company press release.

The F-16 fleet was designed to hold up under heavy stress for 8,000 equivalent flight hours, but the FSDT results will be used to "design and verify" a service life extension program that will extend the service life of up to 300 F-16C/D Block 40-50 aircraft to 12,000 EFH, until USAF's F-35 strike fighters come online.

"This testing milestone clearly demonstrates that F-16s with SLEP modification can be safely operated longer than

By the Numbers

\$808 Million

Boeing's cost overage on the KC-46A tanker program, as of mid-July, bringing the total cost of the fixed-price program near USAF estimates. Boeing must pay the cost overruns.

Senior Staff Changes

RETIREMENTS: Lt. Gen. Ronnie D. Hawkins Jr., Lt. Gen. Bruce A. Litchfield.

NOMINATIONS: To be Lieutenant General: David J. Buck. To be Brigadier General: Christopher P. Azzano, Paul E. Bauman. To be ANG Brigadier General: Howard P. Purcell, Frank H. Stokes, Thomas K. Wark. To be AFRC Major General: Randall R. Ball.

CHANGES: Lt. Gen. (sel.) David J. Buck, from Vice Cmdr., AF-SPC, Peterson AFB, Colo., to Cmdr., 14th AF (Air Forces Strat.), AFSPC, Vandenberg AFB, Calif. ... Maj. Gen. Mark C. Dillon, from DCS, United Nations Command & US Forces Korea, Yongsan Army Garrison, South Korea, to Vice Cmdr., PACAF, JB Pearl Harbor-Hickam, Hawaii ... Lt. Gen. Russell J. Handy, from Cmdr., Alaskan Command, PACOM, JB Elmendorf-Richardson, Alaska, to Cmdr., Alaskan Command, NORTHCOM, JB Elmendorf-Richardson, Alaska ... Brig. Gen. David S. Nahom, from Dir., Regional Affairs, Office of Dep. Undersecretary, Intl. Affairs, Office of Undersecretary of the AF, Pentagon, to Dep. Dir., P&P, ACC, JB Langley-Eustis, Va. ... Brig. Gen. Mary F. O'Brien, from Spec. Asst. to the DCS, Intel., Surveillance, & Recon, USAF, Pentagon, to Dir., Intel., CYBERCOM, Fort Meade, Md. ... Lt. Gen. John W. Raymond, from Cmdr., 14th AF (Air Forces Strat.), AFSPC, Vandenberg AFB, Calif., to DCS, Ops., USAF, Pentagon ... Brig. Gen. Lenny J. Richoux, from Dir., AF Colonel Mgmt. Office, DCS, Manpower, Personnel, & Svcs., USAF, Pentagon, to Dir., Svcs., DCS, Manpower, Personnel, & Svcs., USAF, Pentagon ... Maj. Gen. (sel.) James C. Slife, from Dep. Dir., Strategy, Plans, & Policy, CENTCOM, MacDill AFB, Fla., to DCS, United Nations Command and US Forces Korea, Yongsan Army Garrison, South Korea ... Brig. Gen. Jeffrey B. Taliaferro, from Dep. Dir., P&P, ACC, JB Langley-Eustis, Va., to Dir., Plans, Prgms., & Rqmts., ACC, JB Langley-Eustis, Va. ... Brig. Gen. Billy D. **Thompson**, from Chief, AF Senate Liaison Office, Office of the LL, OSAF, Pentagon, to Dir., Regional Affairs, Office of Dep. Undersecretary of the AF, Intl. Affairs, Office of the Undersecretary of the AF, Pentagon ... Lt. Gen. Tod D. **Wolters**, from DCS, Ops., P&R, USAF, Pentagon, to Dir., Ops., Jt. Staff, Pentagon.

COMMAND CHIEF CHANGE: CMSgt., Patrick F. **McMahon**, from Command Chief, 14th AF, AFSPC, Vandenberg AFB, Calif., to Command Chief, AFSPC, Peterson AFB, Colo.

SENIOR EXECUTIVE SERVICE CHANGES: Winston A. Beauchamp, to Dep. Undersecretary of the AF (Space), Pentagon ... Steven A. Cantrell, to Dir., Civil Aviation Intel. Analysis Center, DCS, Intel., Surveillance, & Recon, JB Anacostia-Bolling, D.C.... Paul F. Freisthler, to Sr. Intel. Engineer/Scientist, Natl. Air & Space Intel. Center, Wright-Patterson AFB, Ohio ... Carolyn M. Gleason, to Assoc. Dep. Asst. Secy., Budget, Office of the Asst. SECAF, Financial Mgmt. & Comptroller, Pentagon ... Richard K. Hartley, to Principal Dep. Asst. SECAF, Instl., Env., & Energy, Pentagon ... Laura N. Jankovich, to Asst. Auditor General, Field Offices Directorate, Office of the Auditor General of the AF, Pentagon ... Richard Linderman, to Dep. Dir., Info. Sys. & Cybersecurity, DASD for Research, USD, Acq., Tech., & Log., Alexandria, Va. ... Michael F. Logrande, to Dep. Dir., AF Review Boards Agency, JB Andrews, Md. ... Rodney L. Miller, to Chief Scientist, AFGSC, Barksdale AFB, La. ... Judith B. Oliva, to Dir., Financial Mgmt., AF Sustainment Center, AFMC, Tinker AFB, Okla. ... Philip L. Ritcheson, to Dep. Dir., Intl. Affairs, Natl. Geospatial-Intel. Agency, Springfield, Va. ... Pamela C. Schwenke, to Assoc. Dep. Asst. Secy. (Prgms.), Office of the Asst. SECAF, Financial Mgmt. & Comptroller, Pentagon.



Strategy on the Eroding Edge

The Defense Department's 2015 National Military Strategy calls for "greater agility, innovation, and integration," while also acknowledging that the United States' "comparative military advantage has begun to erode."

In the first such strategy released since 2011, Chairman of the Joint Chiefs of Staff Army Gen. Martin E. Dempsey wrote in the intro that "today's global security environment is the most unpredictable I have seen in 40 years of service."

The United States now faces "multiple, simultaneous security challenges from traditional state actors" and nonstate actors—"all taking advantage of rapid technological change," added Dempsey. "Future conflicts will come more rapidly, last longer, and take place on a much more technically challenging battlefield."

In addition, such conflicts will "have increasing implications to the US homeland," wrote Dempsey.

The strategy notes Russia's continued disrespect for the "sovereignty of its neighbors" and its willingness to "use force to achieve its goals." It acknowledges the "strategic challenges" Iran's nuclear ambitions pose to the international community and calls the country a "state-sponsor of terrorism that has undermined stability" in "Israel, Lebanon, Iraq, Syria, and Yemen."

North Korea's pursuit of nuclear weapons also threatens its neighbors, specifically Japan and the Republic of Korea.

While the US supports "China's rise," the report highlights the regional tensions created by its actions in the South China Sea.

—Amy McCullough

anyone previously thought possible," said Rod McLean, vice president and general manager of the F-16/F-22 Integrated Fighter Group at Lockheed Martin.

Lightning Strikes Twice

The 62nd Fighter Squadron transitioned from the F-16 to the F-35A, becoming the second Lightning II pilot training squadron at Luke AFB, Ariz., in a ceremony there in June.

"As we open this new chapter in our squadron's history, we will focus our efforts on what we've been doing for three generations—training and delivering combat airpower," said the incoming 62nd FS commander, Lt. Col. Gregory Frana, during the June 5 transition ceremony.

Luke stood up the 61st FS as the first of six F-35 training squadrons in October 2013. The 62nd FS was slated to begin receiving F-35s in July and will eventually host US, Italian, and Norwegian conversion training.

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Russian Fighters Forward

The Russian air force is negotiating an agreement with Belarus to establish a forward fighter base there to counter increased NATO fighter rotations to neighboring Poland and the Baltic States, state-run TASS Russian News Agency reported.

Russia deployed six Su-27s just across the border from US F-15s and F-16s in Poland and Lithuania last March, and Russian air force chief Col. Gen. Viktor Bondarev earlier announced plans to permanently base Su-27s in central Belarus as early as 2016, according to the report.

Belarusian Defense Minister Lt. Gen. Andrei Ravkov said the timing and location are still under discussion, but the country is "ready to undertake all necessary measures" to host a Russian air force presence, according to TASS.

"Belarus cannot ignore changes in the military-political situation in the region that bear additional risks," Ravkov said.

Valor From the Flames

French Defense Minister Jean-Yves Le Drian presented USAF SSgt. Greggory Swarz the Legion d'Honneur medal, honoring Swarz for risking his life to save three French airmen during a deadly aircraft accident in Spain in January.

"He did not hesitate to throw himself in the flames to save his comrades," said Le Drian during the award presentation at the Paris Air Show on June 15.

Swarz dragged the airmen from the flames after a Greek F-16 crashed into several parked aircraft during a NATO training event at Los Llanos AB, Spain, on Jan. 26.

"It's human nature. There [are] people suffering, you've got to do as much as you can," said Swarz. "I saw some stuff that shouldn't really be talked about. Some pretty horrific things," he said.

Swarz is an aircraft electrical technician assigned to the 48th Fighter Wing at RAF Lakenheath, UK. He received the Airman's Medal earlier this year for his bravery.

Hanging by a Helmet

LE BOURGET, FRANCE—The Air Force anticipates declaring initial operational capability on the F-35A between August and November 2016, Lockheed's F-35 executive vice president told reporters during the Paris Air Show.

The 3I software block for the first operational F-35A next year has the same capabilities as the Marine Corps' Block 2B, but with two differences: an upgraded processor and the "Gen 3" helmet, said F-35 General Manager and Executive Vice President Lorraine M. Martin.

"The Air Force has said it wants to go to IOC with the new helmet," she said. To make sure 3I is ready, Lockheed Martin will take 12 USAF aircraft and ensure they are configured correctly with USAF-specific modification, she said.

The company also has some "enhancements" it wants to make to the Autonomic Logistics Information System (ALIS) for the F-35A, per USAF request, to ensure data can be distributed across multiple bases.

The F-35A mods are less intensive than the USMC F-35B changes, since some of the Air Force's airframes came off the production line in Fort Worth, Texas, more recently, giving the company time to make most of the changes while the aircraft were still on the line.

The pilot and maintainer training rate must also spool up, Martin said, as the first aircraft delivery to Hill AFB, Utah, is anticipated by the end of this year.

-Marc V. Schanz