



MILITARY ENGINES

F135

IS006 / Quarter 2 / 2019

POWERING FREEDOM

# PROGRAM MILESTONES



## FIRST F-35S ARRIVE IN KOREA

On March 29, The Republic of Korea Air Force (ROKAF) received its first two F-35s at a military air base in Cheong Ju. With ROKAF fighter pilots undergoing flight training at Luke Air Force Base since 2017, this significant milestone is the culmination of a multi-year long joint effort.

“We expect the deployment of the stealth fighters [to] enhance the Air Force’s operational capabilities by strengthening military readiness posture against possible threats from all fronts,” Defense Acquisition Program Administration (DAPA) Chief Wang Jung-hong was quoted as saying by The Korean Times.

The Republic of Korea and U.S. government officially signed a Letter of Offer and Acceptance for the purchase of 40 F-35A Joint Strike Fighters in September of 2014 under the Pentagon’s Foreign Military Sales program. To date, ROKAF has taken delivery of six F-35s at Luke Air Force Base. Eight more F-35s are expected to be delivered to the ROKAF by the end of 2019. The entire program of record of 40 F-35s is scheduled to be completed by 2022.

## FIRST RAF OVERSEAS EXERCISE

In May, the Royal Air Force’s (RAF) 617 Squadron flew six F-35B aircraft from

RAF base Marham to RAF Akrotiri for a six week training exercise known as Exercise Lightning Dawn. This exercise marked a critical milestone for the United Kingdom’s next generation air combat capability. The training exercise allowed the pilots, three from the British Royal Navy and three from the Royal Air Force, to gain critical experience in maintaining and flying the aircraft in an unfamiliar environment.

The exercise also examined all aspects of what it takes to operate F-35s in a new location, including logistics, maintenance, and sustainment of the equipment and crew while also enhancing its preparedness for its first operational carrier deployment.

## 500 AND COUNTING

In June, Pratt & Whitney officially sold the 500<sup>th</sup> production F135 propulsion system. This milestone coincided with Lockheed Martin delivering the 400<sup>th</sup> F-35 (a U.S. Air Force F-35A) and the Joint Strike Fighter fleet surpassing 200,000 flight hours. These milestones, although still early in the program lifecycle, serve as a reminder that deliveries and usage are increasing. With each additional propulsion system, aircraft, and flight hour, the Joint Strike Fighter Program is maturing and the F-35 is transforming from the warfighter of the future into the warfighter of today.



## SUPPLIER HIGHLIGHT | JARVIS AIRFOIL

For the past 65 years, Jarvis Airfoil, located in Portland, CT, has been a dependable supplier for Pratt & Whitney. The outstanding quality and delivery performance from the Jarvis team has allowed the F135 Program to rely on them in assisting with any and all additional needs within critical airfoil part families. The team at Jarvis Airfoil has consistently given their best to ensure their product meets all quality and delivery requirements, subsequently enabling the F135 Program to meet its customer's needs. Most recently, Jarvis Airfoil has taken on an increased responsibility of supplying additional variable vanes in the F135 Propulsion System. Jarvis's outstanding flexibility and willingness to increase volume with short notice has allowed the F135 program to execute timely engine builds and fill critical spares requirements.

Along with their excellent and proven track record of delivering quality parts at rate and on time, the open communication and transparency from the Jarvis team has always been extremely appreciated. In May 2019, F135 Program Director, Cheryl Lobo, travelled to Portland to personally thank Jarvis for their commitment to the F135 Program and award them with a plaque in recognition of their exemplary performance as a supplier of the Joint Strike Fighter Enterprise. Thank you to the entire team at Jarvis for your continued hard work, consistency, and support.

# JAPAN STANDS UP FIRST OPERATIONAL SQUADRON



The Japan Air Self-Defense Force declared Initial Operational Capability (IOC) for its F-35A Lightning II fighter aircraft on March 29. The force's new F-35A fighter squadron, the 302<sup>nd</sup> Squadron, is stationed at Misawa Air Base, which also hosts the U.S. Air Force's 35<sup>th</sup> Fighter Wing.

“This is a major milestone for the F-35 enterprise, as it marks the first F-35 IOC for an Indo-Pacific region customer,” said Vice Adm. Mat Winter, F-35 Program Executive Officer, “This significant achievement is a testament to the global nature of this program, and the F-35 Joint Program Office values the long-established bond with our Japan allies. This could not have happened without the hard work and collaboration between the F-35 Joint Program Office, the Japan F-35 program, our industry partners and the Japanese Air Self Defense Force.”

Japan is one of four countries to buy the F-35 under the United States' Foreign Military Sales program, along with Israel, South Korea and Belgium. The Japan Ministry of Defense selected the F-35 as Japan's next generation fighter aircraft on December 2011, with a current Foreign Military Sales program of record of 105 F-35As and 42 F-35Bs.

Mizuho, Japan, is home to the first F135 Final Assembly and Check Out (FACO) facility. The facility is operated by IHI Corporation with technical assistance from Pratt & Whitney and oversight from the Joint Program Office. IHI has also been selected by the F-35 Joint Program Office to establish a depot facility in Japan for F135 engine Maintenance Repair Overhaul and Upgrade (MRO&U) for the Asia Pacific region. Pratt & Whitney is working closely with IHI to complete the stand-up of the engine depot by the first quarter of 2023.

## MEET THE P&W TEAM | BILL HOOVER



Bill Hoover is Brett Rhodes' successor as the new P&W F135 Program Production Director. Bill is responsible for managing customer proposals, contract execution, and deliveries related to production. He is also responsible for leading the sales planning process, managing Program Management Office approvals, negotiating consideration and withhold for major variances with the customer. Bill also consolidates key briefings and communications for internal and external reviews. In addition, he sustains and strengthens relationships with Operations, Assembly, DCMA and the Joint Program Office and ensures the enterprise can successfully deliver full rate capacity.

Bill brings extensive leadership experience to the F135 Production Director role. Most recently, he held the position of CIPT (Component Integrated Product Team) Director for Mechanical Systems, Externals and Nacelles (MSEN) Module Center, where he provided leadership to the multiple MSEN CIPTs to ensure that engineering deliverables and production delivery commitments were met. Before holding the CIPT Director position, Bill was a CIPT Leader in MSEN. Prior to this, Bill served in the United States Marine Corps as a mechanic and Crew Chief on CH46E helicopters.



# U.S. F-35A CONDUCTS FIRST

## AIRSTRIKE

Two U.S. Air Force F-35A Lightning II aircraft conducted an air strike at Wadi Ashai, Iraq, in support of Combined Joint Task Force – Operation Inherent Resolve on April 30.

This strike marked the F-35A's first combat deployment.

The F-35As conducted the airstrike using a Joint Direct Attack Munition to strike an entrenched Daesh tunnel network and weapons cache deep in the Hamrin Mountains, a location able to threaten friendly forces.

“We have the ability to gather, fuse and pass so much information, that we make every friendly aircraft more survivable and lethal,” said Lt. Col. Yosef Morris, 4<sup>th</sup> Fighter Squadron commander and F-35A pilot. “That, combined with low-observable technology, allows us to really complement any combined force package and be ready to support AOR contingencies.”

The F-35As, recently deployed from Hill Air Force Base, Utah, joined the Combined Forces Air Component team in the U.S. Central Command area of operations on April 15. This marks the F-35A's third deployment and first to the CENTCOM AOR. In preparation for deployment, crews prepared and trained on the aircraft for the AFCENT mission.

“We have been successful in two Red Flag exercises, and we've deployed to Europe and Asia,” said Morris. “Our Airmen are ready and we're excited to be here.” Red Flag is the U.S. Air Force's premier air-to-air combat training exercise which includes U.S. and allied nations' combat air forces.

There are many Airmen ensuring the planes are ready for their combat missions. “This jet is smarter, a lot smarter, and so it can do more, and it helps you out more when loading munitions,” said Staff Sgt. Karl Tesch, 380<sup>th</sup> Expeditionary Aircraft Maintenance Squadron weapons technician.

A central tenant to the F-35A's design is its ability to enhance other battlefield assets. In this case, the aircraft joins the Combined Joint airpower team already in place to maintain air superiority and deliver war-winning airpower.

“The F-35A has sensors everywhere, it has advanced radar, and it is gathering and fusing all this information from the battlespace in real time,” said Morris. “Now it has the ability to take that information and share it with other F-35s or even other fourth generation aircraft in the same package that can also see the integrated picture.”



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*“We are seeing the Joint Strike Fighter integrated into the national defense of the United States and its Allies more and more each day... the state of the F35 Program is strong... and it will only continue to strengthen”*

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# RAMPING UP. HONING IN.

This past quarter has been a very busy time for the F135 Program. We output engines at rate 15 per month for the quarter, approaching our full rate production requirement. While we still have significant work to do to recover our overdue backlog and get our entire supply value stream delivering on time to MRP requirements, the enterprise is ramping and we're seeing the positive impact of your dedication and commitment to this program. Entering the second half of the year, we need everyone's help to keep the momentum going and consistently deliver perfect quality hardware on time and at rate. As I've told many of you in person during visits over the last 6 months, our successful execution today will secure our future together for decades to come on the F-35 program.

You should all know that the performance of the engine and aircraft as a whole has continued to be world class. Over the last few months, the USS Essex returned from the first long term combat deployment with F-35B's, the U.S. Air Force announced the 1<sup>st</sup> use of their F-35's in combat, and Japan declared initial operational capability, becoming the 7<sup>th</sup> military service to do so. I had the opportunity to spend a day with the incredible men and women of the 13<sup>th</sup> Marine Expeditionary Unit on board the Essex during their return home after an 8 month combat deployment. Seeing and hearing the commitment and dedication of the pilots and maintainers and feeling their passion for F-35 and for their mission was truly inspiring. Likewise, seeing the F-35B's, powered by the F135 propulsion system that you make, perform a flawless vertical landing during rough seas and high winds was absolutely amazing. Your F-35's are now in the fight every day, protecting our freedom around the world.

It's with mixed emotions that I announced the end to my tenure as lead of the F135 program. While I'm looking forward to the challenges of my new role in Pratt & Whitney Engineering, my time on the F135 program has been incredibly rewarding. In particular, I'll miss meeting and working with the dedicated men and women across the value stream who make this program successful.

Replacing me as Vice President for F135 programs is the current Pratt & Whitney Vice President of Fighter and Mobility Programs, Ms. Bev Deachin. Bev brings with her over thirty years of experience at Pratt & Whitney and has an extensive background leading our other key engine programs including the F100 (powering the F-15 and F-16), the F119 (powering the F-22), and the F117 (powering the C-17). The F135 program is in experienced, expert, and capable hands.

I would like to thank each and every one of you in our supply base, many of whom I've met in person, for their tireless work in enabling the F-35 by manufacturing and delivering the most advanced propulsion system in the world. My time serving as Vice President of the F135 Program has been one of the proudest in my career, and one that I will always cherish. I look forward to seeing all that you will accomplish!

**JOHN D. WIEDEMER**  
Vice President  
F135 Program





**GO BEYOND**

### Let Us Know How We're Doing!

Do you enjoy reading the F135 Newsletter? Do you have topics in mind that you would like to read more about? Please send in your comments and suggestions to Navjot Singh at [Navjot.Singh@pw.utc.com](mailto:Navjot.Singh@pw.utc.com)

### Give Us a Follow!

To keep up to date with the latest developments, achievements, and activities of the F135 Program, follow us on our social media channels linked below!



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