

**I**n preparation for transition to the F-35C, the US Navy reactivated Strike Fighter Squadron (VFA) 125 'Rough Raiders' as the fleet replacement squadron (FRS) for the carrier variant of the Lightning II in January 2017. One of the roles of the FRS is to help introduce a new aircraft type/model/series to the fleet and these squadrons are responsible for converting operational units to the new platform. VFA-147 'Argonauts' was selected as the first operational squadron to make the conversion from the F/A-18E Super

Hornet to the F-35C. The 'Argonauts' have a long history with both the 'legacy' Hornet and Super Hornet. The squadron received its initial F/A-18Cs on December 6, 1989 and completed its conversion to that platform using assets from the 'Rough Raiders'. At the time, VFA-125 was serving as the Hornet FRS.

The 'Argonauts' received their initial Lot 12 'Night Attack' Hornets in December 1989. After a deployment to the Persian Gulf in March 1991, in support of Operation Desert Storm, VFA-147 became the US

Navy's first operational F/A-18 squadron to employ the Navigational Forward-Looking Infrared (NAVFLIR) pod and night-vision goggles (NVGs). While engaged in Desert Storm, the squadron primarily flew combat air patrol missions over Iraq and Kuwait in support of troop withdrawal operations.

In June 1995, the squadron completed transition to its new Lot 16/17 F/A-18C aircraft with the improved AN/APG-73 radar and Enhanced Performance Engines (EPE). The 'Argonauts' made three more cruises to the Persian Gulf in support of Operation Southern Watch aboard the USS *Nimitz* (CVN 68), enforcing the no-fly zone over southern Iraq.

In May 1998, the squadron swapped its Lot



# 'Team Ar

## TRANSFERS TO LIGHTNING

The US Navy's first frontline F-35C squadron recently received its safe-for-flight operations certification, after independently conducting carrier qualifications with the Lightning II.

**Patrick Roegies** investigates.

16 Hornets for a dozen Lot 11 jets received from VFA-195 'Dambusters', while 'Argonauts' jets headed in the opposite direction, to Yokosuka, Japan. After the terrorist attacks of September 11, 2001, VFA-147 participated in Operation Noble Eagle, flying combat patrols over Los Angeles. During Operations Enduring Freedom and Anaconda, 'Argonauts' pilots, flying off the USS *John C Stennis* (CVN 74) conducted strikes against Taliban and al-Qaeda forces in Afghanistan.

During Operation Iraqi Freedom, the 'Argonauts' and Carrier Air Wing (CVW) 9 operated from the USS *Carl Vinson* (CVN 70) for an eight-month deployment beginning in January 2003. ▢



**Above:** An 'Argonauts' F/A-18E, 166447/NH-212, tears through a canyon in one of eastern California's low-flying areas prior to the squadron trading in its 'Rhinos' for F-35Cs. Patrick Roegjes **Below:** A pair of F-35Cs from the US Navy's first operational Lightning II squadron – VFA-147 based at NAS Lemoore – formate for a photo exercise last November. US Navy/Chief Mass Communication Specialist Shannon E Renfro



Another combat deployment with CVW-9 and USS *Carl Vinson* took place in support of Operation Iraqi Freedom in January 2005. The following year, the same team was back in action supporting both Iraqi Freedom and Enduring Freedom, flying in excess of 4,500 hours, including 409 combat sorties.

## 'Rhinos' arrive

The squadron began conversion to the F/A-18E Super Hornet in October 2007, a process successfully completed the following February. After completing pre-deployment workups in late 2008, the 'Argonauts' deployed again in January 2009 for a six-month deployment aboard USS *John C Stennis* with CVW-9 – the unit's first cruise flying the F/A-18E.

Once operating the F/A-18E, the squadron stepped up its deployment tempo. During its 2010 pre-deployment workup cycle, the squadron was awarded the 2009 Pacific Arleigh Burke Fleet Trophy for its enormous strides in battle efficiency since transition to the single-seat Super Hornet. In 2013, the 'Argonauts' maintenance team won the Golden Wrench Award and the LTJG Bruce Carrier Maintenance Award for outstanding maintenance.

In December 2017, VFA-147 completed a six-month deployment with CVW-11 embarked on USS *Nimitz* (CVN 68) and returned to its home base at Naval Air Station Lemoore, California.

## Super Hornet to Lightning II

Almost immediately after returning home, the 'Argonauts' began the process of conversion from the F/A-18E to the F-35C. Although some tuition took place at Eglin Air Force Base, Florida, most of the training for the maintainers and pilots took place at NAS Lemoore. VFA-147 personnel worked with their VFA-125 colleagues to complete the required qualifications and syllabus events to gain hands-on experience with the aircraft. Maintaining the new jet requires more space, and a new hangar has been constructed for the base's F-35Cs.

A mixture of F-35Cs from VFA-101 'Grim

Reapers', VFA-125 and VFA-147 – all assigned to Commander, Joint Strike Fighter Wing (CJSFW) headquartered at Lemoore – were used to facilitate the training and certification of the US Navy's first operational F-35C squadron. VFA-147 received a first Lightning II – serial 169305/'NH-407' – 'on the books' in early October last year.

Since the F-35 lacks a two-seat trainer variant, basic training principles were taught using a full-mission simulator. Several simulators are on hand at NAS Lemoore and additional assets are scheduled for delivery as the programme expands. Security Chief Joseph Walter of VFA-125 told *AFM*: "The simulator is very accurate and resembles the real-time situation to a very high degree of detail."

After almost three months of simulator training, VFA-147 carried out its first flight with the F-35C on April 18 last year with LT Dave 'Strokes' Hinkle at the controls.

At the time, Lt Hinkle said: "In the back of my mind, I knew this day would happen eventually, but I still can't believe that we are here, we are doing it and I have the privilege of being a part of this amazing programme. When you realise what this day means, not just in the context of our squadron's history, but also what it means to the US Navy, it is both simultaneously humbling and empowering to catch a glimpse of what's in store for our community."

## Air wing integration

Last summer, six F-35Cs from both VFA-147 and VFA-125 participated in air wing integration exercises with F/A-18E/Fs, EA-18G Growlers and E-2D Advanced Hawkeyes aboard the carrier USS *Abraham Lincoln* (CVN 72). The integrated air wing operation – Operational Test-I (OT-I) – was a precursor to the formal initial operational test and evaluation (IOT&E) phase and marked the Lightning II's first operations as part of a regular air wing, in this case CVW-7.

On October 19, the CJSFW issued the 'Argonauts' with its interim safe-for-flight operations certification status. This was the final step before the squadron's formal conversion from F/A-18E to F-35C and one ▶



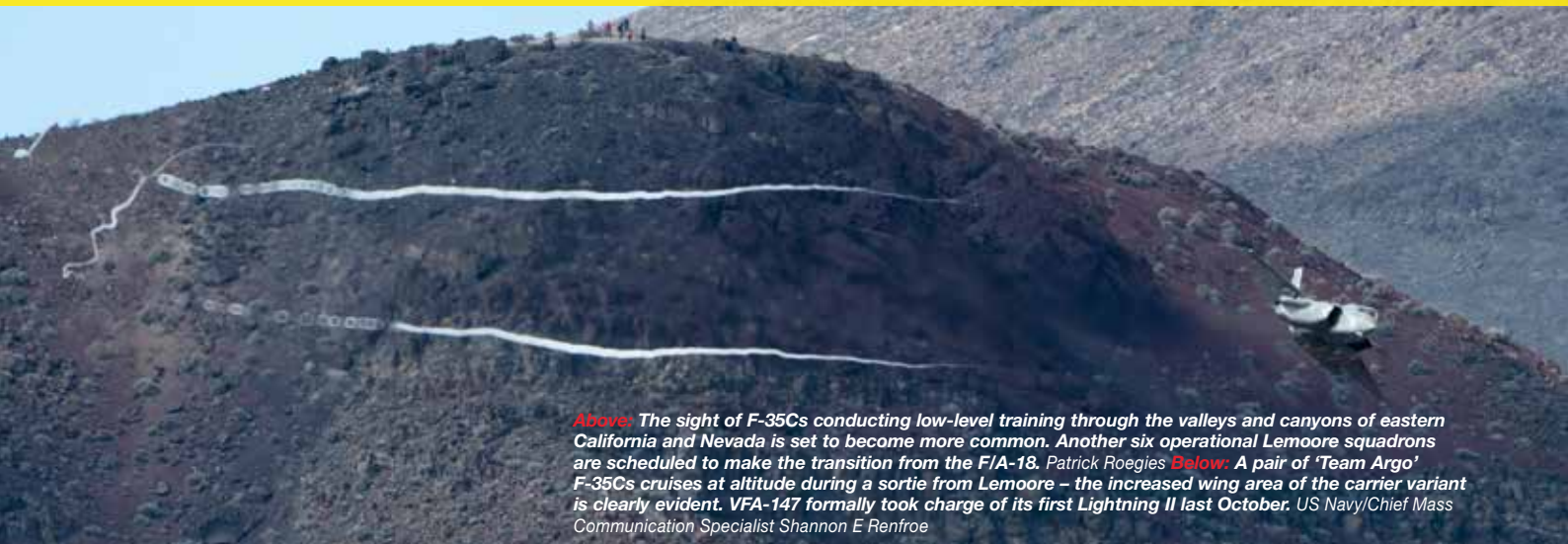


A pair of F-35Cs in 'Argonauts' markings aboard the USS 'Abraham Lincoln' while Super Hornets assigned to VFA-103 and VFA-143 undergo pre-flight checks. The warship was taking part in carrier qualifications in the Atlantic last August 21. US Navy/ Mass Communication Specialist 1st Class Brian M Brooks



**Above left:** F/A-18E 166443/'NH-206' recovers to Lemoore to complete one of VFA-147's final Super Hornet missions. The 'Argonauts' technically began transition to the F-35C in December 2017 after returning to Lemoore following a six-month deployment aboard the USS 'Nimitz' as part of CVW-11. Patrick Roegies **Above:** Looking pristine under the California sun, serial 169161/'NH-403' is one of the first F-35Cs assigned to VFA-147. Known to the Lockheed Martin factory as CF-25, this aircraft served with VFA-101 'Grim Reapers' at Eglin AFB – the initial F-35C FRS – before being transferred to the 'Argonauts'. Patrick Roegies **Left:** A member of the deck crew directs an F-35C on the flight deck of the Nimitz-class carrier USS 'Abraham Lincoln' during air wing integration exercises in the Atlantic last August. The jet already wears partial VFA-147 markings. US Navy/Mass Communication Specialist 1st Class Brian M Wilbur **Below:** F-35Cs from VFA-147 over Lemoore – home of the US Navy's Joint Strike Fighter Wing. The wing was formally established on October 1 and is charged with overseeing training, manning and readiness of all the service's F-35C squadrons. US Navy/Chief Mass Communication Specialist Shannon E Renfro





**Above:** The sight of F-35Cs conducting low-level training through the valleys and canyons of eastern California and Nevada is set to become more common. Another six operational Lemoore squadrons are scheduled to make the transition from the F/A-18. Patrick Roegies **Below:** A pair of 'Team Argo' F-35Cs cruises at altitude during a sortie from Lemoore – the increased wing area of the carrier variant is clearly evident. VFA-147 formally took charge of its first Lightning II last October. US Navy/Chief Mass Communication Specialist Shannon E Renfro

of the crucial steps towards the US Navy's F-35C programme achieving initial operational capability (IOC), planned for February.

After the squadron independently completed carrier operations aboard the USS *Carl Vinson* (CVN 70) late last year, VFA-147 finally received the full safe-for-flight operations certification on December 12. Finalisation of this process ensures the squadron has sufficient qualified personnel to implement safety and maintenance programmes in support of fleet operations.

VFA-147 commanding officer CDR Patrick Corrigan explained: "Since we returned from deployment [in December 2017], our team has been driving toward fully bringing [the F-35C] online for the navy." He continued: "As the 'Argonauts' close out 2018 and the final stages of our safe-for-flight certification, we continue to exhibit the relentless drive required to meet transition goals and milestones. With this certification, we are announcing that we have the right skills, training and people to take this mission and execute it, to its fullest potential."

The safe-for-flight operations certification includes equipment, personnel and procedures and requires the squadron to be in the physical custody of at least 30% of the assigned aircraft. Other requirements



include the installation and operation of the Autonomic Logistics Information System (ALIS) – the technology that allows F-35 operators to maintain, plan and sustain its systems over the life of the air vehicle.

Joint Strike Fighter Wing commander, CAPT Max McCoy said: "The 'Argonauts' safe-for-flight operations certification was earned through the herculean effort of squadron sailors and is an acknowledgement that they have

developed the skills to safely maintain and operate the F-35C." He added: "We eagerly look forward to declaring IOC and integrating the F-35C into the Carrier Strike Group. This aircraft is a key component to maintaining the US Navy's dominance anywhere in the world."

### Next step: IOC

IOC will be declared once the full capability of the US Navy's F-35C has been demonstrated and all remaining criteria are met. Once IOC has been acquired, VFA-147 will continue to work towards successful integration of the Joint Strike Fighter in the fleet. The 'Argonauts' plan to make a first deployment in 2021 embarked in the USS *Carl Vinson*, but this date could potentially be moved forward if required.

The US Navy's plans for the future Joint Strike Fighter Wing call for additional F-35C squadrons to operate alongside the F/A-18E/F. Although the next squadrons to convert to the F-35C haven't been selected, construction work has already begun on new hangars at NAS Lemoore – ultimately, the California base is expected to be home to seven deployable F-35C squadrons plus VFA-125, the FRS. Before long, the Joint Strike Fighter Wing's main focus will be expanding the F-35C capabilities within the US Navy and managing the conversion of all selected squadrons to the fifth-generation fighter. **AFM**

**Right:** 'Argonauts' pilot CDR Kyle Jason, F-35C Lightning II Fleet Integration Team officer in charge, performs pre-flight inspection on one of the squadron's jets at NAS Lemoore last November. US Navy/Mass Communication Specialist 3rd Class Jason Isaacs



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