

# 0-Level Reform: Lemoore Strike Fighter Squadrons Returning More Jets to Flight Line



F/A-18E Super Hornets from Strike Fighter Squadron 136 “Knighthawks” fly in formation during a photo exercise over the California coast. The Knighthawks are an operational U.S. Navy strike fighter squadron based at Naval Air Station Lemoore, California, and are attached to Carrier Air Wing One. U.S. Navy / Chief Mass Communication Specialist Shannon Renfroe

LEMOORE,

Calif. – Two Navy Super Hornet squadrons at Naval Air Station (NAS) Lemoore,

California, have reduced maintenance turnaround times and are boosting aircraft

readiness as part of naval aviation’s maintenance reform initiatives under the

Naval Sustainment System (NSS).

The NSS

initiative leverages best practices from commercial industry to help reform

aspects of naval aviation’s fleet readiness centers, organizational-level

(0-level) maintenance, supply chain, engineering, and maintenance organizations

and governance processes. Initially, the NSS is concentrating on getting the

Navy F/A-18 Super Hornet fleet healthy before rolling out the approach to every

Navy and Marine Corps aircraft.

## Strike

Fighter Squadrons (VFA) 22 and 122 were the first to implement 0-level maintenance reforms following visits from commercial aviation consultants in December and January.

## Reforms

include assigning crew leads to manage the maintenance on each aircraft and reorganizing hangar spaces, parts cages and tools.

## **Squadrons Empower Petty Officers**

The most significant change has been the delegation of ownership over each aircraft in for repairs from the squadrons' maintenance material control officers, or MMCOs, to individual crew leads comprised mostly of first-class petty officers.

Traditionally, MMCOs must keep track of the status of each aircraft in for maintenance as well as the Sailors working on them, and that's in addition to deciding what maintenance actions are required for each jet and which aircraft are safe to release for flight. Assigning junior-level crew leads to each jet removes some of that burden from the MMCOs and has led to improved communication and increased accountability.

"The crew leads are not making the maintenance decisions; that's still done by the

maintenance controllers, but what it allows for is it sheds those maintenance control chiefs of having to know every status of every jet, of every person, all day long," said Lt. Cmdr. Brandon Michaelis, O-level reform champion for Commander, Naval Air Forces (CNAF). "So they can focus on releasing safe aircraft by empowering those first-class petty officers, who can now own that process and know where the people are, know the status of the parts, and brief that up the line."

For the petty officers accustomed to doing their job a certain way, reform did not come easy. But the benefits have been evident, said Aviation Electronics Technician 1st class Victor Perez, the leading petty officer for VFA-122's avionics shop and one of the squadron's selected crew leads.

"At first the changes didn't feel productive, because we didn't really understand it, but now that we've had some time with it, it's definitely helped improve our processes and communication," Perez said.

Used to focusing exclusively on avionics, Perez said serving as a crew lead has forced him to approach the maintenance of his assigned aircraft more holistically. The increased responsibility of bringing an entire jet back online ultimately leads to a greater sense of accomplishment, he said.

“You get kind of personal with an aircraft,” he added. “Some aircraft are easy, and some are a struggle to get through. Rather than working on a jet for a couple hours to complete the one thing assigned to your shop and then moving on to the next jet, this way you take more ownership toward completing the whole thing.”

In some cases, exceptional second-class petty officers have also been considered for crew lead, including Aviation Electrician’s Mate 2nd Class Michaela Zadra, a member of VFA-22’s quality assurance division. Having crew leads that can focus on individual jets – and communicate with the various maintenance shops – relieves maintenance control from having to keep near-constant track of as many as a dozen aircraft at a time, Zadra said.

“Crew leads have cut down on empty communication, so now I, as a maintainer who is not stuck behind a maintenance control desk, can walk around to each shop and talk to them personally,” she said. “There’s a lot more communication one-on-one, instead of one-to-one-to-one and then to maintenance control. It’s definitely helped with communication and productivity with the jets.”

In tandem with the crew lead concept has been the utilization of a whiteboard alongside

each aircraft that informs anyone passing by as to the jet's status.

Information on the boards includes the names of the crew chief and additional personnel assigned to the aircraft, what maintenance is needed, and the expected completion date.

"If you physically walk through one of our hangars today, you can tell which ones have been reformed and which ones haven't," said Vice Adm. DeWolfe H. Miller III, CNAF. "You know the exact status of that airplane, you know who's working on that airplane and when they expect that airplane to be up. There's going to be a crew lead who has that ownership."

In addition, the two squadrons have begun treating the spaces around each Super Hornet in their hangars as dedicated workspaces, with all necessary tools and parts kept beside the aircraft rather than back in one of the various maintenance shops.

"We're now treating the airplane a little more, as an analogy, like a patient getting surgery," Miller said. "I am the doctor as the maintainer, and I said, 'scalpel,' and my tool is right there. What we're seeing with that sort of approach, having our tools next to the airplane, having our status board next to the airplane, everything is going to the point of action

being around that airframe, and we're seeing a really significant improvement in our mission capable rates."

Both squadrons have also begun keeping larger parts in a centralized "parts cage" in the hangar, dramatically reducing the amount of time Sailors spend traversing the hangar in search of equipment rather than with their hands on an aircraft.

"It may be five minutes here or five minutes there, but over the course of a day across all those technicians, that's a lot of time saved by having those parts close to where the job is being done," Michaelis said.

### **The 84-Day Corrosion Inspection**

Together, the changes have helped the squadrons achieve one of the first goals of 0-level reform – reducing the turnaround time for routine 84-day corrosion inspections down from 10-14 days to three days.

The 84-day inspection, so called because Super Hornets receive one every 84 days, is one of the most common checks conducted on the jet and is officially supposed to take three days.

"Our average is about 10 to 14 days," Miller said. "It's really important for us to

put some discipline into achieving these checks on a predictable three-day pattern.”

After meeting with consultants, VFA-22 was the first squadron to pilot reforms aimed at reducing the 84-day inspection time.

“They were able to do it in two-and-a-half shifts, and as we’ve been going through the process with other squadrons, we realize that yes, three days in itself is sufficient, once we weed out the inefficiencies,” said Lt. Hasely Clarke, assistant maintenance officer for Strike Fighter Wing Pacific.

Clarke said many of those inefficiencies arose from work centers waiting on one another to be finished with an aircraft before beginning their own tasks.

“There was a lot of waiting time in between,” he said.

Time management, communication and multitasking between shops have all improved following the 0-level reform, Zadra said, noting shops were encouraged to identify which of their tasks could be performed alongside another’s simultaneously. For instance, Zadra said she can check the lights in the cockpit from the side of the jet while someone from the avionics shop inspects instrumentation inside the cockpit.

“It cuts down a lot on worker hours, so we can minimize the time on the inspection,” she said.

### **Initial Skepticism**

A former MMCO, Michaelis said he was skeptical of the O-level reforms when they were initially proposed, but has come around after seeing how VFA-22 and VFA-122 have put the reforms into practice.

“It’s been a tough pill to swallow, to see how inefficient even when I was in that position, even though I thought we were on point every single time,” he said.

“To now look back and go, ‘Wow, there were a lot of places where I could have improved.’ So, that’s what’s made me a believer, is being able to look in hindsight and realize there’s tons of this stuff that I wish I had when I was an MMCO.”

Michaelis said the plan is to take the reforms to VFA squadrons at NAS Oceana, Virginia, before rolling them out across the Super Hornet community and, ultimately, to other platforms.

“As we migrate this and expand it across all type-model-series, I’m excited about what this is going to do for our future,” Miller said.

Further

evidence of the reform's efficacy will come when squadrons can keep their

Sailors on normal work schedules while preparing for deployments, Michaelis said.

"Before we go on detachments or on deployment, we often work Sailors 12 [hours] on, 12 off, sometimes seven days a week," he said. "The proof is when, on a Thursday, we can let our people out for a three-day weekend because our jets are up and ready to go, and we saw that recently in one of our transformed squadrons."