



Fabric Hangars Help FRCSW Preservation Program



Commander, Naval Air Forces Vice Adm. Mike Shoemaker, left, is joined by Fleet Readiness Center Southwest (FRCSW) Commanding Officer Capt. Craig Owen and logistics management specialist Jamie Riddle during a tour of the new F/A-18 Hornet fighter preservation facilities at the FRCSW flight line. (U.S. Navy photo)

NAVAL AIR STATION NORTH ISLAND - "We have a mishmash of full birds and darts in here," said Tim Guilbert as he walked between the F/A-18 legacy and Super Hornet aircraft stored in a cavernous new tension fabric aircraft hangar at the Fleet Readiness Center Southwest (FRCSW) Test Line.

The "full birds" have wings, the "darts" don't.

About 115 feet in width and almost as long as a football field, the hangar is well lit, ventilated and climate-controlled by two gas and electric units located outside of the building to regulate the humidity inside.

"Our optimum health and humidity is 35 percent relative humidity plus or minus five. We want to be in the 30 to 40 percent range," Guilbert said.

The production line manager and preservation supervisor and Naval Aviation Maintenance Program (NAMP) aircraft preservation manager, Guilbert oversees the FRCSW preservation program.



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And thanks to Commander, Naval Air Forces (CNAF) the program recently received two hangars to help the command manage its F/A-18 preservation program.

Costing approximately \$2.5 million each and able to accommodate up to 16 full Super Hornets, or 36-40 legacy “darts,” the hangars’ sole purpose is for storage. They are not outfitted for repairs or maintenance activity. Construction took about eight months.

The fabric “skins” are made of flame-resistant polyester pulled over a framework of steel. The materials can last five to 10 years, dependent upon environmental factors.

“The new hangars will minimize the cost of our level 2 preservation maintenance cycles,” Guilbert said. “We had 60 plus aircraft, and at one time we had almost 90 Hornets in level 2.”

There are four levels within the preservation program.

Level 1, not applicable to FRCSW, is preservation at the squadron level.

Level 2 occurs upon an aircraft’s induction, and encompasses the preservation procedure which includes fuel system preservation, caps and plugs. Aircraft in a level two preservation are typically seen wrapped with a laminated metal foil to prevent moisture contamination at intake openings.

Aircraft may remain in a level two state for up to one year.

“After one year you have to refresh them and do the whole thing over again. In the meantime, there are maintenance schedules that include daily inspections, seven-day, 28 and 56-day inspections all with different requirements. And there are heavy weather inspections where we inspect any wrapped areas and check for water intrusion,” Guilbert said.

“The goal of level 3 is if the shelter is there, the aircraft are put into a ‘dynamic level three,’ which means to take the whole aircraft and put it in a climate-controlled environment,” he said.

Level 4 signifies when the aircraft have reached an overhaul or Planned Maintenance Interval (PMI) cycle, a time when the requirements for a stringent level two or three can no longer be met.

If parts are unavailable during the analysis of overhaul or PMI, work must stop and the aircraft may revert back to a level 3 preservation state depending upon the parts arrival date.

“If it was level 2 (under this scenario) we would have to wrap them back up, but now we have the level 3 capability with the hangars and can hold them for the duration,” Guilbert



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noted.

Overall, the preservation process takes about 50 hours per aircraft, he said.

FRCSW is currently slated to receive a third tension fabric aircraft hangar at its test line in late June 2017. It will exclusively store H-60 Seahawk helicopters.