



FRC SW

ALMANAC

Volume 5 - Issue 2



**Last UH-1N
Undergoes
IMP by
FRC SW**



**FRC SW Site – Camp Pendleton:
CoNA Paint Job Honors
Navy Cross Recipient**

Skipper's Corner: Change of Command Corner



Capt. Fred Melnick

Whether at the flight line, one of our airframe maintenance lines, or one of the manufacturing shops in Building 472, I am constantly reminded of the crucial role we play in the Navy's defense of our country.

The equipment and buildings of this facility are nothing without the driving force that makes ours the greatest Navy in the world: our people.

Each of you plays a vital role to ensure that the aircraft flown by our pilots in the fleet perform safely and effectively to complete their missions.

During the past two years, our dedicated staff garnished FRCSW a number of unprecedented accomplishments within the naval aviation community: We became the first command in the Navy to achieve Aerospace Standards 9100/9110 registrations in 2009; that same year, FRCSW was named the single Gold-level recipient of the California Award for Performance Excellence (CAPE); and one year later, we became the first naval facility to earn FAA Repair Station Certification.

These achievements reflect the way we conduct business, and affirm our commitment to continual improvement. I am quite confident that more goals and aviation standards will be reached, if not surpassed, in the future.

My tenure as the FRCSW Commanding Officer has been a rewarding experience. On August 4, I will be relieved by Capt. John Smajdek. I know our culture of success and achievement will continue and expand under his leadership.

Capt. Smajdek will be joined by Capt. (sel.) Donald Simmons who will serve as our next XO. No stranger to the FRC family, Capt. (sel.) Simmons comes to us as the previous commanding officer of FRCWP.

Together, these officers will ensure that FRCSW has the resources and support to accomplish its mission and the core values of continual improvement to support our Navy in the defense and service to our country.

My next assignment will be at COMFRC. I look forward to the future challenges facing the FRCs, and know full well that FRCSW will continue its role as the leader, innovator, and cornerstone of the Naval MRO community.

FRED MELNICK
Captain, U.S. Navy
Commanding Officer



Fleet Readiness Center Southwest



Staff

COMMANDING OFFICER
Capt. Fred Melnick

EXECUTIVE OFFICER
Capt. John Smajdek

COMMAND ADDRESS
Commanding Officer
Fleet Readiness Center Southwest
P.O. Box 357058
San Diego, CA 92135-7058

FRCSW WEBSITE
<http://www.navair.navy.mil/frcsw>

FRCSW PUBLIC AFFAIRS OFFICE
619-545-3415

OMBUDSMAN
Cari Goad
619-301-7091
FRCSWombudsman@gmail.com

**WORK SCHEDULE STATUS &
SPECIAL INSTRUCTIONS IN EMERGENCIES**
1-866-269-6590

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MISSION
DELIVER RESPONSIVE MAINTENANCE, REPAIR AND OVERHAUL PRODUCTS AND SERVICES IN SUPPORT OF FLEET READINESS AND NATIONAL DEFENSE OBJECTIVES.

VISION
BE THE PREFERRED PROVIDER OF INNOVATIVE AVIATION MAINTENANCE SOLUTIONS, COMMITTED TO CUSTOMERS, PARTNERS, WORKFORCE, AND COMMUNITY.

VALUES
INTEGRITY (HONESTY, ACCOUNTABILITY, PERSONAL RESPONSIBILITY), TEAMWORK (OPEN COMMUNICATIONS, TRANSPARENCY, INFORMATION SHARING), MUTUAL RESPECT, AND WORKPLACE DIVERSITY.

PUBLIC AFFAIRS OFFICER
EDITOR
GRAPHIC ARTIST
PUBLIC AFFAIRS SPECIALISTS
PHOTOGRAPHERS

Mike Furlano
Jim Markle
Chuck Arnold
Leandro Hernandez
Jim Markle
Joe Feliciano
Scott Janes

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America's Navy – A Global Force for Good

FRCSW

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About the Cover

Painters Carter Morgan, left, and Stefan Mussen stand with the UH-1N Twin Huey helicopter painted to reflect the scheme used in 1968 during the Vietnam War and to honor Navy Cross recipient LCpl. Gordon Phelps. The aircraft was also the last UH-1N to complete the Integrated Maintenance Program at FRCSW Site – Camp Pendleton.

*Photo by Jim Markle,
Illustration by Chuck Arnold*

The original NAS North Island tower. Built in 1920, it is now the home of Commander, Naval Air Forces (CNAF) Headquarters. *Photo by Mike Furlano*

FRCSW Site Camp Pendleton Bids Farewell to UH-1N Twin Huey



When the artisans of Fleet Readiness Center Southwest (FRCSW) – Site Camp Pendleton left work on March 4, it was a day very few of them would likely forget: It was the last time they would perform the scheduled maintenance to a UH-1N Twin Huey helicopter.



Aircraft inspector Chris McElfresh repairs the pilot door frame to an AH-1W Super Cobra.
Photo by Jim Markle

The Marine Corps is retiring the aging UH-1N Huey and replacing it with the newer UH-1Y Super Huey.

Officially the “Iroquois” series, the versatile UH-1 has served the Marines since 1964 as a material and troop transport, medical evacuation, and as a gunship.

“We sold our first H-1N model in 2002,” said FRCSW – Site Camp Pendleton manager Ed Roberson. “Since that time, we have completed 134 Integrated Maintenance Program (IMP) events to that model. We’ve also done a significant number of in-service repair (ISR) events, from tailboom rework to complete crash damage rework.”

The IMP targets the airframe integrity of the helicopter platforms serviced by FRCSW – Site Camp Pendleton which include the UH-1N and the AH-1W Super Cobra attack helicopters of Marine Air Group (MAG) 39 and Marine Aviation Logistics Squadron (MALS) 39.

The UH-1 IMP cycle occurs in 36-month intervals following a one-time induction inspection. During the planned maintenance intervals-one (PMI-1) and PMI-2, aircraft are disassembled, inspected, and repaired.

“We’re hoping that the IMP on the UH-1Y won’t be any different. For all intents and purposes, we’ll be taking it apart just as we did the N model. The inspection criteria will be the same, and hopefully the rework won’t be quite as labor intensive,” Roberson said.

Service to the H-1Y Super Huey prototype IMPs should begin by the 4th quarter of this fiscal year.

The primary difference between the two UH airframes is the UH-1Y cabin is approximately 18 inches longer, and the UH-1N two-bladed rotor system is replaced with a four composite-blade system.

“The H-1Y has an increased payload and a significant increase in airspeed, as well. The technology is much newer, digital dash and health systems permanently installed to monitor while flying, while the 1N model never had anything like that,” Roberson noted.

“The health and usage monitoring system tracks vibrations and system irregularities within the drive train system. That being said, we anticipate we’ll see less structural damage in areas like the tailboom because these management systems are going to identify areas that are out of limits or approaching limits much sooner than 200 or 400 flight hours, which was when we would see the legacy (UH-1N) models,” said Roberson.

“Currently, there are about 28 of the H-1Ys on the flight line here,” Roberson said. “Four are deployed in Afghanistan, and of those, three are due to rotate back here in seven to eight months.”

Meanwhile, the site’s 48 artisans will continue maintenance services to the AH-1W Super Cobra roughly until FY 2017. Like the Huey, the Super Cobra AH-1W is also slated for replacement. It will be upgraded by the AH-1Z model.

“The ‘Z’ model Super Cobras just passed operation evaluations this past summer, and were granted full rate production from Bell Helicopter. They should be delivered a few at a time in eight to nine months, and we don’t expect to begin any IMP events on them this year,” Roberson stated.

“Because of the logistics of getting the tooling, support equipment and the specifications justified, we’re looking at four to four and a half years after delivery on starting the IMP events, and after that they’ll fall in every three years,” he added.

As the Marine Corps updates its helicopter assets, Roberson said that FRCSW – Site Camp Pendleton and MALS 39 will work closely to coordinate the IMP rotation cycle of aircraft earmarked for duty in Afghanistan and Iraq. The goal is to ensure the airframes do not exceed their three-year fixed induction date for PMI-1 and 2 services.

“It’s helping the material condition and readiness of the aircraft,” he said. ▲

Cpl. Andrew Jones, left, and Cpl. Dan Quinn, both from Marine Light Attack Training Squadron 303, remove the M60D machine gun from the UH-1N Twin Huey prior to relocating the aircraft to their hangar at Camp Pendleton.



UH-1N Twin Huey



FRCSW – Site Camp Pendleton teammates in front of the final UH-1N Twin Huey to undergo scheduled maintenance under the Integrated Maintenance Program at MCB Camp Pendleton. The Marine Corps is replacing the UH-1N with the UH-1Y Super Huey.



FRCSW Site Recognizes CoNA, Navy Cross Recipient

The final UH-1N Twin Huey helicopter to complete the Integrated Maintenance Program at FRCSW Site Camp Pendleton was also the first aircraft painted by the site to commemorate the Centennial of Naval Aviation, and simultaneously, to recognize Navy Cross recipient and Vietnam Veteran Lance Cpl. John G. Phelps, whose name appears on the nose of the helicopter.

The aircraft is the 38th UH-1N painted at FRCSW Site Camp Pendleton's 1,440 square-foot facility.

"This aircraft took us a little longer to paint because we were working from a very old diagram that was very vague. The actual application of the paint was no different than any other color. But the final stenciling and what they wanted on it was different than what our manual showed," stated FRCSW Site Camp Pendleton manager Ed Roberson.

Assigned to Marine Light Attack Training Squadron 303 (HMLAT) at Marine Corps Base Camp Pendleton, the UH-1N is painted to a color scheme used during the late 1960s, when the Vietnam War was escalating; a time

when Lance Cpl. Phelps and three other crewmembers of his UH-1E Iroquois found themselves in a desperate battle for their lives, and the lives of four other American soldiers.

While escorting a medical evacuation mission on August 19, 1967, Phelps' aircraft, attached to Marine Observation Squadron Six (VMO-6), received a distress call from the pilot of an Army CH-47 Chinook helicopter that had experienced mechanical difficulties near a beach at Quang Ngai, a city located in central Vietnam.

When his aircraft responded to assist "... we saw four U.S. personnel lying on the beach, and around them, not less than 40 or 50 armed Viet Cong," crew chief Phelps wrote in his statement of the event.

The UH-1E immediately fired its guns and rockets, killing and scattering the enemy as the rescue effort began. As the aircraft landed between the wounded Americans and the Viet Cong, Phelps manned his M-60 while Gunnery Sgt. Leroy Poulson sprinted to the injured soldiers. Poulson easily returned with the first, but found the second man too heavy to carry.

Co-pilot Capt. Rupert Fairfield ran to help Poulson, and the two dragged the other soldier to the safety of the aircraft.

The Viet Cong were regrouping; and

when the third man proved too much for the Poulson and Fairfield, Phelps jumped from the UH-1E to help his crew mates.

"We were about 20 feet from the aircraft when a lone Viet Cong with a hand grenade came running from behind the aircraft. I let go of the wounded man and drew my pistol, firing all six rounds into the Viet Cong," Phelps wrote.

With all four soldiers aboard, the UH-1E lifted off as enemy gunfire rained toward it. But the aircraft had exceeded its maximum payload, and heading out to sea, perilously skipped off waves four times within one mile before picking up enough airspeed to escape.

While en route to the 1st Hospital Company at Chu Lai, (a seaport of Vietnam) Phelps and Paulson rendered first aid to two of the most critically injured soldiers, saving their lives in the process.

Editor's note: The Navy Cross is the highest medal awarded by the U.S. Navy, and the second highest awarded for valor. To earn a Navy Cross, the event must have occurred in the presence of considerable danger or at great personal risk. The medal was established by Congress in February 1919, and as originally authorized, could be awarded for distinguished non-combat acts. Legislation in August 1942 limited the award to acts of combat heroism.

F/A-18 Hornet Fighters: Mission Ready at FRCSW – Site MCAS Miramar

From its maiden combat mission against Libyan forces during Operation Prairie Fire in 1986 to the conflicts in Afghanistan and the global war on terrorism today, the F/A-18 Hornet stands as the premier first-strike fighter aircraft for the Marine Corps and Navy.

Operating from tactical squadrons and aircraft carriers for the past 25 years, many of the F/A-18 A-D Hornet models have surpassed their intended 6,000 flight-hour service life. To extend the life of the legacy F/A-18 Hornets and to keep the airframe combat-ready, the 26 members of Fleet Readiness Center Southwest (FRCSW) at Marine Corps Air Station Miramar perform

Planned Maintenance Interval-Two (PMI-2) inspections on the aircraft assigned to Marine Aircraft Group 11 (MAG 11).

For land-based aircraft, the PMI inspection is completed once every 12 years. For carrier-deployed aircraft, it is performed once every eight years due to the harsh salt environment while operating at sea.

PMI-2 includes an extensive corrosion inspection, structural fatigue testing, and the testing of the transmissions and associated bushings of the wingfold, and leading edge flaps of the aircraft. All problems and damages identified are repaired.

**“IT GIVES ME GREAT COMFORT AND RELIEF
KNOWING THAT I HAVE FRCSW ARTISANS HERE
ONSITE TO RESPOND ON A MOMENT’S NOTICE.”**

**– Aircraft Maintenance Officer Major Anthony Lyons,
MAG-11/MALS-11**



F/A-18C/D Hornets are positioned on the flight line of Marine Corps Air Station Miramar during the early morning fog. *Photo by MC1 Anastasia Puscian.*

PMI-2 PRE-INDUCTION

At FRCSW Site Miramar, Marine Corps personnel from Marine Aviation Logistics Squadron (MALS) 11 play an integral role in the PMI-2 process by handling some of the pre-induction procedures of the F/A-18 Hornets.

In addition to submitting any special work requirements for the aircraft, the Marines ensure all safety compliances prior to turning the aircraft over to the Site Miramar Tactical Airframes Production (TACAIR) technicians. Safety measures include defueling the aircraft; removing the aircraft’s external tanks; removing any circuit breakers not required for the PMI-2 inspection (such as the control landing gear); disarming the explosive charges for the deployable flight incident recorder, or “black box”; and disarming the rocket launchers on the wing tips.

Any loose gear and special support equipment, like ejection seats and intake covers, are also removed. Lastly, using a hydraulic pressure regulating machine, the Marines perform a “patch test” which is designed to identify contamination to the aircraft’s hydraulic systems.

MAG-11/MALS-11

FRCSW Miramar artisans prepare the Hornet for PMI-2 by performing an operational functional check of the aircraft’s two mission control computers, its circuit breakers, electrical systems, and airframe mounted auxiliary drive which powers the aircraft’s generators that run the aircraft’s fuel and hydraulic pumps.

Electrical systems and breakers must be intact to power the components checked under PMI-2. Similarly, the airplane’s hydraulic systems must be operational for applicable systems. Hydraulics which is not part of PMI-2 procedures is capped off.

F/A-18 PMI-2

PMI-2 is scheduled by the Navy. Once the schedule is finalized and funded, the FRCSW Miramar manager is provided the aircraft’s arrival date, assigned squadron, repair history, and any other requirements including modifications.

During FY 2010, the FRCSW Site Miramar team completed nine PMI-2 events to the six squadrons of MALS 11.

“Our regular crew consists of four mechanics, three sheet metal mechanics, two machinists, and an Examiner and Evaluator (E&E). The E&E evaluates the aircraft and the parts that come off of it,” said FRCSW Site Miramar F/A-18 crew leader Robert Drew.

“He also oversees the corrosion work and other areas where we may have work orders for ‘over and above’ issues, or repairs exceeding those of PMI-2,” Drew added.

(See Miramar F/A-18s, on page 16)

FRCSW Hosts “Boots on the Ground” North Island Visit





▲ Capt. Pete Hunt, NAE Integrated Resource Management Team director talks with FRCSW sheetmetal mechanics John Prince, Dwayne Crooks and David Deck as they remove fasteners from the top skin of an F/A-18 inner wing.

Photo by Joe Feliciano



← Gabe Dragucevich of the FRCSW Reverse Engineering Lab, gives a presentation to attendees of the NAS North Island Boots on the Ground event on May 11, 2011. The Boots on the Ground event helps the senior leadership of the Naval Aviation Enterprise see and interact with the people and innovations throughout the naval aviation community.

Photo by Joe Feliciano

To identify and develop strategies to improve business practices within the Naval Aviation Enterprise (NAE), Fleet Readiness Center Southwest (FRCSW) hosted Navy and Marine Corps senior leadership May 11 for a “Boots on the Ground” (BOG) visit to Naval Air Station North Island.

The intent of BOG is to provide leadership a direct view of AIRSpeed and continuous process improvements (CPI) that have been initiated within the NAE maintenance and supply sectors.

Maj. John DiGiovanni, CPI lead at Headquarters, Marine Corps Aviation Logistics Support Branch (ASL) 40, said that the replication of best practices throughout the enterprise are paramount to improvement, and that there will be barriers to overcome when implementing process replications.

“It’s not part of our culture to take a great idea someone else had, and accept it as our own and bring it forward. Everybody is doing things a little bit different,” DiGiovanni stated.

“During a BOG at Yuma we started seeing some trends of good practices that, for example, may not exactly fit each facility in how we set the processes in place at the organizational and intermediate levels,” noted Vice Adm. Allen Myers, Commander, Naval Air Forces.



Boots on the Ground

Cdr. John Fernandez, deputy program manager for the FRCSW Tactical Air (TACAIR) Program points to a structural area in the engine bay of an F/A-18 aircraft in Building 94 while briefing the senior staff of the Naval Air Enterprise during the North Island "Boots on the Ground" visit.

Photo by Joe Feliciano

The replication process will depend upon five requirements: Establishment of an SOP as to what is a replicable project or event; chain of command involvement; the Continuous Process Improvement Management System (CPIMS); and recognition and promulgation.

"The CPIMS will be used to measure the effectiveness of the replication process," DiGiovanni said. "An example would be taking the BOG to Marine Air Logistics Squadron (MALS) 24 and developing a metrics specifically addressing the response time of delivering parts to the flight line. That metric is taken through leadership support, made into a MALS enterprise metric, and promulgated out through policy so that every MALS will use that metric as to how we are supporting the flight line."

A group of commands will soon be selected to participate in a replication pilot program, DiGiovanni added.

Citing potentially smaller DOD budgets aimed to trim the federal deficit, Lt. Gen. Terry Robling, USMC Deputy Commandant for Aviation, said the FRCs stand to benefit from the NAE process.

"We find a lot of efficiencies and cost-avoidance through the NAE process," Lt. Gen. Robling noted.

Robling said that FRCSW's point-of-usage and kitting of tools to specific areas of aircraft maintenance exemplifies the efficient work flow procedures that can conserve money and manpower, and may be applied from the depot through the organizational level.

"FRCSW is probably the crown jewel of the FRCs in my view. I say that a little parochial because I was the commanding general at 3rd MAW up the road at (MCAS) Miramar and have had a very close relationship with them," Robling said.

"The enthusiasm from the FRC down to the squadron level really impressed me. Everybody was excited about doing the right thing for the customer --- from the men and women who fly the aircraft, to the lance corporals and seaman who work with them. So, if we're providing a product that everyone is happy with after all of the hard work and money that we put into it, then we've done our job," he said. ▲

NAE Leaders Gain Insight from BOG

By LCDR Timothy "Straw" Tuschinski
FRCSW Testline Director

On May 11th, 2011, Fleet Readiness Center Southwest (FRCSW) hosted a widely anticipated event at NAS North Island called "Boots on the Ground." The event provides first hand access to Naval Aviation Enterprise (NAE) leadership allowing them to view new products and tools, learn about ground breaking innovation, and meet the hard working individuals who are exerting their blood, sweat and tears to ensure that Navy and Marine Corps aircraft reign supreme.

Boots on the Ground, affectionately known as BOG, places admirals, generals, senior officers and enlisted right in the middle of the action, allowing everyone to obtain a better

understanding of current events in the business of Naval and Marine Corps Aviation. Events are conducted at various military locations throughout the year; however, the North Island BOG was considerably more challenging to orchestrate due to the sheer number of participants. The event was successful due mainly to the high level of professionalism displayed by FRCSW planners and staff.

This BOG brought together more than 70 Navy and Marine Corps personnel, including nine flag officers, to partake in the FRCSW-sponsored tour. Attendees included the Chief of Naval Air Forces, Vice Admiral Allen Myers, who is in charge of all Naval Aviation. Also in attendance was Lt. Gen. Terry Robling, the Deputy Commandant for Aviation USMC. It was not only a pleasure for the admirals and generals to meet the hard working individuals of FRCSW, who are dedicated to their country, but it was also a learning experience. During the

event NAE leadership was introduced to new maintenance concepts in addition to being given the opportunity to share best practices.

The event wrapped up with Vice Adm. Myers presenting a Flag Letter of Commendation to FRCSW sailor AS2 Israel Graham for his outstanding performance in process improvement reflecting the core spirit of the Naval Aviation Enterprise.

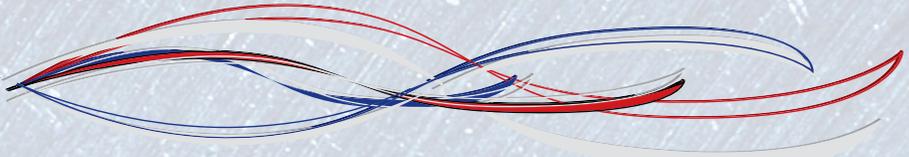
Each flag officer was then given a chance to speak on their individual "takeaways," following which action items were distributed so that each representative could take them back to their various communities.

The final portion of the event, dubbed "Hot Wash" was arguably the most important evolution since it allowed for the informational briefs presented to leadership during the day to be turned into decisional points for aviation leaders from the Navy and Marine Corps.

RADM Timothy Matthews, Commander, Fleet Readiness Centers, left, and RADM Thomas J. Moore, Director, Fleet Readiness Division, review an image for the MH-60 Common Cockpit system during a presentation in Building 463. Photo by Joe Feliciano



Out & About



Matthew Schreck, FRCSW Energy & Water Conservation Manager, presents the Crystal Award to Mr. Bill Reschke, FRCSW Plant General Manager, on June 1, 2011. The Crystal Award is given on a yearly basis to a large San Diego based organization in recognition of efforts at reducing energy consumption, emissions, and for taking progressive steps towards renewable energy. FRCSW environmental projects have allowed the command to reduce energy consumption, save millions of dollars, thus earning the 2011 award.
Photo by Scott Janes.

Friends and family welcome home the crew of the aircraft carrier USS Carl Vinson (CVN 70). The crew included many Sailors from FRCSW on detachment. The ship returned to San Diego June 15 following a seven-month deployment.
Photo by Jim Markle



The 3/4-scale replica of the Curtiss A-1 Triad aircraft built by FRCSW artisans to commemorate the Centennial of Naval Aviation is placed atop its perch above the newly built garden at the north end of Building 90, on July 6, 2011. The Curtiss Triad was the first aircraft procured by the U.S. Navy.
Photo by Mike Furlano

FRCSW Helps Finnish Air Force Expand Maintenance Capabilities

To improve the readiness of its F/A-18 C and D Hornet fighter fleet, the Finnish Air Force (FAF) sent six representatives to Fleet Readiness Center Southwest (FRCSW) in May to undergo flight control hydraulics maintenance training on the legacy airframes.

FAF Liaison Officer Capt. Mika Hamalainen said the week-long training held in Building 472 concentrated on stabilizers and electro hydraulic servo valves, which control the flow of hydraulic fluid to actuators.

“These assets are only repaired when needed, but we are also planning to do the overhaul as well. As these reach a certain point in their life span, it may be beneficial to repair beyond what is needed to include the surrounding components,” Capt. Hamalainen said.

“And that’s one of the reasons why we are here --- to see what the Navy does when the components come in: Do they only repair what’s wrong, or do they look at the other parts of the serviceable asset as well?”

The FAF currently operates 62 Hornets. The final assembly for the FAF’s 55 Hornet C models was done by Finnish aviation company Patria, which completed the last one in 2001. All Hornet D models were assembled in St Louis.

The majority of the F/A-18 maintenance and repairs is performed by Finnair, the largest commercial airline carrier in Finland, who also maintains a fleet of approximately 70 commercial aircraft.

“The Hornet flight control hydraulics and components are harder to repair than those in commercial aircraft,” Finnair engineer Juha Silvola stated. “Commercial aircraft generally have only one electrical channel, but in the F/A-18 components there are four electrical channels. The F/A-18 components also have a dual hydraulic system.”

“Some avionics equipment must be sent to the original equipment manufacturer (OEM) for repair or update, so we have the capability to do the scheduled maintenance for the aircraft, and most of the weapon replaceable assemblies and shop replaceable assembly’s maintenance,” Hamalainen said.

A Global Force for Good



Hydraulic systems mechanic Robert Fierro, left, assembles a stabilizer actuator of an F/A-18 Hornet fighter while Finnair artisan Henrik Salminen, center, and Finnish Air Force system engineer Petri Pertola look on. Salimen and Pertola were part of a six-member Finnish Air Force team who completed five days of maintenance training on legacy Hornet flight control hydraulics. *Photo by Jim Markle*

Though European capability to maintain F/A-18 flight control servos is available in Switzerland and Spain, the FAF prefers to “... come to the source,” Hamalainen said.

FRCSW not only oversees the engineering authority for the F/A-18 airframe, but repairs or overhauls more than 1,000 components quarterly in its hydraulics shop, according to hydraulic supervisor Dennis Turner.

Turner noted that a gradual increase in the number of components needing repairs coincides with the aging of the legacy Hornet airframes.

“The U.S. (Hornet) fleet is a bit older than ours and if we can see some of the technical problems encountered today, we know that eventually we’ll see those same problems and can be prepared to address them,” Silvola said.

Silvola and four other Finnair artisans were assigned with one FAF engineer to the flight control hydraulics training session.

“Once the customers complete the training here, they get a handle on it. We’ll send FRCSW artisans to assist customers when they’re required, but we don’t send them over routinely,” said logistics management specialist Steven King.

“This is a technical exchange—I was here 10 years ago and during that time I only had questions, but now it’s changing and we have experience also, and both of us are learning all the time. It’s very good idea for us to visit here and work together,” Silvola said.



Miramar F/A-18s

Continued from page 9

FRCSW Site Miramar technicians remove more than 14 components of the aircraft's wings and access panels. Major components removed include the aircraft's ailerons, or the hinges attached to the rear edge of the wing which control the aircraft's roll (up and down movement of the wings); trailing edge flaps, inboard and outboard leading edges, and both inner and outer wings and transmissions.

The planned turn-around time (TAT) for a PMI inspection is 39 days. During FY 2010, FRCSW Miramar TACAIR site not only met the TAT, but completed the inspection in an average of 22.3 days, approximately two weeks ahead of schedule, or 18 percent under the Navy's planned TAT.

FY 2010 PMI cycles required 1,100 manhours – 248 manhours or 19 percent under the Navy's 1,348-hour target, equating to a savings of more than \$19,000 per aircraft.

"The basic task is removing the wings, and going through our 'free play' checks which indicate if we have to replace bushings and bearings, aileron bushings, flap and actuator or stabilizer bushings," Drew stated. "Anything out of specification is annotated and marked during the induction phase. There are certain parameters that need to be met. We keep a record of them and provide the squadron a copy."

"The squadron will change any parts that we identify requiring replacement or repair. If they are unable to do it, because of manpower or supply system shortages, for example, we will assist them," said FRCSW Site Miramar F/A-18 overhaul and repair supervisor Matthew Fort. "In that case it becomes an in-service repair (ISR)."



Aircraft mechanics Fenando Valda and Pedro Ramos secure a fuel cell bladder prior to inserting it into the fuselage of an F/A-18 Hornet aircraft during In-Service Repair at MCAS Miramar.

Photo by Leandro Hernandez.

F/A-18 IN-SERVICE REPAIRS (ISR)

ISR work performed at Site Miramar is usually generated under one of two circumstances: unanticipated repairs or damage discovered during the PMI-2 induction process, and emergency or unanticipated repairs reported by the squadron.

ISRs were performed on five visiting squadrons that were deployed to training missions at MCAS Miramar during FY 2010.

"The squadrons have their inspections, like phase maintenance inspections, and they'll also have aircraft that are damaged which they'll bring in. Their QA people will identify the areas of the aircraft that

need to be worked on, and they will determine if those areas are organizational (O-level), or squadron level, which means they will work on them, or depot level. If the damage requires a depot level repair, the squadron will release a message that indicates the aircraft, and write a repair requirement report," Drew explained.

The FRCSW Site Miramar planner and estimator (P&E) verifies the repair level as determined by the squadron. Depot-level repair costs are primarily based upon labor, not materials. The P&E's request is sent to FRCSW North Island for approval, along with an estimate of the hours required to complete the repair. Once approved, the ISR is assigned to the appropriate technician.

"We'll complete ISR work concurrent with PMI-2 almost 99 percent of the time, so long as it's not something that

prevents the hydraulics from operating. This way, we can return the aircraft to the squadron faster," said Drew.

During FY 2010, the Site Miramar ISR program repaired 94 aircraft involving more than 400 ISR events at cost savings of more than \$26 million.

ISR work typically performed at FRCSW Site Miramar includes repairs to cracks on aft fuselage skins and upper dorsal decks, leaking fuel cells, and worn rudders, flaps, and landing gear door bushings.

"For electrical work, we have an electrician on-site. We get a lot of electrical damage, like burnt wire harnesses," Drew noted.

“THEY (FRCSW – SITE MIRAMAR) DO A GREAT JOB FOR US, AND ARE WILLING TO PUT IN THE EXTRA TIME TO GET THOSE LAST MINUTE THINGS NEEDED DONE TO OUR AIRCRAFT SO WE CAN MEET THE TIMELINES OF OUR MISSIONS.”

**– Material Control Officer 1st Lt. Jason Brooks,
Marine Fighter Attack Squadron (VMFA) 323**

Site Miramar’s machinists fabricate precision bushings and several straps used to repair aircraft doors. They also assist in the precision installation of engine mounts and boot straps. The Field Service Team provides repair procedures for nonstandard repairs, (repairs that are not covered under the aircraft publications) such as replacement of a skin.

In addition to its electrician and machinist, Site Miramar also employs an on-site engineer.

“The engineer was originally assigned to us for PMI-2 work, and can do anything except stress analysis. He’s completed more than 100 repairs this FY (2010), and usually gets us a TAT of two days on a repair,” Fort said.

“Having him here saves us time because we don’t need to contact an (FRCSW) North Island engineer, a process that can take up to nine days to resolve a repair issue. Also, our engineer keeps a database of templates for repairs that are repetitive. Keeping information like that on hand saves even more time, and helps us to return the aircraft faster to the squadron.”

F/A-18 ISR work totaled 18,921 manhours during FY 2010; 1,284 manhours over FY 2009. The increase is attributed to the growing number of returning aircraft that have been exposed to the harsh environments of Afghanistan and Iraq.

F/A-18 TECHNICAL DIRECTIVE MODIFICATIONS

Technical directive (TD) modifications are used to upgrade aircraft to newer operating or weapons systems. The scope and number of aircraft within the FRCSW cognizance that are assigned to receive TDs is determined by Naval Air Systems Command located in Patuxent River, Md.

Site Miramar completed more than 120 depot-level TD modifications to 20 F/A-18 Hornets last FY. Many TDs involve avionics system upgrades which provide the aircraft greater capabilities to support the warfighters.

Other TDs extend the life of the aircraft by repairing or modifying structures, such as replacement of an aluminum fuel cell floor with a stronger titanium floor. Due to the current Marine Corps deployment tempo, many aircraft required a short TAT to meet their deployment schedule in direct support of contingencies around the globe.

The largest TD Site Miramar has been involved with recently is the joint helmet modification. The joint helmet is a heads-up digital display that appears on the visor and provides the fighter pilots information they need to focus on different targets. Pilots may look in any direction and the information remains in their line of sight.

“For the two-crewman Hornet models, this TD allows the back seat pilot, who is the weapons officer, to also identify targets without the pilot having to look for them – it’s used for air-to-air and air-to-ground targets,” Fort said.

Eight joint helmet modifications were completed on F/A-18C model Hornets during FY 2010.

Another MOD incorporated was “AFC-534,” which provides aircraft the capability for forward looking infrared radar (FLIR). A FLIR detects heat and transmits an image to a video output, and is used by pilots to better support troops on the ground during night operations.

Like ISR events, smaller TDs are installed during PMI-2. Conversely, aircraft scheduled for PMI-2 that also require larger modifications are reclassified to a modification status.

FRCSW Site Miramar devoted more than 10,000 manhours to TDs during FY 2010; approximately 2,000 manhours, or 17 percent, under the Navy’s allowable limit with an average TAT of 36.7 days per modification. ▲

Awards

Applause

Retirements

Michael Alderman
Aida Barbera
Kenneth Brady
Chad Bright
Francisco Bustos
Shelby Emele
Richard Erickson
George Foster
Chester Gavin
Gene Graves
Cheryl Hespenehde
Gary Hunter
Constance Malone
Mitchell Mireles
Johnny Napalan
Teresita Pino
Paul Santiago
Everett Silva
Hoang Tran
Gabriel Velasquez
Albert Wertz

Promotions

Allen Allen
Andrew Applegate
Matthew Araiza
Tomas Barber
Kurt Butler
Billy Daniels
Gil Deleon
James Elgie
Lydia Ensor
Joseph Foster
Marvin Frizell
Frederick Gardner
Dave Geilenkirchen
Shane Hanson
Terry Hogan
Rosemary Huerta
Tracy Hunt
Michael Isyasa
Robert Jackson
Walter Jackson
Matthew Jones
Christopher Lacroix
Johnny Lam
David Manago
Teresa Neal
Jeffrey Norton
Daniel Nguyen
Matthew Obregon
Manuel Perez-Preve
Ian Poole
Carina Rankinen
Timothy Schupp
Michael Turner
Thea Vargas

Years of Service

5 Years

Reuben Herrereia
Ian Khoumborine
Ian Nguyen
Khanh Nguyen
Man Nguyen
Ian Poole
Christopher Venable
Seth Winkelman

10 Years

Paul Antonopoulos
Ronald Batty
Thomas Considine
Stephen Earner
Juan Gonzalez

John Morris
Teresa Neal
Albert Nguyen
Andrew Zablocki

15 Years

Gabriel Dragucevich
Michael Harrison
Terence Ongtawgo
Amir Walker

20 Years

Paul Donahue
Jeffrey Freedman
Erskine Kinzy
Gregory McCalester
Triet Nguyen
Tuong Nguyen
Rusico Pizarro

25 Years

Robert Carrasco
Van Cully
Robert Dominguez
Javier Escobales
Camerino Machado
William Moore
Nancy Scott
James Sharp
Frank Snook
Kham Thai
Gary Tinney
William Winne
Jimmy Yeh
Jeffrey Zeller

30 Years

Irone Campbell
Milda Delorosa
Chester Gavin
Donald Harmston
Randall Heath
Alvin Miller
Mitchell Morris
John Orlowski
Geronimo Paclebar
Melony Robertson
James Russell
William Scott
Melvin Scott
Michael Williams

35 Years

William Brown
Joseph Davies
Edward Fisher
Dinah Goodspeed
Abraham Gumbayan
Danny Howard
Dennis Ingram
Rogelio Izon
Betty Kozar
Bartolo Lopez
Cesar Lotero
Gordon Ludden
Bruce Odell
Stephen Romesberg
Donald Vandundy
Edward Whited
Jessie Williams

40 Years

Lee Davison
Lillian Grant
William Hickman
Titus Reed
Roy Santos
Robert Szuba

On the Spot

Kenneth Calver
Gerald Childers
Eduardo Cresini
Ruben Herrereia
James Hill
Ellis Jones
Manuel Jotie
Danny Maceno
Royce Moke
Christopher Painter
Florentino Quisay
Jose Ramos
Steven Randal
James Russell
Melvin Scott
Paul Toledo

Time-Off Award

James Davis
Hung Giang
James Hardie
Scott Johnson
James Pham
Edward Quinteros
Remigio Ravallo
John Roberts

Productivity Recognition

Year

James Horsfall

Quarter

Nestor Bariuau
George Blas
Kevin Brunson
Adam Gergen
Edwin Hawkins
Valerie Isales
Isaac Llamas
Leonard Martinez
Jerry Mendiola
Esteban Nicolas
Terry Parker
Jason Payne
Terri Reynolds
James Styliniski
William Wooldridge

Month

Terry Anderson
Mark Archuleta
Nestor Barrera
William Baughman
Emiterio Bumbasi
Richard Burris
Kenneth Calver
Jose Campa
Henry Castrence
Joselito Cervantes
Debra Curry
Christopher Davis
Ruel Dilonisio
Webste Dizon
Ernesto Espenida
Joseph Espinoza
Carol Flanagan
Earl Frazier
Cheryl Hespenehde
Terrance Kenny
George Kozlik
Joseph Krasko
Michael Kremer
Jason Kubitz

Eleazer Lopez
Phuong-Chi Ly
David McAdams
Cesar Morales
Charles Morris
Richard Pledger
Ian Poole
Kevin Porter
Victorino Poyoan
Efrén Ramos
Jaime Rangel
Ruth Richardson
Geoffry Ross
Danilo Sarsoza
Rodolfo Sebastian
John Sohl
Lenard Throngburg
Ngoc Trieu
Paul Tyler
Jung Yang

Sick Leave is Money

Michael Albert
Timothy Amerine
Richard Bitting
Joseph Bonilla
Janette Burris
Joseph Caoile
Robert Carrasco
Mark Corbilla
Edwin Davis
James Davis
Kenneth Dewell
Luc Doan
Duane Domingo
Thomas Drake
Lydia Ensor
Daniel Fischer
John Goelze
Mark Greenfield
Mario Guigayoma
Tedskip Guinto
Khanh Ha
Edward Harris
Richard Heinrich
Leandro Hernandez
Danny Howard
Joanne Jordan
Robert King
William Ly
John Maloney
Jameson Montgomery
Wilford Moore
Rowena Naidl
Kevin Okerman
Edward Padilla
Indar Rai
Edmundo Ramirez
Albert Robles
Shamira Smashe
Roger Stensland
David Triglia
Brandt Wirstrom
James Yaeger

Special Act

Joan Agustin
David Allison
Kevin Alexander
Neil Anstedt
Nestor Aranda
Eugene Array
Donald Bair
Kenneth Ball
Melina Baray
Brent Barnes
Joseph Biederman

Tinea Binion
Anthony Bishop
Richard Bitting
Travis Boecker
Timothy Bolden
Donald Booth
Bridget Breidenbach
Frank Brown
William Brown
James Brushaber
Jeff Buckingham
Benjamin Bunag
Louis Burns
Richard Burriss
Janette Burris
Craig Busby
Donald Butler
Stephanie Bye
Ernesto Camacho
John Cardenas
Ricardo Casalme
Teresa Cassama
Geraldo Chacon
Kelvin Chau
Jose Chavez
Kristen Childers
Hazel Childress
Simeko Christenson
James Chudy
Archivald Clemente
Donald Coles
Daniel Conley
Thomas Considine
Sheila Considine
Renato Coronel
Arlene Critchlow
Jose Cruz
Daniel Cunniff
Daniel Curry
Debra Curry
Percy Davis
Rick Defend
Brian Delrio
Nestor Dominguez
Gabriel Dragucevich
Gail Duffield
Stephen Duryea
Douglas England
Joseph Espinoza
Edward Evers
Carson Fanning
Florante Faustino
Pedro Fuentes
Henrico Fulgencio
Michael Galaz
Michael Garber
Felicia Garcia
Brett Gardner
Brandon Gemlo
Christopher Gibson
Jeffery Glover
Edwina Gobasco
Michael Godwin
Linda Goelze
Michael Gomez
Mishaal Gonzales
Russell Green
William Greer
George Gualle
Linda Guerra
Michael Hall
Kathleen Harris
Edwin Hawkins
James Hawks
Ruben Herrera
William Hickman
Robert Hill
Gary Hise

Tung Ho
Terry Hogan
Richard Hopkins
Gary Huber
Rosemary Huerta
Garrett Huguley
Gary Hunter
Larry Hyman
Donald Icaman
Donald Jackson
Donald Jenkins
Ajai Johnson
Gary Johnson
Oliver Johnson
Glen Jones
Kenneth Jordan
Victor Juarez
Vincent Kaporic
Robert Keim
Richard Kennedy
Ronald Kidwell
James Klein
Gregory Kohlbrand
George Kozlik
Michael Kremer
Chirstopher Krolik
Miles Kurashima
Denton Labar
Rolando Lapuz
Yolanda Laws
Benjamin Lee
Miller Lewis
Jennifer Lloyd
Walter Loftus
Simon Lozano
Michael Luster
William Ly
Rafael Magayanes
Edwin Manasala
John Manry
Janie Martinez
Raymond May
Brian McAfee
Mark McCaughey
Anne McCoy
Lynette McMahan
Lemoyno McManis
Alexander Mejia
Ricardo Mendoza
Danilo Mercado
William Mewborn
Guy Mewton
Armando Montoya
Carl Moraleja
Jonathan Moore
Walter Moran
Mitchell Morris
Eric Movido
Alvin Nakao
Ricardo Narag
Teresa Neal
Daniel Newell
Robert Oxley
Edward Padilla
Christopher Painter
Ronald Pangilinan
Terry Parker
Narcisa Pedrena
Derrick Pettit
Robert Picklesimon
Karen Polk
Geoffrey Pre
Jason Price
Richard Price
Francis Pitman
Edmundo Ramirez
Steven Randell
Alcide Richards

William Ridge
Henry Rimoldi
Robert Rollins
Hector Romero
Ernest Ross
Jeffrey Ross
Bridget Breidenbach
Ricky Roy
Mona Russell
Armando Salazar
Miriam Salcedo
Janet Sanchez-Roberts
Griselda Santa Maria
David Schiffner
Matthew Schreck
Dean Scott
James Sharp
William Shearer
Carl Shelley
Kristen Short
Michael Short
Armando Sison
Robin Sluder
Michael E. Smith
Michael J. Smith
Galileo Somerville
Karen Sommers
Roberto Songco
Lisa St. Mary
Chrys Starr
Willie Stroud
Benton Tam
Emily Taylor
Robert Tedeschi
William Thayer
Anthony Thompson
Gary Thompson
Kimberly Tomasino
Alexander Tortoles
David Triglia
Brian Trout
Penelope Ulander
Todd Uzzell
Patrick Valentino
Larry Veach
Christopher Venable
Mark Venzanni
Mary Vilicich
Barry Vison
Patrick Wells
Elizabeth West
Richard West
Seth Winkelman
Harold Williams
Matthew Williams
Shawn Willis
William Wooldrige
Russell Wong
Jung Yang
Joseph Yuzon

EMERGENCY DRILL

HAZMAT, CONFINED SPACE SIMULATION DETAILS

Scenario:

Unconscious victim was overcome by vapors while performing maintenance inside an H-53 port aft fuel cell.

This is the third summary of quarterly drills to enhance our preparedness in Safety, Environmental, Security and Emergency events and meet NAMP requirements. Look for us in future editions of Almanac, All Hands, and CCTV.

- Location: Building 378 Hangar.
- Type: HAZMAT, Confined Space Rescue drill and spill response.
- Date of Event: April 26, 2011

OUTCOME

- Shop personnel called 9-911 and positioned signal flag bearer outside of building within seconds of simulated incident.
- Simulated Fire and Rescue team arrived within 4 minutes.
- Employees knew to "Attend to Victim" and call "Man Down" - Time Out Training.



OPPORTUNITIES FOR IMPROVEMENT

- Employees and Supervisors attended to injury without putting themselves at risk.
- Employees knew to stay clear, spread the word and make way for rescue personnel.
- Evaluate location of spill kit.
- Evaluate response time of confined space Fire Rescue equipment.

WHAT CAN YOU DO?

Prepare For:

- What to do in case of Emergency.
- Who to call and who makes the call.
- What NOT to do (Do not attempt rescue by going in after the victim.)

Will you be prepared for the next emergency?

**For Further Information,
Contact FRCSW
Safety at:
(619) 545-3693**





Fleet Readiness Center S o u t h w e s t

Change of Command



Captain Fred Melnick



Captain John Smajdek

Captain Fred Melnick

will be relieved by

Captain John Smajdek

at

10:00 AM on August 4, 2011

at the

FRCSSW Test Line (Building 785)

For more information, contact your supervisor