Contract Civilian Maintenance Support in U.S. Marine F/A-18 Fleet Squadrons

Captain CP Ferrer

Major KJ Grissom, CG 8
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Introduction

Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) have taken a fairly significant toll on U.S. Marine Corps F/A-18 aircraft. Due to the increased operational tempo, F/A-18 aircraft have been flown at a rate far beyond what was predicted. As Brigadier General Robert Walsh, the former assistant deputy commandant for aviation stated, “In Iraq right now, we are flying our F/A-18Ds more than 100 hours per month – three to four times their normal utilization rate.”[1] This tempo has caused a significant decrease in the readiness of the aircraft and, thus, with unavailable aircraft has degraded the training and, hence, readiness of the F/A-18 aircrew. U.S. Marines will continue to utilize F/A-18 aircraft in the current and future conflicts for close air support (CAS) to maximize the combined arms capability of the Marine air ground task force (MAGTF) until it is replaced by the Joint Strike Fighter (JSF) in 2012.[2] The loss of training poses a serious threat to both marines on the ground and the aircrew flying the aircraft because the number of trained personnel assigned to Marine F/A-18 squadrons is inadequate to support the workload required to maintain an aging aircraft.

In order to reduce the effect of this deteriorating situation, F/A-18 squadrons would benefit from augmented maintenance crews. Augmented civilian maintenance crews are currently used by the Marine Corps F/A-18 Hornet training squadron, VMFAT-101. To correct the current shortage of maintenance personnel and to bridge the gap until the Joint Strike Fighter is fielded, the Marine F/A-18 Hornet community should contract civilian maintenance support.

Current Deteriorating Situation

The aging and current loss in numbers of F/A-18 aircraft have severely hampered the quality of training and hence, the readiness of F/A-18 aircrew. The Table of Organization (T/O) for Marine F/A-18 squadrons simply does not allow for enough personnel to support the required maintenance workload on F/A-18 aircraft.[3] This includes phase maintenance, periodic inspections, as well as many other maintenance requirements delineated in the OPNAV 4790.2 and F/A-18 maintenance requirement cards.[4] The significant rise in the maintenance workload taxes the maintenance Marines and the aircraft they maintain.

In addition, a squadron frequently loses key personnel following deployments. Units return from deployment and many of the experienced staff non-commissioned officers

(SNCOs) and non-commissioned officers (NCOs) transfer units, conduct a permanent change of station (PCS), or retire. These vacancies in the squadrons are then filled with inexperienced Marines directly from school. Additional training is necessary for these Marines, so that they acquire the hands-on experience in order to conduct maintenance safely. Thus, even if a squadron has enough personnel in accordance with the table of organization, these Marines are normally too junior and/or inexperienced to deal with the current volume and complexity of workload.

To exacerbate this problem, squadrons are often left with fewer flyable aircraft following deployments: while the table of equipment (T/E) for Marine F/A-18 squadrons calls for twelve aircraft a squadron may be reduced to as few as eight aircraft upon return from deployment.[5] This is because aircraft are transferred to deploying squadrons from the post-deployment squadrons. Additionally, due to the hours flown on these post-deployment aircraft, some may be removed from service for advanced maintenance actions, such as center barrel replacements and preventative maintenance inspections that can take an aircraft out of flying status for several months.[*] In addition, some of the

[*] Center barrel replacements involve replacing the center portion of the aircraft fuselage that supports the landing gear and wings

aircraft a post-deployment squadron retains may require modifications, which also takes it out of flying status.[6] Thus, a squadron is forced to conduct the same required maintenance on fewer aircraft that are flown more often.

Just as the experienced Marine maintainers leave a squadron post-deployment, so do many of the experienced aircrew. As Captain E.T. Sprague argued in "Preparing For the Next Flight", many company grade aviators are significantly below the desired training levels.[7] The required training, flight hours, and sorties are very difficult to obtain for a junior, inexperienced aviator because of the requirement to "train the trainer." As the experienced instructors leave squadrons, sorties must be allotted to train more instructors. The squadron enters a vicious cycle as training officers, operations officers and, ultimately, commanding officers have to determine where to sacrifice.

The *F/A-18 Training & Readiness Manual* outlines the training requirements for F/A-18 aircrew. This manual assumes that squadrons are able to produce twenty sorties per flying day.[8] Having few flyable aircraft, post-deployment squadrons are often able to produce only ten to twelve sorties per day. This decreased number of sorties must still be apportioned to the same number of aircrew.

Often this means that the required sorties are not being flown by the aircrew. Additionally, because of the reduced number of sorties, all aircrew are getting less flight time. Degradation in sharpness and ability occurs with a drop in time in the cockpit.

Bridging the Gap to the JSF

The first Marine JSF squadron will stand up in 2012. After that, a steady and systematic implementation of JSF squadrons will replace F/A-18 squadrons.[9] The Marine Corps declined purchasing the F/A-18 E/F Super Hornets and decided to move directly to the JSF. As Lieutenant General John Castellaw, the former deputy commandant for aviation stated regarding the inventory shortage of D model F/A-18s, "There are only so many airplanes, and the ones we fly are no longer being built."[10]

With the current trend of reduced flight hours and lack of training, a time gap in full readiness rates occurs between F/A-18 and JSF squadrons. With the current and potential future operational commitments of these aircraft, this poses a serious problem for MAGTF commanders with respect to air combat element (ACE) assets. Employing under-trained aircrew who are lacking important flight time in combat becomes very dangerous. For example, the detailed level of integration and pressure on aircrew to

deliver ordnance on target and on-time in a close air support scenario requires significant training, preparation, and repetition.[11] This training is not occurring because of the reduction in sortie production and flight hours. Some may argue that aircrew can accomplish much of the required training in simulators. However, getting in the actual aircraft and delivering actual ordnance provides the most realistic and effective training to prepare aircrew for combat.

Contract Civilian Maintenance Support

Implementation of civilian maintenance crews to augment U.S. Marine F/A-18 squadrons would be a relatively simple and effective process. The Marine Corps F/A-18 Fleet replacement squadron (FRS), VMFAT-101, is located at Marine Corps Air Station Miramar. This squadron currently utilizes civilian maintenance to augment the constant changeover of military personnel. The civilian maintenance company, PKL Maintenance Inc., provides approximately sixty civilian maintenance personnel to work in concert with the Marines and Sailors.[12] This civilian maintenance team operates in just about every work center in the maintenance department. These individuals provide a wealth of experience and knowledge to keep readiness rates at a higher level. Additionally, due to their lower turnover

rate, these personnel provide continuity and stability to the squadron.

Civilian maintenance personnel provide a staple that could help the problems associated with personnel transfer, lack of experience, and increased maintenance requirements in the F/A-18 fleet squadrons. The fact that VMFAT-101 already implements civilian maintenance personnel is a bonus because a model is already in place. With such expertise, the massive workload would become more manageable and readiness rates would rise.

One way to implement such as change is to have the civilian maintenance company attached to the higher headquarters, the Marine Aircraft Groups (MAGs), and then to task them to specific units as required. Just as with VMFAT-101, a contract could be drafted that would indicate work responsibilities of the contractor. Furthermore, this team could continue maintenance while the Marines are accomplishing mandatory requirements such as taking physical fitness tests (PFTs), combat fitness tests (CFTs), going to the rifle range, attending martial arts and other training courses. The actual number of personnel to be implemented would be based on many factors, not the least being a cost analysis. Even a civilian team equivalent in

size to the one at VMFAT-101, would benefit the fleet squadrons.

Counterarguments

One potential argument against implementing civilian personnel into fleet squadrons may be that with the increase in size of the Marine Corps to 202,000, reorganizing and increasing the F/A-18 maintenance military occupational specialties (MOSs) would help to benefit the squadrons. While a viable option; however, increasing the numbers in certain MOSs detracts from MOSs (i.e. potentially in the ground combat element (GCE)). Another argument is that the civilian personnel would not go to combat zones and would thus reduce the effectiveness of a squadron in combat if it relied on them too heavily when not deployed. This may be true, but the benefit they could provide to squadrons while preparing for deployment would outweigh this potential pitfall. Besides, both commanding officers and maintenance officers would task organize to ensure that the readiness and training of their Marines is at an appropriate level when deployed. The civilian team is not meant to replace military maintainers, but rather to augment them.

Conclusion

The F/A-18 is being heavily utilized in combat and around the world to support the United States Global War on Terror. The aircraft has and will continue to be an integral part of the ACE as part of the MAGTF. The usage rate has caused an increase in maintenance requirements and thus a decrease in ability to fly as many hours, which has caused degradation in training for F/A-18 aircrew. Implementing civilian maintenance to augment the massive workload on these aircraft would help to increase readiness rates and allow for more sorties. This would help maintain effective, combat-ready squadrons in the next several years while the Marine Corps begins transitioning the Joint Strike Fighter. The importance of aviation assets was emphasized by former President George H.W. Bush when he stated "Gulf Lesson One is the value of airpower."[13]

1654 Words

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[2] Marine Corps Doctrinal Publication 1-3 Tactics, 39-41.
[3] United States Marine Corps Total Force Structure Management System Unit TO&E Report. Accessed 28 November 2008.
[4] NAVAIR F/A-18 Maintenance Requirement Cards.
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[6] NAVAIR PMA 265 Report. October 2008.
[7] E.T. Sprague, *Preparing For the Next Flight*, 2.

[8] MAWTS-1 F/A-18 Training and Readiness Manual.
[9] USMC Concepts and Programs 2005, 61-62.
[10] United States Marine Corps: Creating Stability in an Unstable World. 2007 Edition, 89.
[11] Joint Publication 3-09.3 Ch 1: Joint Tactics, Techniques, and Procedures for Close Air Support (CAS). September 2003 Incorporating Change 1 September 2005.
[12] VMFAT-101 Contract with PKL Maintenance, Inc.
[13] James Charlton, *The Military Quotation Book* (New York: St. Martin's, 1965), 43.

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