

Training Revolutions: Revised Core Skills for the F/A-18

EWS 2005

Subject Area Training

Training Revolutions:
Revised Core Skills for the F/A-18
EWS Contemporary Issues Paper
Submitted by Captain JD Jones
to
Major TK Hobbs, CG 1
February 2005

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE FEB 2005	2. REPORT TYPE	3. DATES COVERED 00-00-2005 to 00-00-2005			
4. TITLE AND SUBTITLE Training Revolutions: Revised Core Skills for the F/A-18		5a. CONTRACT NUMBER			
		5b. GRANT NUMBER			
		5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(S)		5d. PROJECT NUMBER			
		5e. TASK NUMBER			
		5f. WORK UNIT NUMBER			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) United States Marine Corps, Command and Staff College, Marine Corps Combat Development Command, Marine Corps University, 2076 South Street, Quantico, VA, 22134-5068		8. PERFORMING ORGANIZATION REPORT NUMBER			
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)			
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)			
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 12	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

The F/A-18 Hornet began service in the Marine Corps in 1983 to act as a dual role fighter and attack aircraft. The hornet community has always prided itself on being able to perform both air-to-air and air-to-ground missions. However, as the aircraft approaches the end of its service life, the community insists on maintaining proficiency in missions that are no longer relevant. As a result, training and readiness levels could be jeopardized. As the aircraft ages, the total number of available training sorties has decreased. Furthermore, as joint warfighting doctrine prevails, significant threats to US air supremacy no longer exist. Therefore, as flight time decreases and missions evolve, the USMC F/A-18 Aviation Training and Readiness manual should revise the F/A-18 core missions.

Barriers to Training

Hornet training is currently hindered. Aircraft availability rates are exhibiting a steady decline which is affecting the amount of training sorties available. Additionally, the need to extend the airframe until 2020 limits realistic basic fighter maneuver (BFM) training.

The backbone of readiness is consistent training. In order to facilitate training, the Marine Aviation Campaign Plan sets a goal of twelve to fifteen tactical sorties per aircrew per month. Flying this number of sorties per month would enable

aircrew to maintain proficiency in the "precious skills required to maintain tactical proficiency."¹ However, decreasing aircraft availability is limiting the amount of monthly training for aircrews. A review of F/A-18 aircrew logbooks shows that aircrew average approximately seven tactical sorties a month.²

While the Navy and Marine Corps intend to fly the F/A-18 thru 2020, readiness rates are declining. A US General Accounting Office report stated that the F/A-18 consistently failed to meet mission capable (MC) and full mission capable (FMC) readiness goals.³ US Marine Corps F/A-18 FMC rates for all models of the F/A-18 have declined from 71% in FY2001 to 58% in FY2004.⁴

In order to guarantee that the airframe will survive until 2020, the F/A-18 type commander has instituted a service life extension program (SLEP) for the F/A-18.⁵ The program places significant limitations on the amount and quality of basic fighter maneuver and air combat maneuvering (ACM) training decreasing overall pilot proficiency.

An Evolving Mission

The relevancy of a Marine air-to-air mission capability is questionable. In modern conflicts there have been limited airborne threats to US air supremacy. As US forces transition to joint warfighting, there are platforms available to

commanders that are better suited to air supremacy missions than the F/A-18.

A credible challenge to US or coalition air supremacy has not materialized in recent operations. As reporter Rebecca Grant wrote in a recent article for the Air Force Association, "Air Force aircrews today are far more likely to tangle with surface-to-air missiles than with enemy fighters."⁶ In neither Enduring Freedom nor Iraqi Freedom did any enemy aircraft challenge coalition aircraft.⁷ The last air-to-air shoot down by a USMC aircraft was more than thirty years ago.⁸

The air forces of North Korea and Iran both suffer numerous problems that prevent them from resisting through air power. Described by reporter Donald Macintyre as "dysfunctional", North Korea's Air Force suffers from a severe lack of supplies, which limits pilots to flying approximately ten hours annually.⁹ Similarly, Analyst Anthony Cordesman describes Iran's air force as facing "serious problems in terms of sustainment, command and control, and training."¹⁰ In addition, "Iran has a pilot quality problem."¹¹

With the advent of joint warfighting, it should not be expected that USMC F/A-18s will be assigned an air superiority mission. If a conflict escalates to the point where Marine F/A-18s are operate at a fixed base ashore, then "the U.S. Air Force

will be there in force, providing significantly more capability than organic Marine air.”¹²

Because US forces enjoy air superiority, Marine fixed wing aviation has been able to focus heavily on air-to-ground missions. Forward air controller (Airborne) (FAC(A)), close air support (CAS), and armed reconnaissance (AR) missions have been used extensively in operations in Afghanistan and Iraq. With the additional capabilities of the Litening pod and advanced targeting forward looking infrared, F/A-18s will become even more lethal in future air-to-ground missions.

Core Capabilities

The core capabilities of particular type/model/series aircraft are specified in Training and Readiness manuals and form a basis for training. A core mission is one that a MAGTF commander expects a squadron to be able to perform during combat operations. Core plus missions are those that are high risk or have a low probability of being executed¹³. The current USMC F/A-18 T&R categorization of core and core plus missions are out of line with training and mission realities.

F/A-18 core skills include air to air missions, such as ACM or BFM, and air-to-ground missions, such as CAS or AR missions. Two seat F/A-18D squadrons must also be qualified in combined arms coordination and control (CACC) missions such as FAC(A).

The only core plus skill for F/A-18 squadrons is night systems low altitude tactics (NSLAT).

Squadron aircrew training follows the basic pattern of first attaining proficiency in each of the core skills then, when proficiency is attained, maintaining those core skills by flying certain flights designed to maintain proficiency in that particular skill. For a squadron to be considered core competent, it must maintain at any one time a certain amount of aircrew that are qualified and current in core and core plus capabilities. For example, F/A-18D squadrons must have twelve aircrew qualified in CAS, a core capability, and four qualified in NSLAT, a core plus capability.¹⁴

The current F/A-18 training and readiness manual requires an over emphasis on air-to-air proficiency. For example, single seat F/A-18 squadrons dedicate 30% of core competency sorties to gaining and maintaining proficiency in air-to-air missions. Comparatively, 16% of core competency sorties are dedicated to gaining proficiency in CAS and AR, and 20% are dedicated to maintaining proficiency in those missions. Dual seat F/A-18D squadrons dedicate 22% of their core competency sorties to gaining, and 19% of their core competency sorties to maintaining air-to-air proficiency. They dedicate almost an equal amount of sorties, 17% and 21%, to gaining and maintaining proficiency in

combined arms coordination and control missions such as FAC(A) and tactical air coordinator (airborne) (TAC(A)).¹⁵

Based on the likelihood of missions that F/A-18's will be tasked with performing, revisiting what is categorized as a core capability for the F/A-18 is warranted. A redefinition of air-to-air as a core plus skill correctly considers the current availability of tactical training sorties and the realities of current missions. In this case, resident air-to-air skills are retained in the community. With training sorties becoming increasingly limited, this allows squadrons to focus their efforts on maintaining proficiency in the missions that they are likely to conduct when deployed. Furthermore, realigning core and core plus skills acknowledges the different assets and capabilities available when operating in a joint theater.

Expeditionary Culture

Reducing the emphasis on Marine Corps F/A-18 air-to-air training will not affect the expeditionary nature of the Marine Corps. The aviation component of deployed Marine Expeditionary Units is not composed of F/A-18's and do not contain assets that can conduct missions in support of gaining and maintaining air supremacy.

When F/A-18s deploy for contingency operations, squadrons will still retain a credible air-to-air capability as a core

plus skill. This will be in better accordance with current operational mission requirements.

Conclusion

The core missions of the F/A-18 should be revised to reflect current training and mission realities. By transforming air-to-air missions into a core plus skill, US Marine F/A-18 squadrons will be better aligned to handle current threats. Transformation acknowledges both reduced sortie availability as well as an evolving joint culture. An updated core and core plus skill alignment also acknowledges the changing threat in order to produce a force more skilled at its primary mission of supporting ground forces.

Notes

¹ Headquarters, U.S. Marine Corps Aviation Department, *Marine Aviation Campaign Plan 2002*, 2002 (Washington D.C.), 11.

² Sample of USMC F/A-18 logbooks, monthly average of tactical sorties from August 2001 to July 2004.

³ United States General Accounting Office, MILITARY READINESS: DOD Needs to Reassess Program Strategy, Funding Priorities, and Risks for Selected Equipment, 2003 (Washington, D.C.: GAO, 2003), 70.

⁴ GySgt Evans, Michael E., Aviation Analyst, Aviation Logistics Support Branch, Headquarters United States Marine Corps, "RE: It's Smiley," 8 December 2004, personal email (8 December 2004).

⁵ Commander Naval Air Forces, FA-18 Service Life Management Program, COMNAVAIRFOR 011827Z JUN 04.

⁶ Rebecca Grant, "The Missing Aces," *Air Force Magazine, Journal of the Air Force Association*, 87, no. 9 (2004): 81.

⁷ Grant, 85.

⁸ Roy A. Grossnick, *United States Naval Aviation 1910-1955* (Naval Historical Center, Department of the Navy, 1997), 771.

⁹ Donald Macintyre, "Kim's War Machine," *Time Magazine*, 24 February 2003, <<http://www.time.com/time/asia/covers/501030224/army.html>> (10 January 2005).

¹⁰ Anthony H. Cordesman, Arleigh A. Burke Chair, Center for Strategic and International Studies, "Iran's Developing Military Capabilities" (Executive Summary (Working Draft), Center For Strategic and International Studies, 2004), 14.

¹¹ Cordesman, 14.

¹² Roxana Tiron, *Navy-Marine Tac-Air Integration Gets Underway*, January 2003, <http://www.nationaldefensemagazine.org/issues/2003/Jan/As_details_of.htm> (27 December 2004).

¹³ Marine Corps Order P3500.14H, Aviation Training and Readiness (T&R) Program Manual, (18 March 2004), 1-5.

¹⁴ Marine Corps Order P3500.46, Aviation Training and Readiness (T&R) Manual, FA-18, (10 September 2004), 5-23.

¹⁵ Marine Corps Order P3500.46, 5-13.

Bibliography

Commandant of the Marine Corps, *Marine Corps Bulletin 3125: The Marine Aviation Plan for Fiscal Year 2004*.

Cordesman, Anthony H. "Iran's Developing Military Capabilities." Executive Summary (Working Draft), Center For Strategic and International Studies, 2004.

Grant, Rebecca. "The Missing Aces," *Air Force Magazine, Journal of the Air Force Association*, 87, no. 9 (2004): 80-85.

Grossnick, Roy A. *United States Naval Aviation 1910-1955*. Naval Historical Center, Department of the Navy, 1997.

Headquarters, U.S. Marine Corps Aviation Department, *Marine Aviation Campaign Plan 2002*. Washington D.C.: 2002.

Hough, LtGen M. A., *Marine Aviation Plans & Programs Reference Guide*, November 2004.

Macintyre, Donald. "Kim's War Machine," *Time Magazine*, 24 February 2003,
<<http://www.time.com/time/asia/covers/501030224/army.html>>
(10 January 2005).

Marine Corps Order P3500.14H, *Aviation Training and Readiness (T&R) Program Manual*. 2004.

Marine Corps Order P3500.46, *Aviation Training and Readiness (T&R) Manual, FA-18*. 2004.

Marine Corps Order 3125.1A, *Marine Corps Flying Hour Program (FHP) Management*.

Tiron, Roxana. *Navy-Marine Tac-Air Integration Gets Underway*, January 2003.
<http://www.nationaldefensemagazine.org/issues/2003/Jan/As_details_of.htm> (27 December 2004).

U.S. Department of Defense, *Quarterly Readiness Report to the Congress*, January - March 2004

U.S. General Accounting Office, *Military Readiness: DOD Needs to Reassess Program Strategy, Funding Priorities, and Risks for Selected Equipment*, 2003. Washington, D.C.: GAO, 2003.