The Impending Shortfall In Marine corps Aviation Leadership Development

CSC 2000

Subject Area - Aviation

TABLE of CONTENTS

	<i>Page</i>
Table of Contents	i
List of Figures	ii
Executive Summary	iii
I. ACE Commanders are not Prepared	1
II. ACE Unique Characteristics	5
III. Selection of ACE Commanders	9
IV. Development of ACE Commanders	15
V. Formalized Training	21
VI. Future Challenges in a Joint World	32
VII. Recommendations	36
VIII. Conclusion	49
Appendixes	
A. MAWTS-1 Commanders' Course Schedule	53
B. MCU Commanders' Course Schedule	54
Bibliography	55

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 2000		2. REPORT TYPE		3. DATES COVERED 00-00-2000 to 00-00-2000	
4. TITLE AND SUBTITLE The Impending Shortfall In Marine corps Aviation Leadership Development				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 University, 2076 South Street, Marine Corps Combat Dev Command, 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 61	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

LIST OF FIGURES

<i>Figure</i>	<i>Page</i>
1. PROMOTIONAL DATA OF CH-46E ACE COMMANDERS VERSES OTHER CH-46E NON ACE COMMANDERS.....	13
2. PERCENTAGE OF COLONEL PROMOTION RATES BY AVIATION COMMUNITY FOR FY 99,00,01.....	15
3. NOTIONAL TIMELINE for 3 YEAR ACE COMMANDER TOUR.....	46
4. ALTERNATE ACE COMMAND RELATIONSHIP GRAPH 1.....	47
5. ALTERNATE ACE COMMAND RELATIONSHIP GRAPH 2.....	48

EXECUTIVE SUMMARY

Title: The Impending Shortfall in Marine Corps Aviation Leadership Development

Author: Major Thomas P. Mains III, USMC

Thesis: The currently Marine Corps system of selecting and preparing aviators to command Aviation Combat Element (ACE) that support a Marine Expeditionary Unit (MEU) has become inadequate. The current practice of relying on a accumulated operational experience accumulated over a typical carrier to prepare ACE commanders is being negatively impacted by a shortened period of time spent in operational squadrons. flight operational experience. Compounding the problem of the diminishing operational experience is the growing requirement for ACE commanders educated in the art of employing different aircraft in joint environments.

Discussion: The Marine Expeditionary Unit is supported by a composite squadron built around a CH-46E Sea Knight helicopter squadron. The Lieutenant Colonel commanding the CH-46E squadron is given detachments from CH-53E, AH-1W, UH-1N, AV-8B, Marine Air Control Group, and personnel and equipment. These detachments more than double the size of the original parent squadron. The composite squadron provides four out of six functions of Marine Air.

Currently, the Marine Corps selects commanders of Ace's on a formal process. Yet, there is no formal requirements that an officer must meet in order to be selected as an ACE commander. There is neither a formalized career path nor training pipeline to prepare the CH-46E commander to employ the unique capabilities of the ACE. Prior experience, on the job training, and a six month predeployment workup are the primary means through which a commander is supposed to acquire the requisite ACE commander skills. With current trends of reduced flight experience and accelerated promotion rates, and expanded joint integration with more capable aircraft, the Marine Corps cannot afford to rely on OJT as a proper means of preparing ACE commanders.

Recommendations: Recommend that career paths be expanded to include pilot exposure to aviation command and control functions. Headquarters Marine Corps should be tasked with sending newly selected ACE commanders to command level

schools that help to fill in gaps in operational knowledge and tactical employment. Additionally, all future ACE commanders should be placed as an ACE executive officer prior to taking command.

The Marine Corps should open up ACE commands in support of MEU's to aviators outside of the CH-46E community. Restructuring the composite squadron such that all the attachments are under operational command of a Lieutenant Colonel who has the experience of being a former squadron commander could facilitate this. A former squadron commander from any aviation community with MEU experience could qualify as opposed to the current situation where only CH-46E squadron commanders qualify.

THE IMPENDING SHORTFALL IN MARINE CORPS AVIATION LEADERSHIP DEVELOPMENT

THE ACE COMMANDER IS NOT PREPARED

"The ACE [aviation combat element] is the MAGTF's [Marine Air Ground Task Force] aviation arm. It exists to help the MAGTF commander win the war. The MAGTF commander receives advice from the ACE Commander concerning effective employment of the ACE".¹

Marine aviation has evolved over the last eighty years into an indispensable component of the Marine Corps total fighting force. Integration of Marine aviation assets with its ground combat and support elements produces a synergistic effect that enables the U.S. Marine Corps to fight as an effective force with a combined lethality that is greater than the sum of its individual components. The heavily reinforced helicopter squadron that deploys as part of a Marine Expeditionary Unit (MEU) is a true force multiplier. Without the flexibility and capabilities that the ACE provides, the MEU would be incapable of performing the types of missions that it is required to accomplish. To

¹ U.S. Marine Corps, Organization and Function of Marine Aviation, FMFM 5-1, (HQMC 1990) 1-2

paraphrase what a former Commandant of the Marine Corps once said, "If you take the "A" (for aviation) out of MAGTF you are left with little more than a small ground army."

As with any large institution like the Marine Corps, success hinges on the ability of knowledgeable, capable, and experienced professionals to provide proper leadership. But can tomorrow's leaders of Marine aviation meet the future challenges of operating in the joint/combined operational world while being reared in the outdated Cold War selection and training institutions of the past?

Considering the invaluable contribution in firepower and mobility the ACE provides any MAGTF, strong leadership to ensure proper training and employment of the aviation assets is paramount. When the MEU sets sail for a six-month deployment, it must have a fully trained, capable, and certified ACE supporting it. But has the Marine Corps selected and trained the ACE commander to employ and advise the MEU commander regarding the proper use of all his aviation assets? In this author's opinion, the current career preparation for the typical ACE commander at the MEU level fails to best prepare individuals who will face the challenges, now or in the future, as ACE commanders. The Marine Corps' current reliance on "on the job training"

(OJT) and a six-month training cycle as the vehicles to prepare ACE commanders will soon fail to satisfy the vital leadership development requirements that are necessary to properly train and employ the reinforced squadron. The current system's ability to produce knowledgeable and capable ACE commanders is weakening because of a decline in operational flight experience compounded with the Marine Corps' institutional practice of placing only one aviation community in command of all scheduled deploying ACE's, indirectly locking out all other aviation communities.

Operational flight experience has been eroding in many aviation communities because the average Marine student aviator takes longer to complete flight training and report to an active duty fleet squadron than in the recent past. Additionally, today's aviators spend less time at the rank of captain, when most operational flying experience is accumulated, because of an accelerated promotional rate to major. As a result, the operational flying time and experience of today's developing aviator compared to aviators in the past has shortened by two to three years. Compounding the problem of reduced operational experience is the requirement for all U.S. military forces to operate in a joint/combined fashion with other services and militaries.

Unfortunately, as the current system is beginning to fall short in developing future ACE commanders, the requirement for even more well rounded and knowledgeable aviators capable of operating in the joint/combined environment is increasing. With the introduction of the highly capable MV-22 Osprey tilt-rotor transport and the Joint Strike Fighter (JSF), the ACE commander must be well versed on their increased capabilities and new employment as they relate to use in the joint/combined arena. In the near future, the MV-22 and JSF will be able to range throughout the Joint Force Commanders airspace and, therefore, lend themselves to supporting units other than the MEU in joint/combined operations. Because the CH-46E troop transport helicopter and AV-8B attack aircraft have such a relatively short range, airspeed, and carrying capacity, Joint Force Commanders have shown reluctance at times to integrate them in large scale joint operations. That reluctance, however, will disappear as the multi-service purchased Osprey and JSF are introduced into service.

The Marine Corps must compensate for decreased operational experience and increased MEU - joint integration with improved formal education and modified career paths. Failure to adjust to current shortfalls in the development of future ACE commanders will limit the growth of the Marine

Corps Air-Ground Team's capability to accomplish the Joint Force Commander's assigned missions.

ACE'S UNIQUE CHARACTERISTICS

Over the past 20 years, The Marine Expeditionary Unit has arguably evolved into the crown jewel of the Marine Corps. The MEU is operationally viewed as the forward-deployed element of the larger follow-on Marine Expeditionary Force. Usually deployed on a three ship amphibious ready group (ARG), the MEU is task organized, allowing it to perform a variety of missions. The ACE is typically built around a parent CH-46E Sea Knight transport helicopter squadron of 12 aircraft. The CH-46E squadron is assigned additional aircraft to typically include (4) CH-53E Super Stallions, (4) AH-1W Super Cobras, (2) UH-1N's Hueys, and (6) AV-8B II+ or night attack Harrier aircraft, along with additional maintenance personnel and supply support. The squadron is also assigned a detachment from Marine Air Control Group (MACG) to assist in the command and control of aircraft and to provide organic air defense with stinger missile teams. Additionally, Marine Wing Support Squadron (MWSS) provides a detachment of personnel to include fuelers, cooks, and heavy equipment operators. The

reinforced CH-46E squadron is then redesignated as a composite HMM(REIN) helicopter squadron assigned to support a MEU.

The parent CH-46E squadron's size grows significantly with the addition of the attachments. Aircraft numbers increase from twelve CH-46E helicopters to 30 aircraft of four different types. The total number of squadron personnel increases from approximately 170 Marines to 450, over two and one half times its original size.²

The capabilities and missions, as well as the physical size, of the CH-46E squadron expand significantly as it transforms to an ACE. The HMM(REIN) squadron is now capable of executing four of the six functions of Marine Aviation. A homogeneous CH-46E squadron can perform only a single aviation function: assault support. Additional functions include offensive air support provided by AH-1W Cobras and AV-8B Harriers; anti-air warfare provided by Harriers and LAAD, but reinforcing with F/A-18 Hornets; assault support with CH-46Es, CH-53Es, and UH-1Ns; control of aircraft and missiles with integrated MACG and LAAD detachments. The fifth function, aerial photoreconnaissance, is limited to

² SSgt. Walker R., USMC, Administration Chief, HMM-264 (REIN), personal interview, 23 Feb. 2000.

Marine Corps F/A-18D equipped with ATARs photo equipment and Marine unmanned aerial vehicles, neither of which are organic to an ACE supporting a MEU. The sixth function, electronic warfare, is provided by the Marine Corps EA-6B Prowlers which are also not organic to the ACE. However, because of the Marine Corps' ability to task organize, it is possible for a CH-46E ACE commander to integrate and coordinate fighters and electronic warfare platforms in support of an operation. Finally, a CONUS (Continental U.S.) based KC-130 detachment of 2 aircraft and crew are also on call to provide assault support (movement of personnel and cargo), resupply, and aerial and ground refueling capability to the MEU commander.

With the increased number of functions, comes an increase of approximately 11 missions the reinforced helicopter squadron is now responsible for providing. Those additional missions include:

- ❑ Close Air Support (CAS) by both fixed and rotary aircraft
- ❑ Suppression of enemy air defenses (SEAD)
- ❑ Offensive and Defensive Anti-Air Warfare
- ❑ Air Interdiction and Armed Reconnaissance
- ❑ Assault Support for heavy lift

- ❑ Supporting Arms Coordinator Airborne
- ❑ Forward Air Controller Airborne
- ❑ Airborne Coordination and Control for assault support operations
- ❑ Tactical Aerial refueling
- ❑ Air delivery
- ❑ Direct Air Support Center Airborne Operations

The ACE commander must be well versed in all functions of Marine Aviation and employing his assets in carrying out those functions. Additionally, as MEU missions and capabilities expand, their desired use in joint operations will continue to grow. The ACE commanding officer and his staff must become more tactically proficient in providing the aviation functions and missions effectively in a joint environment.

With the evolution of the CINC as a joint warfighter, the MAGTF will be employed in a joint environment, more so in the future than in the past. The MEU, specifically the ACE, may find itself supporting other joint force components outside of the Marine Corps and Navy. The ACE commander will have to become ever more adept at integrating his assets within the joint arena.

SELECTION OF ACE COMMANDERS

Screen and Slate Process

An ACE's unique characteristics and capabilities, unfortunately, do not warrant it special consideration for the selection of its commanders. Headquarters Marine Corps selects Lieutenant Colonels to command all types of squadrons, homogeneous and composite, by the same command screen and slate process. ACE commanders are not formally selected or placed in a category separate from other squadron command positions. A selection board, headed by a Brigadier General and composed mostly of Colonels, meets yearly to select operational and supporting establishment commanding officers. The entire selection process is framed within the context that only the officers best qualified to lead Marines are selected after every officer receives "fair and equitable consideration for the opportunity to command."³

Since the early 1990's, the Marine Corps identified, or screened, about three times as many Lieutenant Colonels eligible for commands as there were available positions.

³ USMC Order 1300.64, Command Screening Program (Dept. of the Navy, HQMC, Washington: 1995) 1

The personnel assignment officers at Headquarters Marine Corps, better known as monitors, would then develop a recommended list, or slate, that assigned commanders to available command billets. In developing the slate the monitors would factor in background experience, latest deployment time, diversity of career, fitness report recommendations, reputation, and individual personal preferences when making final decisions on recommendations for the slate.⁴

While the Marine Corps screening process has formalized criteria for an officer to meet to be eligible for command, the slating process does not have standardized prerequisites that assist in slating commanders into the unique command of an ACE. In theory the slating process does not differentiate between ACE commands and non-ACE command. The process uses an informal process to match up commanders with certain experience levels to squadrons that, due to upcoming scheduled deployments, would benefit from a commander with the appropriate experience.⁵ For example, a Lieutenant Colonel who was on his fourth MEU deployment just two years

⁴ LtCol. Barry Fetzer, "Command Screening and Slating," Marine Corps Gazette Apr. 1999: 49

⁵ LtCol. Barry Fetzer, former LtCol. Aviation Monitor and HMM-262 C.O. 31 MEU (SOC) Oct. 1994-Apr 1995, personal interview, 29 Oct. 1999.

ago will more likely be placed in a deploying CH-46E squadron than a Lieutenant Colonel who has spent the last four years in various joint and staff billets and has been on only two shipboard deployments.⁶

The 1999 fall Command Screening board for fiscal year 2001 operated under slightly different procedures than in previous years, as directed by the Commandant. Instead of screening three times the number of eligible officers required for possible appointment to available command positions, the board selected only twice the number. The monitors reviewed the slating list for potential assignment conflicts while the board retained ultimate authority for slating.⁷ The monitors played a less direct role in the 1999 slating process as compared to past slating boards. The monitor's role change in the 1999 slating process is significant because their input in previous years provided the only semi-formal board action that took experience and other factors into account when assigning future ACE commanders. The 1999 command and slate board did eventually realize the importance of including the monitors and included them back into the process.

⁶ LtCol. Fetzer.

⁷ Col. G.C. Burgess, Director Manpower Management Officer Assignments, personal interview, 10 Feb. 2000.

Regardless of the monitors' role in the past, the Marine Corps does not have a formalized process to identify the best qualified Lieutenant Colonels to command an ACE. While the screen and slating process is formalized, the requirements of determining the selection of ACE commanders are not. The unique structure and capabilities of an ACE require selection of commanders with the proper background and ability to lead it effectively. The Marine Corps must identify appropriate standardized criteria or requirements that potential commanders must meet in order to be assigned to command an ACE. The uniqueness of an ACE is worthy of special consideration when its commanders are chosen.

Post Squadron Command Promotion Rates within CH-46E Community

The CH-46E community has practically monopolized the ACE commander position at the MEU level because of the current practice of structuring the ACE around a CH-46E squadron. The author has witnessed a perception among some Marine aviators that an ACE command is a coveted command opportunity within the CH-46E community because a successful tour practically guarantees further promotion. Examination of promotion rates for CH-46E Lieutenant Colonel over the

last three years does not necessarily support that perception.

Promotion data provided by the Office of Career Counselor and Evaluation Section of Headquarters Marine Corps for fiscal years 1999, 2000, and 2001 combined, showed that every Lieutenant Colonel selected for promotion to Colonel had been a squadron commander. Of the 19 not selected for promotion, 10 were squadron commanders and four were commanders of units other than squadrons. Furthermore, 17 out of 22 CH-46E Lieutenant Colonels promoted to Colonel were former ACE commanders.⁸ Six out of the 19 Lieutenant Colonels not selected for promotion were also former ACE commanders.⁹ (See figure 1)

**PROMOTIONAL DATA OF CH-46E ACE COMMANDERS VERSES OTHER
CH-46E NON ACE COMMANDERS**

	Selected	Nonselected
	To Colonel	To Colonel
Former ACE Commanders	17	6
Non ACE Commanders	5	8
Non Commanders	0	5

Data provided by Office of Career Counselor and Evaluation Section of

Figure 1

Headquarters Marine

⁸ Colonel Promotion Data attained from the office of LtCol. Robert D. Rice, Section Head Officer Career Counseling and Evaluation. Headquarters Marine Corps. Feb. 2000

This table illustrates that command time is essential for further promotion in the Marine Corps. Furthermore, a former ACE commander has a greater chance of promotion over a non-ACE commander in the CH-46E community. An ACE command enhances a Lieutenant Colonel's chance of promotion because commanding an ACE is recognized as a more challenging duty than that of commanding a homogeneous squadron. Being an ACE commander, however, does not guarantee promotion by evidence of six out of 19 ACE commanders were not selected for rank of Colonel.

CH-46E versus Other Community's Promotion Rates

Considering that command of an ACE is more challenging than that of a homogeneous parent squadron, one might think CH-46E pilots have a better chance of promotion to Colonel since only CH-46E aviators currently command ACE's on deploying MEU's. Surprisingly this is not the case. The following is a list of promotion rates for all aviation Lieutenant Colonels who were eligible for promotion during the fiscal year (FY) 1999, 2000, and 2001 combined. (See Figure 2)

⁹ LtCol. Rice.

**PERCENTAGE OF COLONEL PROMOTION RATES
BY AVIATION COMMUNITY FOR FY 99,00,01**

Community	Selected		Non-Selected	Total	% Select
F/A-18	23	4	27	85%	
CH-46E	22	19	41	54%	
F/A-18D WISO	5	10	15	50%	
CH-53E	11	14	25	44%	
AH-1W/UH-1N	14	18	32	44%	
AV-8B	5	8	13	38%	
CH-53D	4	9	13	31%	
KC-130	1	3	4	25%	
Data provided from Officer Career Counseling and Eval. Section HQMC Feb 2000					

Figure 2

At a 54% selection rate, the CH-46E promotion rate to Colonel ranks second behind the F/A-18 community. Even with its strong showing, the CH-46E community does not statistically dominate the promotional opportunities over the other aviation communities. Consequently, it can be inferred that ACE commanders do not hold an overall advantage for promotion over non-ACE commanders.

DEVELOPMENT OF ACE COMMANDERS

Operational Experience

Even though an ACE can perform a multitude of missions and functions in addition to assault support for the MEU, the CH-46E commanders, who are most familiar with assault support, are not provided any additional training to enhance

their understanding of the capabilities or tactical employment techniques of the ACE's other aircraft. For training of an ACE commander, the Marine Corps relies mostly on the experiences attained from "on-the-job training" (OJT).

Experience attained through OJT is certainly a valuable and necessary tool to groom and prepare individuals for challenging leadership positions. Experience alone, however, does not ensure a good commander because experiences can be widely varied between officers. One former ACE commander stated that he was very comfortable commanding his composite squadron because of experiences gained from five previous shipboard deployments with other ACE's.¹⁰ However, not every aviator has the opportunity to acquire such a vast level of operational experience. A second former ACE commander, who had fewer deployments and had been away from the CH-46E community for a number of years, said he felt unprepared to employ an ACE to its fullest capability.¹¹ Unfortunately, the realities of the post Cold War military draw down, budget reductions, and aging of equipment has, and will continue to erode operational flight experience for most of today's aviators.

¹⁰ Col. Knoll, HMM-266 C.O. on 24 MEU(SOC) June -Dec 1996, personal interview, 15 Oct. 1999.

¹¹ LtCol. Fetzer.

Loss of Operational Experience

Relying almost exclusively on experiences gained while in operational flying squadrons may have been sufficient for today's Colonels and Lieutenant Colonels, but times have changed in the typical Marine aviator's career path. The available time spent in operational squadrons as company grade officers has decreased since the middle 1990's. New aviators are entering the fleet later and getting promoted to major sooner. Operational ACE experience accumulated through multiple deployments and attaining 2500-4000 hours of operational flight time prior to taking command was more commonplace from the mid-1970's through the early 1990's than it is today.¹² Changes in the promotion cycle for captains to majors, increased time to complete flight school, and a decrease in available flight time due to smaller operational budgets have all combined to significantly alter a young aviator's ability to accumulate operational flight experience.

According to Marine Corps Manpower and Officer Assignment Monitors, prior to 1996 an aviator could expect to enter his first operational squadron as a 1st Lieutenant. A first tour CH-46E pilot could expect an average of two to

three six-month MEU deployments before rotating out of the squadron. After spending up to three years away from an operational squadron, an aviator could then expect to spend his second tour in the squadron as a senior Captain. Majors spent most of their time in non-flying staff billets before returning to the squadrons. By the time a CH-46E aviator was up for command, it was not uncommon for him to have accumulated at least 2500 hours of flight time after experiencing three to four MEU deployments.¹³

Today, however, excessive time to complete flight school has caused most first tour aviators in both fixed wing and rotary wing communities to reach the fleet as one to two year captains.¹⁴ Because of a multitude of reasons including budget constraints and lack of aircraft availability, the average time for an aviator graduate from flight school has lengthened. According to data provided by the Marine Corps Aviation Training Branch a student jet pilot in 1998 required 48 months to graduate from naval flight school which is designed to take only 30 months to

¹² Flight hour average from interviews with Col. Knoll, Col. Duva (5400 hours), LtCol. Fetzner (3200 hours), Oct. 1999

¹³ Col. Duva and Col. Knoll USMC. Former commanding officers HMM-263 and HMM-266, respectively. Interviewed by author 15 Oct.1999.

¹⁴ Maj. Todd W. Schlund, Fixed Wing Majors Monitor, HQMC, personal interview, 11 Feb. 2000.

complete. In the same year, new Marine helicopter pilots took 38 months to complete flight school while it is programmed to take only 24 months.¹⁵ When the helicopter and jet flight school time to train is averaged together, an additional 55% more time is required to complete the flight training process than it is intended.¹⁶

The consequence of extended training time to produce new pilots for fleet squadrons is a decrease in the amount of time a young aviator has to accumulate operational flight experience because he begins his flying later in his career. Unfortunately, not only is today's aviator losing flying opportunities at the start of his career but he is also losing time in the middle of his career because of an accelerated promotional rate to Major.

Accelerated Promotion Rates

Since approximately 1995, an accelerated promotion rate to the rank of major has further limited an aviator's time spent accumulating operational experience. Whereas a Captain could previously expect to wait until his 12th or 13th

¹⁵ Naval Aviator Production Process Impr. Brief, Aviation Training Branch, HQMC 11 Feb. 2000.

year before being promoted to Major, aviators are now being promoted at 10 years of active service.¹⁷ This accelerated promotion rate is forecast to continue with promotion to Major occurring in the ninth year of service beginning after 2000.¹⁸

Delivering winged aviators to the fleet later, and promoting them to major earlier, significantly decreases an aviator's second tour as a senior Captain. Now most second tour aviators are newly selected Majors with less flight experience and less opportunity to attain that experience. Headquarters receives complaints from squadron commanders asking, "Where are all of the second tour Captains?" The monitor's reply is, "They are all called Majors now."¹⁹

The combination of the accelerated promotion rate and expanded training time has resulted in a two-year loss of operational experience which previous aviators use to acquire before becoming a squadron commander. Loss of these two years of operational flying time as a 1st Lieutenant and

¹⁶ HQMC, Aviation Training Branch, MCCDC, 1997 Aviation Quality Management Board Brief (HQMC: 1997)

¹⁷ United States, Report to the Permanent Grade Table Relief Steering Group of the Department of Defense (HQMC Sept. 1995) and Memorandum for the Under Secretary of Defense (Personnel and Readiness), FY 99 Commissioned Officer Promotion Report, (Dept. of the Navy, HQMC, Jan. 5 2000)

¹⁸ Maj. Ronald Wielsma, Officer Promotion Planner, Marine Corps Plans and Policy Division, HQMC, personal interview, 9 Feb. 2000.

¹⁹ Maj. Schlund.

Captain equates to loss of operational experience that the Marine Corps relies on to prepare its future ACE commanders.

The assumption that on-the-job training will continue to provide the bulk of the training required to develop competent and knowledgeable ACE commanders cannot be sustained considering the current trend towards reduced time spent in the cockpit. ACE commander preparation will become tenable under current operational conditions as compared to the not too distant past.

FORMALIZED TRAINING

The ACE commander must possess most of the operational knowledge of employing an ACE when he reports to the MEU commander for duty. Any lingering operational gaps regarding operational and tactical employment are worked through during the six-month pre-deployment work-up phase. Any additional schooling that addresses ACE integration and employment techniques is limited to a MEU/SPMAGTF (Special Purpose MAGTF) and Commander's Course offered at Marine Aviation Weapons and Tactics Squadron 1 (MAWTS-1) at Yuma, AZ.

The three day MAWTS-1 course and six month pre-deployment work-up does not, however, provide sufficient

opportunities for an ACE commander to become educated on the employment of all the ACE's assets due to lack of travel funds and ground centric predeployment workup cycles.

Commander Courses

After a Lieutenant Colonel has been screened and slated for command, a number of preparatory commander courses are available. Courses offered include a Headquarters Marine Corps funded Commander's Course held at Quantico, a Safety Center Commander's Course, an Aircraft Maintenance and Supply Commander's Course, and the previously mentioned MAWTS-1 Commander's Course. The only course that has any tactical application to the ACE and MEU is the MAWTS-1 course.

The commander's course at Quantico is one of the few courses where attendance is mandatory and funded by Headquarters Marine Corps.²⁰ Unfortunately, only the MAWTS-1 course offers any worthwhile instruction directed to the employment of the ACE. Unlike the Quantico Commander's Course, the MAWTS-1 course is not funded by Headquarters Marine Corps. As a result, the future commander must rely

²⁰ Commandant of the Marine Corps message to all Marine commands, subject: "March 2000 Resident Commanders' Course," 191600Z JAN 00

on funding from depleted Marine Air Group Temporary Assigned Duty (TAD) accounts to fund attendance at the MAWTS-1 course.²¹ Funding issues aside, attendance is voluntary which makes it easy for a busy commander to neglect the course. The lack of funding and institutional support of the MAWTS-1 course results in "little response" from a majority of squadron commands.²²

According to MAWTS-1, over the last six years that the course has been available, on average, only 60% of all squadrons sent a squadron representative, usually the executive officer or operations officer.²³ Normally, only 30% of an average class is composed of squadron commanders, of which even a smaller percentage are future ACE commanders.²⁴ In particular, East Coast squadron commanders rarely attend the class in part because of limited opportunity, but mostly because the Marine Air Groups (MAG) are not willing to sacrifice limited travel funds for the trip.²⁵ A majority of class attendees are usually west coast commanders because of their close proximity to MCAS Yuma, AZ.

²¹ Maj. Vail USMC. MAWTS-1 Commanders Course IOC. MAWTS-1, personal interview, Oct. 1999.

²² Maj. Vail.

²³ Maj. Vail.

²⁴ Maj. Vail.

²⁵ Maj. Vail.

If an officer does attend the MAWTS-1 course or any similar commander's course, there appears to be little emphasis on recording or tracking attendance of the course. While researching former ACE commander's records, this author found wide discrepancies in accurate recording of course completion. Most former ACE commanders whom the author interviewed as having attended the MAWTS-1 course did not have their course attendance recorded in their official career records.

The MAWTS-1 Commander's Course is a three day class held only once a year in July. The class is really two courses in one. The entire first day and a half is a series of classes presented to the combined group of commanders, executive officers, operations officers, and other MEU/SPMAGTF staff officers. For the remainder of the second day and into the third the group splits up into a commanders group and a MEU/SPMAGTF staff officers group. The commanders group receives one hour and fifty minutes of class time on MEU and ACE integration into the joint/combined arena (see Appendix A). The staff officers attend classes that cover fixed and rotary wing capabilities, employment, and integration topics.²⁶

²⁶ MEU/SPMAGTF and Commanders Course class schedule June 1999. See Appendix A.

The Marine Corps needs to reevaluate its level of institutional support given to the formal education of ACE commanders. The Marine Corps cannot continue to neglect the formal education of commanders who will be forward deployed with their units in a joint environment as the lead element of larger follow-on Marine forces. The MAWTS-1 course needs to put more emphasis on ensuring the commanders, as well as the MEU staffs, know how to integrate Marine aviation with, organic, non-organic, and joint/combined forces. The Marine Corps dedicates more classroom time at the Quantico Commander's course to Equal Opportunity, gangs, and hate groups than the MAWTS-1 course spends on teaching how to integrate MEU forces into a joint/combined operation²⁷(see Appendix B). Commander's schools that deal with warfighting issues should mandate attendance and be supported institutionally and monetarily by Headquarters Marine Corps.

Navy CAG Training Comparison

In comparison, the U.S. Navy spends up to \$30,000 in TAD (travel) funds to send a Carrier Air Group (CAG) commander to a series of schools prior to his checking into his operational command.²⁸ Granted, CAG selection and

²⁷ Quantico Commander's Course schedule , October 1999. See Appendix B

²⁸ Cmdr. Kelley, USN. F-14 Placement Officer, NAS Memphis, personal interview, Oct. 1999.

training is for a command level (Navy Captain) that is one step above a MEU level ACE (Marine Lieutenant Colonel). The CAG is, however, a valid comparison because the carrier air group is essentially a combined group of different types of aircraft that provides a carrier battle group with a variety of capabilities under the command of one senior aviator. The CAGs aircraft wing provides offensive air support, electronic warfare, airborne command and control, and anti-air warfare capabilities. By comparison, the Marine ACE provides the same aviation functions plus assault support.

CAGs are normally selected from the strike community (F/A-18, F-14). Usually he has been rated as the top squadron commander from among peers in his airwing. As CAG, he will command all of the different aircraft types assigned to the carrier battle group. Once selected for command, the placement officer sets up a formalized training track for the CAG.

The Navy Captain is first sent to the Senior Officer's Course at TOPGUN (the Navy's graduate level aviation tactics school) where he is brought up to date on the newest weapons and employment tactics. He is requalified to pilot his primary aircraft, as well as put through a short course qualifying him to fly a secondary platform of his choice. He then attends a three week Joint Maritime Tactics Course.

Next he learns how to integrate air operations with missile employment at a one week Tomahawk Missile Training Course. He has a one week OPNAV brief in Washington DC that presents real world concerns for the battlegroup's area of responsibility. Intermixed with all the schools and briefings, the future CAG spends two or three days at every Fleet Replacement Squadron (FRS) that trains the new pilots for each type of aircraft that will be in his group. While there he is afforded familiarization flights and weapons employment indoctrination.

When the training is complete, the Navy will have spent approximately \$20,000-\$30,000 on TAD funds sending the future CAG to seven different schools and briefings, not including the individual FRS's.²⁹ Even then, the future CAG spends his first 18-month deployment cycle second as Deputy CAG before appointment to CAG on the second 18-month deployment cycle. The Navy places a premium on ensuring their CAG commanders understand the capabilities and limitations of the different aircraft and how to integrate their employment with the rest of the Navy and the joint/combined world.

²⁹ Cmdr. Kelley.

Predeployment Workup

The six-month pre-deployment work up cycle for the MEU is considered the final graduate level training evolution designed to educate an ACE commander and his staff on employment of the reinforced squadron. Based on a building block approach, the ACE training begins with basic aircrew training that eventually evolves into participation in MEU level exercises that integrates all of the MEU's assets. The 180-day training cycle is divided up into an initial phase, an intermediate phase, and a final phase.³⁰

The initial phase focuses on qualifying the aircrews and the ship's deck crews on basic day and night landing qualifications. Schools and limited interoperability training with the ground combat element (GCE) are also conducted. The intermediate phase integrates all elements of the ACE with other components of the MEU. Informal and formal evaluations are done during various exercises that include a MEU Exercise (MEUEX), Supporting Arms Coordination Exercise (SACEX), Training in an Urban Environment (TRUE), and a host of other operations. The six month work-up period will culminate with the Special Operations Capable Exercises (SOCEX) that qualifies the MEU and Amphibious

³⁰ MCO 3502.3 "Marine Expeditionary Unit(Special Operations Capable) Predeployment Training Program (MEU(SOC) PTP 7 Jul. 95) 7

Ready Group (ARG) to conduct all possible assigned missions. Throughout the six-month predeployment period, the ACE commander and his squadron staff solve integration problems both within the squadron and with the ship's crew. Numerous planning evolutions to include raids, non-combatant evacuation operations, and ship seizures give the ACE commander exposure on how to best employ the ACE in support of the MEU commander's missions.

Currently, composite squadrons are not reporting to the MEU at the prescribed initial level of training expected because of a variety of reasons to include shortage of available aircraft, and lack of funding for flight hours and spare parts.³¹ The result is more time spent during the six-month workup period addressing shortfalls in basic ACE training that could otherwise be used for more challenging and more complex interoperability training. Opportunities for the ACE commander and his staff to explore and practice missions beyond basic assault and fire support are lost.

The predeployment training period is primarily directed by the MEU commander and is facilitated by agencies such as the Special Operations Training Group and the G-7 staff of

³¹ Maj. Joe Strohman, Air Officer, Special Operations Training Group, II MEF, USMC, personal interview, 10 Mar.2000.

the Marine Expeditionary Force Headquarters. The MEU commander decides what his primary focus of effort for the training will be. If the MEU commander does not prioritize advanced aviation training, such as use of air as a maneuver element or intraservice tasking of his AV-8B's with the accompanying carrier task force, the training will not happen. Additionally, if the ACE commander does not request or initiate training that exercises the other functions of Marine aviation which the unit is capable of performing, all ACE capabilities will likely never be realized.

Unfortunately, if the ACE commander is not given the opportunity to learn the operational capabilities and limitations of all the ACE assets during the dedicated training phase, it is unlikely he will be given the chance once deployed. This lack of opportunity manifests itself in many ways over time, usually in the form of frustration within the squadron attachments. Some squadron personnel believe that the commander "does not know what he does not know".

Frustration with ACE training and integration from within the HMM(REIN) squadron is reflected by 2nd Marine Air Wing's decision to assign more senior ranking officers in charge of AV-8B detachments assigned to the ACE. After

years of frustrated AV-8B detachments returning home with after action reports identifying a lack of integration and usage, the MAG began to place Lieutenant Colonels in charge of the six plane AV-8B detachments.³² Assigning a Lieutenant Colonel, instead of a Major, as AV8B detachment commander aimed at insuring the fixed wing segment of the ACE had strong representation to deal with perceived integration problems. Right or wrong, the assignment of Lieutenant Colonels to positions normally held by majors in the AV-8B community is a strong indicator of perceived ACE integration problems.

The integration problems are not necessarily the fault of the ACE commander. At times, problems with reaching minimum training goals are numerous and difficult to overcome because of the post Cold War military draw down effects as mentioned earlier. The work-up period is an intense and highly productive training and evaluation cycle for most, but unfortunately, not for all of the MEU elements. The opportunities for the ACE commander to exercise control over all of his assets and learn how to integrate them in different mission scenarios are lacking.

³² LtCol. Hayward, AV-8B det commander and ACE X.O. 26 MEU(SOC) Apr.-Oct. 1999, personal interview, 9 Mar. 2000.

FUTURE CHALLENGES IN A JOINT WORLD

The capabilities of the different ACE aircraft and aviation support platforms provide the MEU commander with formidable air combat and air assault flexibility. Currently, the thirty-year-old CH-46Es assigned to an ACE can carry 8-15 combat loaded Marines an average of 90 nautical miles (nm) round trip at approximately 120nm per hour.³³ The CH-53E can carry 24 Marines 200nm without refueling and/or carry 36,000 lbs. of cargo depending upon configuration. The UH-1N can carry 2-4 Marines an average of 100nm at 110nm per hour. For fire support the AH-1W Cobras can carry 8 anti-armor precision guided TOWS or Hellfire missiles, 700 rounds of 20 mm and a variety of other unguided munitions.³⁴ The AV-8B can carry combat load of bombs, 25mm gun, and short-range air to air missiles an average of 225 NM.³⁵ The well-rounded mix of helicopter and jet aircraft make the seabased ACE an attractive force to be used by overseas theater and joint commanders.

³³ United States, Dept of the Navy, Joint Strike Fighter(STOVL Variant)Concept of Employment, unclassified brief. (HQMC: 1999) 21

³⁴ USMC, MAGTF Staff Training Program Pamphlet 5-0.3, MAGTF Planner's Ref. Manual (HQMC: Dec. 1999) 2-8.

³⁵ Joint Strike Fighter (STOVL Variant)Concept of Employment 11

Consequently, the MEU has found itself participating in joint/combined operations on an ever-increasing scale.

The prospects of further MEU integration into joint/combined operations will undoubtedly continue in the future. The ACE will quite likely also be considered for tasking by joint or theater commanders to provide direct support for future operations that call for the use only of aviation assets. With the tendency in recent years of the U.S. government towards restricting military operations in foreign lands to air operations only, the MEU will have increased opportunities to participate but only with its use of the ACE. Examples of current operation that have allowed only the use of airpower without the use of ground forces include the ongoing No Fly Zone Enforcement over Iraqi territory and the Kosovo air campaign.

Usage of the ACE for such aviation centric operations will also increase as new and more capable aircraft begin to replace today's aging platforms. The introduction of the MV-22 and Joint Strike Fighter in the near future will assure continued MEU integration into future joint operations because of their increased capabilities and commonality with the other services' aircraft.

MV-22 Osprey

The future holds many new challenges and increased opportunities for the ACE. With the introduction of the MV-22 Osprey tiltrotor aircraft into the Fleet Marine Force as a replacement for the CH-46E, assault support is entering a new era of capabilities. The MV-22's speed, range, and carrying capacity will allow the Marine Corps to execute missions further, faster, and safer than the CH-46E that it is replacing. The MV-22 will be able to move 24 combat loaded Marines at 250 NM per hour over 200 NM without refueling.³⁶ With a refueling capability, the Osprey can self-deploy anywhere in the world. The MEU will be able to launch Marines hundreds of nautical miles from shore if need be, and conduct operations from over the horizon deep into an enemy's territory.

This exponential increase in assault capability over the CH-46E and CH-53E can place ACE assets into situations that force the MEU into joint operations outside the Amphibious Ready Group area of responsibility. The range and altitude capabilities of the MV-22 could place it in battlespace controlled by outside joint/combined forces. ACE and MEU commanders should be willing and comfortable

³⁶ Joint Strike Fighter (STOVL Variant) Concept of Employment 11

employing its assets within their increased capabilities in support of joint/combined operations.

Joint Strike Fighter

The Joint Strike Fighter will also bring new capabilities to the ACE and MEU commanders that will undoubtedly enable the MAGTF to be integrated more frequently into joint integrated operations than is currently the case today. By approximately 2008 the STOVL (short takeoff vertical land) variant of the Joint Strike Fighter will begin replacing the AV-8B, bringing new capabilities to the ACE and MEU commanders. The STOVL JSF will be a low observable aircraft with the latest defensive countermeasures to include active radar jamming.³⁷ The aircraft will also be able to act as a communications and data relay between U.S. dispersed units operating over the horizon and the Amphibious Ready Group.

Use of over the horizon communications capability and the ability to interact with other sensor platforms (JSTAP, AWACS, and SATCOM) will increase situational awareness for the battle commander on the ship as well as the pilot. The commonality between the Marine STOVL JSF variant and the Air

³⁷ Joint Strike Fighter Concept of Employment Brief 10

Force and Navy variants will make the aircraft more attractive to joint operations. The current AV-8B is used comfortably by the Marine Corps, but is somewhat of an unknown quantity to the sister services, even after 15 years of service. The shared parts and logistic support apparatus of the JSF will make the ACE strike aircraft more attractive to a joint air force or maritime component commander for use in operations not directly in support of the MEU.

The increased capabilities and commonality of the MV-22 and JSF will further draw the ACE into the joint arena. Future ACE commanders must know how to best control and integrate assigned aircraft into the ever-growing joint environment.

RECOMMENDATIONS

Selection Process

The selection process for squadron commanders needs to account for the added challenges that an ACE commander faces. Currently, the slating process for ACE commanders is informal. Manpower needs to formalize the process and identify specific requirements that a future ACE commander needs to possess above and beyond what is required of a parent squadron commander. Those requirements could include a minimum number of shipboard deployments, specific squadron staff billet assignments while on previous ACE deployments,

and formal aviation schooling. The selected requirements would help direct and focus a young aviator's career path and assignment selection as he progresses towards the rank of Lieutenant Colonel.

Accurate career record keeping is necessary to track an aviators experiences and schooling. The lack of attendance keeping on MAWTS-1 Commanders Course as pointed out earlier may be a strong indicator that aviator formal training is not tracked accurately or considered worthy of the effort. If the screen and slat board does not have up-to-date personal schooling data, even the informal manner of ACE commander selection used today lacks validity.

Career Development

The command screening and slating selection board is the first informal process that looks at differentiating the command credentials required for an ACE command. Up until this point in an officer's career, no one has been singled out or selected for a specialized career path to prepare for command of an ACE. The ACE must be recognized for its importance and uniqueness and requires a more thoughtful and tailored career path progression for its commanders than the haphazard approach to career development that exists today.

By virtue of the ACE's wide range of capabilities and susceptibility for use in the joint arena, an ACE commander must be competent in his ability to integrate Marine, Navy, and joint aviation assets. Tours spent with Marine Air Command and Control Groups should be considered as important to career development for young company grade officers, as are tours with Marine infantry units.³⁸ Learning the basics of command and control of aircraft would unquestionably establish a strong foundation for knowledge of integration of ACE assets into the Navy and joint environment.

The Marine Corps should make tours on amphibious ships as Helicopter Direction Center (HDC) Officers for Majors more palatable and attractive. The HDC is a part of the ARG's conduit with outside aircraft control agencies to coordinate airspace management while deployed overseas. Knowledge attained as an HDC officer gives an aviator great insight into aircraft management and control with the Navy and other joint and combined forces.

Additionally, Headquarters Marine Corps should expand available "out of the cockpit" tours with Air Force Joint Staffs for young field grade officers. Currently there are very few joint staff billets for Marines with the Air Force

³⁸ Col. Keenan, John A. Commanding Officer, Amphibious Warfare School, MCCDC Quantico, personal interview, 23 Nov. 1999.

beyond the normal pilot exchange program. The standard "out of the cockpit" tours that include mostly forward air controller and flight school billets are too limited and needs to be expanded.

Additional time out of the cockpit is not being recommended; Marine pilots already spend much more time in non-flying billets than the other services. However, more operational value needs to be placed on tours that expose Marine pilots to aspects of aviation that lend itself to understanding integration and interoperability of Marine aviation assets.

Expand Eligibility

Historically, the commander of the unit with the greatest number of aircraft within the ACE has been designated the ACE commander. This time-honored practice, however is not directed by either Marine Corps order or doctrine. The practice is based on the ability to easily integrate numerically smaller units into larger ones that have an established staff and command structure. Since the typical ACE assigned to a MEU is composed of 12 CH-46Es, the CH-46E squadron commander has always been the ACE commander for normally scheduled MEU deployments.

If, however, a AH-1W Cobra or a CH-53E helicopter pilot has comparable ACE deployed time and even some experience in the fixed wing or joint world, why could he not be eligible for selection as ACE commander? The Marine Corps should place the best qualified officer in the command regardless of the community from which he comes. If a newly winged pilot is selected to fly any aircraft other than the CH-46E, he stands virtually no chance of commanding an ACE on a MEU. Highly qualified and experienced CH-53E, AH-1W, UH-1N, and AV8B pilots, capable of leading an ACE, are informally denied the opportunity of command. An entire pool of highly capable aviators outside of the CH-46E community is not being used to their maximum capability by the Marine Corps.

In addition to having a larger pool of commanders to select from, mixing up commanders from other communities would breathe new life into a composite squadron by exposing detachment personnel to ways of doing business other than the CH-46E way. Overall, ACE command experience spread out over a wider number of different types of Marine aviators could only strengthen senior Marine aviation leadership and operational development. New and innovative thinking on ACE employment would be encouraged. The ACE would no longer be

seen only, as one former ACE commander has said, "a flying motor-T" for the GCE.³⁹

Placing a non CH-46 Lieutenant Colonel in command of a mostly CH-46E squadron might seem inefficient. However, the extra administrative requirements to set up a non CH-46E ACE command would be challenging at first, but once established, the benefits would outweigh the negatives.

Post Selection Schooling

Once selected for ACE command, Headquarters Marine Corps should provide funds to send him to various schools prior to taking command of his unit. Especially for those commanders who are returning from nonflying staff tours, all ACE commanders should be sent to the MAWTS-1 Commander's Course to be brought up to date on the latest Marine aviation systems and tactics.

The MAWTS-1 Commander's Course should be scheduled to occur at least twice a year. One class a year in the middle of summer cannot adequately provide support to the operating forces that consistently has three ACE's deployed, three in workups and three preparing for workups. MAWTS-1 should attempt to tailor the scheduling of its MEU/SPMAGTF and Commander's course to better coincide with ACE predeployment

³⁹ Col. Duva.

workup cycles so that all ACE commanders are better afforded the opportunity to attend.

A better option to a semi-annual MAWTS-1 Commander's Course would be the development of a MEU/SPMAGTF Commander's course mobile training team designed to visit Marine Corps Air Bases. Bringing the course instructors to the students, similar to the way MAWTS-1 trains squadron pilots in the fleet, would make training the ACE commander and his staff easier and more convenient. The mobile training team would alleviate East Coast Marine Air Groups' reluctance to fund the transportation of ACE commanders to Yuma, Arizona. Commanders would also be more inclined to attend, considering that the mobile training team would save two days of travel to Yuma to attend the course.

Additional schools such as the USMC Tactical Air Control Course or Navy Tactical Air Control Course should also be considered. Like the Navy's preparation for newly selected CAGs, the Marine Corps should select, fund, and support future ACE commanders by fostering their attendance at appropriate schools prior to taking command.

Additionally, new ACE commanders should be allowed to fly at least one familiarization and one tactical flight in all type model series that his ACE will employ, including KC-130s, F/A-18s, and EA-6B Prowlers. This will allow him

to gain a better understanding of all of his asset's capabilities and limitations. If a commander waits to get familiarization flights after he takes command, he could very easily find himself too busy executing his command duties.

CAX Experience

As a precursor to taking command of a deploying ACE, future ACE commanders should be required to have ACE command experience at a Combined Arms Exercise at Marine Corps Base 29 Palms, CA.⁴⁰ Exposure to the integrated aviation and ground combat element exercises that occur throughout the year would be a great stepping stone to gaining knowledge and a degree of comfort to employ a mix of aviation assets and support units.

Many CAX ACE commanders have been from various jet and helicopter communities and proven themselves capable of commanding effectively. Especially for non CH-46E aviators, commanding a CAX ACE could help bring their level of integrated exposure up to the level that their CH-46E counterparts claim to attain through their numerous MEU deployments.⁴¹ If an officer other than a CH-46E pilot can

⁴⁰ Col. G.C. Reuss, Aviation Colonel's Monitor, HQMC, personal interview, Oct. 5 1999.

⁴¹ Col. Duva.

command and employ a CAX ACE, why cannot he also be capable of commanding a MEU ACE?

Fleeting Up From Executive Officer

The Marine Corps could help prepare ACE commanders by first having them serve as ACE executive officers (X.O.) before assuming command. Instead of being thrust into a fast paced operational command after spending anywhere from two to four years in a staff job, the Lieutenant Colonel could be eased into command by first serving as squadron and ACE X.O.

The "fleeting up" from X.O. to commanding officer is not completely foreign in the Marine Corps, but it is institutionally not the norm. From 1994 through 1998, 20 out of 37 ACE commanders had fleeted up from parent squadron executive officer to commanding officer, and then ACE commander. Eleven ACE commanders had not fleeted up. Six ACE commander's records were unaccounted for, presumably due to retirement. It is important to note that only one of the 37 officers surveyed had experience as an ACE executive officer before becoming an ACE commander.

While stepping up from squadron executive officer to squadron commander allows commanders to ease into their parent command duties, it does not provide the same benefits

as stepping up from ACE executive officer to ACE commanding officer.

In the Navy, a CAG spends his first deployment as a Deputy CAG to allow him to get a feel for the job. The ACE command position should be treated no differently. The current deployment cycle for CH-46E squadrons could support an ACE promotion system similar to the Navy's CAG development system. On the east coast there is one and one half years between the time a CH-46E composite squadron returns from deployment and begins its next six-month workup cycle.⁴² A period of three years would be required for an officer to serve a tour beginning as a parent squadron and ACE executive officer, then assuming command of the parent squadron, and finally ending as an ACE commanding officer

The following timeline illustrates a notional three-year tour for an aviator beginning as the squadron X.O. and ending as ACE commanding officer. Time 0 is when the future ACE commander checks in as parent squadron X.O. Month 36 marks the end of the three-year tour cycle. (See figure 3)

⁴² Sgt. Shawn Patin, USMC, Operations Clerk, MAG-26 Operations, personal interview, 29 Feb. 2000.

Notional Timeline for 3 Year ACE Commander Tour

0	6	12	18	24	30	36
Parent sqd. X.O.	ACE X.O. workups	ACE X.O. MEU deploys	Parent sqd. C.O.	ACE C.O. workups	ACE C.O. MEU deploys	

Figure. 3

The Marine Corps does not institutionally place officers in positions as X.O.s with the intent of fleeting them up to C.O.s. Allowing a future ACE commander time to grow and learn as X.O. prior to taking command would better prepare the future ACE commanders.

Post Squadron Commander

An alternative command structure could be implemented with the appointment of a Lieutenant Colonel who has already completed a tour as a homogenous squadron commander. The change would allow aviators other than assault support specialists the opportunity to command ACEs. ACE commanders from other aviation communities would bring greater diversity in the employment of ACE assets and its other functions of Marine aviation.

The organizational chain of command of an ACE lead by a commander who has already completed a tour as a homogeneous squadron commander could be structured in one of

two ways. As depicted in figure 4, the CH-46E squadron commander would be responsible for overall administrative control over the smaller detachments. The CH-46E commander would in a sense act as a deputy commander for the new ACE commander. Personnel issues and flight schedule generation would funnel through the CH-46E squadron. However, the ACE commander would make final operational decisions.

Figure 4

The second option, as depicted in figure 5, would treat detachments as individual units with equal say and input in all operational matters. When disagreements arise between ACE detachments, an post squadron command aviator, less influenced by the possibility of community bias, would make the final decision.

Figure 5

Either of these alternate chains of command would allow the ACE C.O. to remove himself from the full time job of commanding the squadron and allow his mind to focus on employing his ACE and all of its support assets. Dealing with day to day squadron tasks such as flight schedules, personnel problems, and other command related issues can rob the ACE commander of his energy and time needed to actually plan the employment of the composite squadron.

An additional advantage of the alternate ACE command structures would be the facilitation of allowing other aviation communities the opportunity to command an ACE. A post-command Lieutenant Colonel could be selected from all aviators who have served as a previous squadron or detachment commander. This would create a larger pool of officers, with proven command experience, to select as an ACE commander.

A post command ACE commanding officer could focus on employment and integration of the different components of the composite squadron. Instead of acting as a CH-46E, CH-53E, or any type of squadron C.O. who has supporting detachments assigned to him, the ACE commander should be placed in a position that allows him to engage every detachment and the unique capabilities it provides the MEU.

The ACE is viewed by some as a CH-46E squadron with attachments whose mainly there to enable it to better perform its assault support mission.⁴³ Assault support is, however, only one of the Marine aviation functions that the ACE is supposed to bring to the MEU. The ACE should be thought of as a conglomeration of aircraft that can do many things, not just move troops and gear. As long as ACE commanders are selected from only one aviation community that provides only one function of Marine aviation, other capabilities such as offensive air support, ship's defense, command and control of missiles and aircraft will potentially be under utilized.

CONCLUSION

As MEU missions evolve to include deeper integration in

⁴³ Col. Duva.

the joint environment and the development of professional operational knowledge erodes due to decreased time available spent in operational squadrons for the average pilot, leadership development in Marine aviation could diminish unless steps are taken to supplement its development. The Marine Corps can no longer rely so heavily on on-the-job training and the pre-deployment work-up period in its current state to expose the ACE commander to everything he is required to know to successfully employ the ACE. The Marine Corps must institutionalize commander training for the ACE commander. Headquarters should administer and fund commander training that would include mandatory attendance at an improved MAWTS-1 Commander's Course and familiarization flights in all ACE aircraft types.

The predeployment training should give the ACE commander the opportunity to learn and employ the capabilities of all of his assets, now just a few. Training of aviation assets should include tasking and integration with joint/combined agencies such as the carrier battle group with which the ARG conducts a portion of its workup and deployment. Unfortunately, as long as the ACE commander has to be concerned with his composite squadron meeting

minimum requirements for deployment, exploring the capabilities of his different assets will remain unlikely.

However, when the opportunity for advanced training presents itself, commanders selected from aviation backgrounds other than assault support would likely be more comfortable, capable, and willing to integrate other functions of Marine aviation into ACE training. Selection of post squadron command Lieutenant Colonels would facilitate the infusion of other aviation backgrounds and experiences into the ACE. Since the air successes of the Gulf War and Kosova, aviation has increasingly become the method of choice in dealing with crisis that do not warrant the high risk of casualties. Thus, the Marine Corps should begin focusing more on the other capabilities the ACE brings to the MEU in addition to assault support. Increasing the level of ACE commander training and opening up command selection to other aviation communities would be a positive step to ensure the MEU retains its ability to respond to the changing operational requirements of theater commanders.

As the Marine Corps moves to reintroduce the Marine Expeditionary Brigade (MEB), which would include an ACE two to five times the size of one that supports a MEU, a more robust and formalized ACE commander career development and selection program becomes increasingly more important. A

MEB level ACE commander would logically benefit from experienced gained as a MEU level ACE commander. However, most aviators with that experience are currently from mostly a single aviation community. Marine aviation at the MEB level would also benefit from a larger and more diverse pool of aviators to choose from if ACE commands at the MEU level were opened up to other aviation communities.

The future of Marine Aviation will be a blessing for the MEU's. Increased capabilities will enable the MEU to be used in a wider range of operations in support of the regional combatant commanders. Aviation budget constraints and force structure changes, however, will likely continue to bite into precious training opportunities for potential ACE commanders. Unless the Marine Corps begins to shore up looming deficiencies in operational experiences, leadership development of future ACE commanders will be stunted at a time when it needs to grow.

Bibliography

- Major General Berndt, Martin R. Deputy Commanding General,
Marine Corps Combat Development Command, Quantico.
Interviewed by author 14 December 1999.
- Brigadier General Gardner Jr., Emerson N. USMC Assistant
Deputy Chief of Staff for Aviation, USMC. Interviewed
by author 13 December 1999.
- Colonel Keenan, John A. USMC Commanding Officer, Amphibious
Warfare School, MCCDC Quantico. Interview by author,
23 November 1999.
- Colonel Duva, Michael, USMC Branch Head, Headquarters
Marine Corps (HQMC) Pentagon. Interviewed by author,
15 October 1999.
- Colonel Patton, Charles S. USMC Commanding Officer 11th
Marine Expeditionary Unit. Interviewed by author, 18
October 1999.
- Colonel Knoll, Stuart L. USMC Assistant Branch Head
Headquarters Marine Corps, Pentagon. Interviewed by
author, 15 October 1999.
- Colonel Browning, Darrell A. USMC Director Command and
Staff College. Interviewed by author September 1999.
- Colonel Ruess, G.C., USMC Aviation Colonel Monitor, Marine
Manpower and Officer Assignments, HQMC. Interviewed
by author 5 October 1999.
- Colonel Cooney, James J. USMC Command and Staff College.
Interviewed by author approximately 22 October 1999.
- LtCol. Fetzner, Barry R. USMC, Senior Marine DONOMIT.
Interviewed by author, 29 October 1999.
- Major Butler, Mark A. USMC. HQMC, Aviation Plans and
Weapons, HQMC. Interviewed by author over phone 21
November 1999.
- Major Vail, David J. USMC. Marine Aviation and Weapons
Training Squadron 1, MCAS Yuma, AZ. Interviewed over
phone by author 19 November 1999.

Major Desens, Mark J. Rotary Wing Monitor, Manpower Headquarters Marine Corps. Interviewed by author 4 October 1994.

Commander Kelley, Navy F-14 Placement Officer. Interviewed by author over phone 20 November 1999.

Major Vail, "MEU/SPMAGTF and Commander's Course" June 1999 Syllabus Class Guide. MAWTS-1, MCAS Yuma, AZ.

Marine Aviation and Weapons Tactics School, MCAS Yuma, AZ. *MAWTS-1 Course Catalog*. 3 August 1998.

Munson, Curtis A., and Lyons, Dwight, Major, USMC. "Is The MAGTF Still Relevant?" *Marine Corps Gazette*, February 1996: 32-35

Fetzer, Barry R., LtCol. USMC. "Command Screening and Slating" *Marine Corps Gazette*, April 1999: 47-50

Wielsma, Ronald, Major, USMC. Officer Promotion Planner MPP 31, Manpower Plans and Policy Division. Interviewed by author 10 February, 2000.

United States Marine Corps Aviation Plans and Policies Pamphlet, *Marine Aviation Campaign Plan*" 1 October 1999

FY 99,00, and 01 COL. BOARD SELECTS-NONSELECTS Data worksheet, Aviation Career Councilors, Manpower Division, Headquarters Marine Corps.

Marine Corps Order 3120.9A with Change 1, *POLICY FOR MARINE EXPEDITIONARY UNIT (SPECIAL OPERATIONS CAPABLE) (MEU (SOC))*. 24 November 1997

Marine Corps Order 3502.3 with Change 1, *MARINE EXPEDITIONARY UNIT (SPECIAL OPERATIONS CAPABLE) PREDEPLOYMENT TRAINING PROGRAM (MEU(SOC) PTP)*. 7 July 1995

Dailey Jr., T.E. Major, USMC. *The User Friendly Guide To The Functions of Marine Aviation*. Marine Air-Ground Training and Education Center, Marine Corps Combat Development Command, Quantico, Virginia. Ref. Designator C(C)2250

Fleet Marine Force Field Manual (FMFM) 5-1, *Organization and Function of Marine Aviation*. Washington D.C.: Department of the Navy

U.S. Marine Corps, "Joint Strike Fighter (STOVAL Variant) Concept of Employment" Unclassified briefing package. MCCDC. Dec. 1999.

Bell Boeing 1998 Multimedia Show CD ROM 08/02/985337-01S.

Marine Corps Order 1300.64, *COMMAND SCREENING PROGRAM* January 1995.

Department of the Navy, *Report to the Permanent Grade Table Relief Steering Group of the Department of Defense*. Washington D.C. 1995.

Sergeant Patin, Shawn, Operations Clerk, MAG-26 S-3 Operations Office. Interviewed by author 29 Feb. 2000.

Staff Sergeant Walker, R. Administration Chief, S-1 Administration Office, HMM-264(REIN), MAG-26. Interviewed by auhtor 29 Feb. 2000.

Major Rupp. "Total Time To Train" Brief. *1997 Aviation Quality Management Board Brief* Aviation Support Manpower 51. HQMC. 1997.

Major Piirto, Micheal. Aviation Training Branch, Training and Education, MCCDC. Interviewed by author 2 March 2000.

Major Smith, Russell H. Director Commanders' Program, Marine Corps University, MCCDC. Interviewed by author 11 April 2000.

Marine Corps University Commanders' Program CD ROM. 14-24 March 2000

Commandant of the Marine Corps. Message to all Marine commands. Subject: "March 2000 Resident Commanders' Program." 191600Z JAN 00

APPENDIX B: COMMANDERS' COURSE

Mon, 13 Mar 00	Tue, 14 Mar 00	Wed, 15 Mar 00	Thu, 16 Mar 00	Fri, 17 Mar 00	Sat, 18 Mar 00
Travel day to MCB Quantico	0800 - 0830 Welcome/Admin Remarks <i>BGen Conway</i> President, MCU	0800-0930 Combat Development Process CG, MCCDC <i>LtGen Rhodes</i>	0800-0900 Componency <i>LtCol Marletto</i>	0800-1015 Manpower & Reserve Affairs <i>LtGen Klimp</i>	
	0830-0930 Opening Address ACMC <i>Gen Dake</i>	0945-1045 Public Affairs <i>BGen Whitlow</i>	0915-1100 Commanders' Role & the MCPD <i>LtGen Christmas (Ret)</i>	1030-1130 <u>Discussion Groups</u>	
	0945-1015 Admin Remarks <i>Maj Smith</i>	1100-1200 <u>Discussion Groups</u>	1115-1230 Casualty Affairs <i>Maj Ward</i>	1130-1230 Lunch Anthrax Elective <i>Capt Schor</i>	
	1030-1130 Command, Control, Communications, Computers, & Intelligence (C4I) <i>BGen Shea</i>	1200-1330 Lunch	1230-1400 Lunch	1230-1330 Operational Risk Management <i>RADM Dirren</i> <i>Comdr, Naval Safety Center</i>	
1800-2000 Commanders' Course check-in at Aquia Days Inn	1145-1300 Plans, Policies & Operations <i>LtGen Ayres</i>	1330-1430 Aviation & Ground Maintenance Management <i>Col Diaz, ASL</i> <i>LtCol Sipes, FSMAO-1</i>	1400-1500 Programs & Resources <i>LtGen Williams</i>	1330-1345 *Depleted Uranium Awareness Training* Video <i>Maj Smith</i>	
	1300-1430 Lunch	1445-1545 Command & Control Doctrine <i>Col Brown</i>	1515-1730 Training & Education Division <i>BGen Jones</i>	1400-1700 *Equal Opportunity, Gangs, & Hate Groups* <i>Col Butler</i>	
	1430-1530 Installation & Logistics <i>LtGen McKissock</i>	1600-1630 *Suicide Awareness* <i>LCDR Jones</i>			
* denotes presentation mandated by CMC guidance, MCO, or MARADMIN	1545-1645 Marine Aviation <i>LtGen McCorkle</i>	1640-1740 MCUF/MCA/NMCRS <i>MGen Gardner (Ret)</i> <i>MGen Palm (Ret)</i> <i>ADM Johnson (Ret)</i>			
	1700-1830 Icebreaker Social The Clubs at Quantico

APPENDIX A

MEU/SPMAGTF and Commander's Course

Tuesday, June 29, 1999

0800-0810	Welcome Aboard	Col Catto	Toad Hall
0810-0820	Course Description / ROE	Maj Vail	Toad Hall
0820-0910	WTI Course Overview	LtCol Santacroce	Toad Hall
0910-0930	Break		Toad Hall
0930-1020	Intel Systems & Product Support	CWO4 Gibson	Toad Hall
1030-1120	Urban CAS	Maj Mahoney / Capt Adams	Toad Hall
1120-1230	Lunch		
1230-1320	TRAP	Capt Mclellan	Toad Hall
1330-1410	UAV Overview	Capt Weaver	Toad Hall
1415-1700	Dept / Div Time	Dept Heads	Ready Rooms
1730-1900	No Host Social	Staff	O' Club

Wednesday, June 30, 1999

0800-0900	MEU/JFACC ATO Integration	Maj Weidley	Toad Hall
0900-0920	Discussion/ Break		
0920-1010	NATO & Combined Ops	FltLt McAleer	Toad Hall

Commanders

1020-1110	ROE	Maj Reddy	Toad Hall
1110-1230	Lunch		
1230-1300	ADT&E Update	Maj Franzak	Toad Hall
1310-1400	LTA / UCA	Capt Adams	Toad Hall
1400-1425	Discussion / Break		
1425-1440	TOAD Hall Setup	Acad	Toad Hall
1445-1630	Discussion Panel	CO	Toad Hall
1730-	BBQ Dinner	Staff	O' Club

MEU / SPMAGTF

1020-1110	AV-8B / F-18	Majs Schram / Mahoney	Ditto Hall
1110-1215	Lunch		
1215-1245	AH-1W / UH-1N	Maj Landeche / Capt Vanderwerff	Ditto Hall
1245-1315	CH-46 / 53	Maj McCoy / Capt Wernecke	Ditto Hall
1315-1330	Discussion/ Break		Ditto Hall
1330-1400	KC-130	Maj Flanery	Ditto Hall
1400-1430	EA-6B		Ditto Hall
1445-1630	Discussion Panel	CO	Toad Hall
1730-	BBQ Dinner	Staff	O' Club

Thursday, July 1, 1999

0730-0820	The New TACC	Maj Reddy	Toad Hall	0730-0820	OAS FW/RW Integration	Maj Gering / Capt Curtis	Ditto Hall
0830-1000	TMD	Capt Breeden	Toad Hall	0830-0920	TAC(A) / FAC(A)	Capt Farnum	Ditto Hall
1000-1030	Discussion/ Break		Toad Hall	0930-1020	OAS PGMs	Maj Vail/Capt Farnum	Ditto Hall
1040-1130	AGS	Maj Thoma	Toad Hall	1030-1120	Convoy Escort Operations	Maj Vail	Ditto Hall
1120-1230	Lunch			1130-1230	Lunch		
1230-1320	MACCS 2010	Maj Reddy	Toad Hall	1230-1320	TACRON / CVBG / AEW	Cmdr McCmb1	Ditto Hall
1320-1340	Discussion/ Break		Toad Hall	1320-1340	Discussion / Break		Ditto Hall
1340-1420	JSF Update	Col Pckrd	Toad Hall	1340-1420	ARG MLA	Capt Becker	Ditto Hall
1420-1510	MV-22 Update	Capt Flynn	Toad Hall	1420-1510	MACG ISO MEU(SOC)	Capt Weaver	Ditto Hall
1510-1530	Discussion/ Break		Toad Hall	1510-1530	Discussion / Break		
1530-1545	Closing Remarks	Col Catto	Toad Hall	1530-1545	Closing Remarks	Col Catto	Toad Hall