

KEEPING THE DAGGER SHARP: A COMPARISON OF MC-130H
AND MH-47E SELECTION AND TRAINING METHODS

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

KEEPING THE DAGGER SHARP: A COMPARISON OF MC-130H AND MH-47E SELECTION AND TRAINING METHODS, by Major Matthew A. Powell, USAF, 83 pages

Since its inception in 1990, Air Force Special Operations Command (AFSOC) has struggled to balance its roles as both a Major Command in the US Air Force (USAF) and the air component of US Special Operations Command (USSOCOM). US Code, Title 10, grants the authority to train US special operations forces to USSOCOM, however AFSOC is still required to observe USAF training rules and restrictions.

This study compares the selection and training methodologies of AFSOC MC-130H aircrews and those of US Army MH-47E aircrews. It first analyzes the respective regulatory guidance and operational practices employed during assessment and selection, initial qualification training, and continuation training for each aircraft type. It then ascribes a quantitative valuing system to measure compliance with legal responsibilities. An analysis of the selection and training methodologies of baseline variants, the C-130 and CH-47, follows to highlight differences between conventional and unconventional forces.

This study concludes that MC-130H selection and training has much more in common with conventional units than its unconventional counterpart, the MH-47E. In order to resolve the often conflicting responsibilities of air component of USSOCOM and USAF major command, this study then provides recommendations on how to modify MC-130H assessment and training methodologies.

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ACRONYMS

AETC	Air Education and Training Command
AFI	Air Force Instruction
AFPC	Air Force Personnel Center
AFSOC	Air Force Special Operations Command
AMC	Air Mobility Command
AO	Area of Operation
AW	Airlift Wing
DES	Department of Evaluation and Standards
DoD	Department of Defense
DOT	Directorate of Training
DOV	Directorate of Standardization and Evaluation
DP	Directorate of Personnel
FAA	Federal Aviation Administration
FM	Field Manual
FTG	Flight Training Guide
MAJCOM	Major Command
METL	Mission Essential Task List
NVG	Night Vision Goggle
PL	Public Law
POI	Program of Instruction
SF	Special Forces
SOA	Special Operations Aviation
SOAR(A)	Special Operations Aviation Regiment (Airborne)

SOATC	Special Operations Aviation Training Company
SOCOM	Special Operations Command
SOF	Special Operations Forces
SOW	Special Operations Wing
TTP	Tactics, Techniques, and Procedures
USC	United States Code
USSOCOM	United States Special Operations Command
110 AVN BDE	110th Aviation Brigade

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CHAPTER 1

INTRODUCTION

In the immediate aftermath of the terrorist attacks of 11 September 2001, an Air Force Special Operations (AFSOC) MC-130H Combat Talon II squadron commander and his operations officer began to assemble five crews in anticipation of a deployment in support of Operation Enduring Freedom. Although the squadron maintained twelve crews, the task of selecting five for combat operations was a difficult one. Within the past year, ten of thirteen instructor pilots had separated from the Air Force following the fulfillment of their service commitments. This left the squadron with not only a gap in experience, but a shortage of aircraft commanders as well. The squadron attempted to narrow the resulting gap in experience, but the MC-130H Flight Training Unit at Kirtland could only produce four instructor pilots a year to be distributed amongst the three operational MC-130H squadrons. Similarly, the squadron had received some aircraft commanders from the other two operational units, but the Flight Training Unit could only produce four to six crews, or six to ten aircraft commanders a year. In order to meet the demand for pilots, Air Education and Training Command (AETC) allowed aircraft commander applicants into training who had no C-130 tactical flying experience.

Within the ranks of the experienced aircrew members available, the squadron commander and operations officer faced further difficulties. Several crewmembers were non-current for flying events, a status that could not be waived at the squadron level. Despite the urgency of the situation, the necessary paperwork required staffing at the two echelons above the squadron. Although some minor waivers were approved, many were

not. Frustrated by the perceived bureaucracy of the training waiver process, the commander withdrew several highly experienced aircrew members from his list. Similarly, deficiencies in training resulted in the loss of mobility status for several individuals. The waiver approval for some of these items resided outside of AFSOC altogether, and in the interest of time, pursuit of those waivers was abandoned outright.

When the deployment order was finally received, the squadron fielded five aircrews that were each well capable of accomplishing the mission. However, less than 20 percent of the individuals that comprised those crews had greater than 1,000 hours flying the MC-130H, including only one of the five-crew commanders. The squadron operations officer, aware of the extended planning time that would be afforded them at the Forward Operating Base, devised a training regimen intended to mitigate deficiencies in individual experience levels, but the lack of a higher headquarters-approved landing zone severely hampered his plan. Once the squadron had accomplished their primary mission, follow-on missions began to evolve which required exercising Mission Essential Tasks in an unfamiliar environment. The squadron commander, with an eye to preparing his crews at home for impending operations, petitioned higher headquarters to allow his crews at home to conduct short-field landings on unimproved landing strips. His appeal was denied based on the perceived risk of such training operations. As a result, the first time an aircraft commander conducted such a landing was in a combat environment.

Overview

Although the preceding vignette was fictional, most of events described actually occurred and the rest were certainly within the scope of possibility. Within the various Special Operations Forces (SOF) that comprise Special Operations Command (SOCOM),

there exists an explicit requirement for selective assessment of prospective candidates, for organic initial qualification, and for unit-tailorable continuation training. The basis for these requirements resides within Title 10 of the *United States Code (USC)*, which assigns to the SOCOM commander the responsibility and authority to train assigned forces and conduct specialized courses of instruction (10 *U.S.C.*, 167(e)(2)(D, E)). However, AFSOC does not conduct selective assessment, nor does it conduct the initial qualification training of incoming MC-130H aircrews within the command, nor does it allow for unit-tailorable continuation training.

This thesis will examine to what degree AFSOC, and in turn the USAir Force, complies with the training requirements set forth in Title 10. In order to draw a conclusion, it is first necessary to establish just what those responsibilities are and compare the MC-130H training methodology with that of other Special Operations Aviation (SOA) aircraft. In an attempt to draw meaningful comparisons, this aircraft should have a similar mission, which would, in turn, require a similar skill set from its aviators.

According to the *United States Special Operations Forces Posture Statement*, the mission of the MC-130H is to “provide global, day, night, and adverse weather capability” in order to conduct “infiltration, exfiltration, resupply” (Billingslea and Holland 2003, 74). The 160th Special Operations Aviation Regiment (Airborne) (SOAR(A)) operates the MH-47E whose mission is to “conduct infiltration, exfiltration, air assault, resupply . . . under a wide range of environmental conditions” (Billingslea and Holland 2003, 76). Although there are significant differences between training and flying

fixed-wing and rotary-wing aircraft, the similarity in missions should afford an opportunity to compare and contrast training methodologies.

This analysis will include three phases of training: personnel assessment and selection, initial qualification training, and continuation training. As will be discussed in a later chapter, special operations missions place unique demands upon individuals and the purpose of assessment and selection is to determine those individuals with the appropriate capabilities to successfully complete the prolonged and rigorous training and ultimately execute the mission. Following assessment and selection, initial qualification training provides primary mission training in the aircraft and affords trainees an opportunity to familiarize themselves with the various tasks they will be expected to accomplish in an operational unit. Finally, continuation training encompasses not only maintenance of skill sets and flying proficiency, but also upgrade to subsequent, higher positions of responsibility, such as instructor or flight examiner.

This thesis will demonstrate the similarities and differences between MC-130H and MH-47E training and will illustrate whether or not either or both are in keeping with the responsibilities set forth in Title 10. If there are deficiencies in MC-130H training, recommendations of strategies to correct the situation will be proffered.

Background

Following the war in Viet Nam, the U.S. military force was drawn down to reflect the peacetime needs of the nation. The special operations soldiers, sailors, and airmen languished, neglected by a military structure that saw little need for such capabilities. The skills and experiences that were hard-won in Southeast Asia quickly faded. But, soon a new threat emerged, a threat that conventional forces were ill-equipped to counter.

In late 1979, a group of Iranian students stormed the U.S. Embassy in Tehran and captured dozens of American hostages. Unable to broker a diplomatic solution, President Carter approved the planning and execution of a rescue mission. The mission, which was to span two days, involved the integration of disparate conventional and unconventional units in a complex operation which had never been accomplished before. Unfortunately, the operation was aborted during the first night of the mission and eight Americans lost their lives in the Iranian desert.

In an effort to determine what factors led to the failure of the operation, the Joint Chiefs of Staff established a commission chaired by Admiral J. L. Holloway. Citing the ad-hoc nature of the organization and planning, the recommendations of the commission's "Rescue Mission Report" included: "It is recommended that a Counterterrorist Joint Task Force (CJTF) be established as a field agency of the Joint Chiefs of Staff with permanently assigned staff personnel and certain assigned forces" (Holloway 1980, 61). Suddenly, as Stanley McChrystal stated, "the American public, Congress, and [Department of Defense] sought to rectify the shortcomings [in SOF capability] resulting from a decade of neglect" (McChrystal 1990, 5).

After a series of attempts to codify guidance for the military, Congress passed Section 1311 of Public Law (PL) 99-443, or the Goldwater-Nichols Department of Defense (DoD) Reorganization Act of 1986, which established United States Special Operations Command (USSOCOM) as a new unified combatant command with land, sea, and air components. Air Force Special Operations Forces, which had first been under the command of Tactical Air Command then Military Airlift Command, were organized into a separate Major Command and placed under the Combatant Command of USSOCOM

while the Air Force retained administrative control. However, the branches of the military were slow to react to the legislation, as cited in a 1987 memorandum to Secretary of Defense Weinberger from Senators Cohen and Kennedy: “There are reports which suggest that the Department of Defense may not be cooperating fully in providing the new unified commander for special operations the unique budget authority granted him by Congress” (Uttaro and Vycital 1988, 60). Although this authority was ultimately given, if grudgingly, there continues to exist a conception that unconventional forces are under the direct combatant command of their parent services, and therefore, subject to the demands and restrictions of that parent service.

Scope

Whereas the MC-130H shares many common mission sets and training regimen other AFSOC aircraft, especially the MC-130E Combat Talon and MC-130P Combat Shadow, this study will be limited to MC-130H aircrews. There are myriad small differences, which would require identification and analysis, and this would broaden the scope of this study beyond usefulness. This thesis will, however, provide a framework within which future study of different aircraft could be made.

Furthermore, there are clear parallels between the MH-47E and its older variant, the MH-47D, but the MH-47E shares with the MC-130H the ability to terrain follow, or fly above the contours of the landscape using radar cues instead of visual cues. This capability brings with it additional specific training to develop and maintain the skills associated with terrain-following flight. Beyond that, aircrew training for the two MH-47 variants is virtually identical, but for the sake of clarity, this study will focus entirely on the MH-47E.

Considerable differences exist between the aircrew composition of the MC-130H and MH-47E. Each of these crewmembers are trained to accomplish distinct tasks in order to ensure overall mission accomplishment. Aircrew specialization places unique demands upon training requirements, and parallels are often hard to draw. This study will only consider those tasks which are shared between MC-130H and MH-47E crewmembers, rather than attempt to draw analogies between distinct crew positions, that is to say pilot to engineer, or navigator to crew chief. In doing so, some tasks will not be considered, but this is not meant to imply they are unimportant, just that there are no parallels to be drawn.

Finally, crew tasks will be compared without consideration of rank. In the MC-130H officers fill pilot, navigator, and electronic warfare officer positions while enlisted personnel occupy the flight engineer and loadmaster positions. Both officers and warrant officers pilot the MH-47E and crew chiefs are drawn from enlisted ranks. The considerable differences between the career paths of officers and warrant officers afford each group some advantages and disadvantages with regard to continuity of training, proficiency levels, and opportunities for upgrade, but these issues will not be discussed in detail.

Primary and Secondary Research Questions

The research question this thesis will consider is: Does the USAir Force allow AFSOC to adequately select and train MC-130H aircrews in accordance with Title 10? To answer this, the study will analyze the degree to which AFSOC selectively assesses prospective trainees, conducts initial qualification training, and facilitates unit-tailorable continuation training.

Assumptions

The primary assumption of this thesis is that SOA personnel accession is conducted at relatively fixed rates. Either unit expansion, accelerated individual separation, or simple attrition can place severe demands upon training, most notably in assessment and selection, where standards may be lowered to provide more trainees, and initial qualification, where shortages in instructor manpower limit a unit's ability to provide initial qualification instruction to those new trainees. This is a difficult assumption to make in the face of ongoing combat operations in southwest Asia and the dramatic expansions planned for both the MC-130H and MH-47E communities, but it is important to emphasize that these are anomalies. Throughout history, military units have been forced to lower standards in times of conflict or growth, but this should not be an accepted practice for normal operations.

Literature Review

This study relies on five types of reference sources. Legal sources, such as USC and PL, comprise the first category. Military regulatory guidance, such as Air Force Instructions (AFIs) and Army Field Manuals (FMs) and Flight Training Guides (FTGs) provide the second reference source category. The third type encompasses books and articles, which describe SOF and special operations missions in a historical context. Next, this study will examine research papers and theses written by individuals with experience in special operations. The final category of reference sources consists of personal interviews in order to provide insight on SOF processes, both current and past.

The USC provides the foundation for this study. The existence and responsibilities of USSOCOM are codified in Title 10 *USC*, Section 167. However,

Section 167 is derived from two significant laws, PL 99-443 and PL 99-661. The first of these, PL 99-443, is better known as the Goldwater-Nichols DoD Reorganization Act of 1986, which established the unified command structure in use today. This was amended by PL 99-661, the Cohen-Nunn Amendment to the DoD Authorization Act of 1987, which established USSOCOM as a unified combatant command and created the Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict.

Guidance is provided to military units in the form of regulations. Pertinent training regulations include AFI 11-2C-130, Volume 1, *C-130 Aircrew Training*, and its AFSOC counterpart, AFI 11-2MC-130, Volume 1, *MC-130 Aircrew Training*. The US Army describes the 160 SOAR(A) in FM 3-05.60, *Army Special Operations Forces Aviation Operations*, and the 160 SOAR(A) establishes initial qualification training regimen in the *MH-47E Basic Mission Qualification Training FTG*.

There are several excellent books and articles, which describe the evolution and current composition of SOF. Two books, written during the embryonic years of USSOCOM, deserve special consideration. The first, *Special Operations in US Strategy*, is a compilation of essays provided during a two-day symposium sponsored by the National Strategy Information Center in March 1983. Noted military theorists provided their insights on myriad facets of special operations and other eminent individuals then analyzed their comments. The result is a historical look at the proposed roadmap of how special operations should integrate into the military construct. In his book, *Special Operations Forces: An Assessment*, John M. Collins summarizes the difficulties faced by SOF prior to corrective legislation, reviews process improvement up to 1994, identifies problems that remain, and offers options to advance SOF capabilities. Collins' study,

which was commissioned by Senators Sam Nunn and William Cohen, stands as a significant milestone in the evolution of special operations.

There are a number of research papers and theses, which contributed to this study. The work which inspired this thesis is “The Air Force Special Operations Identity Crisis: An Assessment and Opinion” by David J. Scott. This report thoroughly examines the seemingly schizophrenic characteristics of an organization that attempts to appease two masters. The identity dilemma presented is “should AFSOC present USSOCOM with the tools, tactics, and doctrine of the conventional service component to which it belongs, or develop a new and unconventional identity based upon the unique nature of the unified command it supports?” (Scott 1996, 13). The value of the thesis lies in its identification of the distinct nature of AFSOC with regard to the other Air Force Major Commands. By establishing the unique demands placed upon AFSOC, Scott creates the case for a higher degree of autonomy from the rest of the Air Force.

Understanding the need for and process of assessment and selection was greatly facilitated by “Special Forces [SF] Assessment and Selection” by Sean Feeley. Given a lack of analysis of SOA assessment and selection procedures, this study provides the reader with an outstanding analysis of assessment and selection with specific emphasis on Army SF personnel. Of particular importance is Feeley’s discussion of current methods of psychological testing to ascertain an individual’s strengths and weaknesses in thirteen attributes found to indicate potential success in qualification training and mission execution. “An Assessment of Assessment: Is Selective Manning Right for USAF Special Operations Aircrew?” by William Saier, which compares Army and Navy SOF assessment and selection programs, compliments Feeley’s thesis by describing in depth

the various methods of psychological assessment and recommending a method to be used for assessing Air Force SOF.

Two works, written during AFSOC's infancy, propose a theoretical model for how the command should conduct itself. "USAF Special Operations Forces: A Road Map into the Future" by Gerald Uttaro and Gary Vycital provides an idealized version of an air component of USSOCOM almost entirely divorced from the Air Force. Although the study proposes numerous policies, which were never adopted, it represents a case study of command structures that should exist in order to satisfy the direction of Congress prior to the actual establishment of AFSOC. Similarly, Stanley McChrystal's "Special Operations Command: The Future" takes a macroscopic look at command relationships and responsibilities in the years immediately following the inception of USSOCOM. The value of this study is the detail in which McChrystal examines the specific requirements and congressional intent of the PLs that created USSOCOM.

Finally, in order to provide a depth in understanding that the written word so often does not afford, personal interviews were conducted. The individuals interviewed represent a spectrum of relevant experiences and include: active duty and retired; Army and Air Force; officer, warrant officer, and enlisted. Their insights provided illumination on the evolution of standard practices within SOA.

CHAPTER 2

METHODOLOGY

In order to thoroughly analyze the extent to which the US Air Force allows AFSOC to honor its Title 10 responsibilities with regard to MC-130H aircrew training, this study will research three areas of interest: Assessment and Selection; Initial Qualification Training; and, Continuation Training. A parallel study of MH-47E training will be presented as a relative gauge to draw comparisons and identify significant differences. The base variants of each aircraft type, namely the C-130 and CH-47 will also be explored as double controls in our analysis, realizing that their parent organizations may have distinctly different responsibilities under Title 10. The purpose is to establish a baseline for this study from which to draw further points.

The object of this study is to compare and contrast aspects of SOA training along parallel lines. Although distinct differences exist in the methodologies of MC-130H and MH-47E training, strong similarities exist when the systems are studied at the macrocosmic level. The purpose of this rigidity is to then ascribe a quantitative valuing system to the largely qualitative research. Various facets of each of the three phases of training will be explored and evaluated on a one to five scale and an aggregate score will be assigned to each phase of training. Finally, these scores will be analyzed to draw conclusions and facilitate recommendations.

Assessment and Selection

In order to study the assessment and selection process, this thesis will investigate aspects of five components: process ownership, responsiveness to requirements,

relevance, quality assurance, and resource allocation. The tremendous demands placed upon an organization by the assessment and selection process, as well as the imperative of standardization, necessitate that this process is normally conducted above the unit level. As such, the focus will be on the US Army Aviation Regiment and US Air Force Major Command (MAJCOM).

Several questions will guide the study of process ownership. Who determines the entrance criteria, if any, for prospective applicants? If an individual assessment is made, who conducts it and of what is that assessment comprised? Who selects individuals for initial qualification? What visibility do gaining units have on the process?

Responsiveness to unit personnel requirements, especially in times of increased or decreased demand, can be studied by investigating assessment and selection with respect to overall personnel production, or total crews produced, and discrete qualification production, or specific crew positions produced.

The study of the relevancy of the assessment and selection process will include: Do gaining units review assessment and selection criteria? Do the organizations responsible for assessment and selection respond in a timely manner to the needs of gaining units?

In order to validate the current assessment and selection process, a quality assurance program must be established. The regiment or MAJCOM must evaluate individual candidate suitability at intervals following qualification. Also, gaining units should provide an independent evaluation of selected individuals.

As previously discussed, the assessment and selection process places huge demands on resource allocation. The portion of total resource allocation borne by the regiment or MAJCOM will be investigated with respect to time, money, and personnel.

The discussions of each of these questions will culminate with a quantitative evaluation and the study of the assessment and selection process will be summarized in an analysis matrix (see table 1).

Initial Qualification Training

As with the previous phase of training, the study of initial qualification training will require the investigation of five areas: process ownership, responsiveness, relevance, quality assurance, and resource allocation. As with assessment and selection, the burden of initial qualification training is considerable, and in the interest of minimizing costs and maintaining a standard amongst trainees that training is normally conducted above the unit level. Therefore, the primary focus of this section of the thesis will also be on the US Army Aviation Regiment and US Air Force MAJCOM.

The first area of study with respect to initial qualification training is process ownership. Is training conducted within the regimental or MAJCOM chain of command? What degree of influence does the regiment or MAJCOM have over the process? Does the gaining unit review the initial qualification curriculum?

Responsiveness in initial qualification training addresses both the individual trainee and the gaining unit. Does training account for previous individual experience? Is training individually tailored? Does the content and pace of training correlate with gaining unit needs?

In studying relevance of initial qualification training, is training geared towards Mission Essential Task Lists (MELT(s)) and establish tactics, techniques, and procedures (TTPs)? Does training account for needs of the specific areas of operation (AO) of the gaining units? At the completion of initial qualification training, are individuals fully mission-qualified?

In order to gauge the effectiveness of initial qualification training, quality assurance is critical. Therefore, does the regiment or MAJCOM establish initial qualification flight evaluation criteria? Does the regiment or MAJCOM maintain oversight of initial qualification flight evaluations? Does the regiment or MAJCOM conduct flight evaluations of initial qualification instructors?

As with assessment and selection, this study will examine the initial qualification training resource allocation of the regiment or MAJCOM. What portion of the total time, money, and personnel resources expended in initial qualification training is borne by the regiment or MAJCOM?

Each discrete area of study will conclude with a quantitative evaluation and the study of the initial qualification process will be summarized in an analysis matrix (see table 2).

Continuation Training

The final component of training, that of continuation training, is conducted predominantly at the unit (company or squadron) level and the focus of this portion of the thesis will center on that level. As with initial qualification training, the areas of interest include: process ownership, responsiveness, relevance, quality assurance, and resource allocation.

Continuation training is vital to ensure that aircrews are prepared to conduct combat operations whenever and wherever needed. To ensure their crews are properly trained, units require a high degree of ownership in the continuation training process. To what degree does the unit influence the training needs determination process? Is continuation training conducted within the unit chain of command? What degree of autonomy do units have to conduct continuation training?

Diverse mission sets and the spectrum of individual capabilities and requirements demand responsiveness in continuation training processes. Is training individually tailored? Does the content and pace of continuation training requirements meet unit needs?

As with initial qualification training, continuation training needs to be relevant. Is training geared towards METLs and TTPs? Does established continuation training account for specific AO requirements?

Quality assurance being necessary to determine a unit's training status; does the unit determine flight evaluation criteria for continuation training? Does the unit conduct flight evaluations of continuation training instructors?

Finally, research into continuation training will examine resource allocation. In order to study resource allocation, this study will examine the portion of continuation training resources, namely time, money, and personnel that are borne by the unit.

Each of these facets of the analysis of continuation training will close with a quantitative evaluation and the study of the continuation training process will be summarized in an analysis matrix (see table 3).

Table 1. Assessment and Selection Analysis Matrix

	MC-130H	MH-47E	C-130	CH-47
1. Process Ownership (To what degree does regimental/MAJCOM leadership:)				
<i>a. Determine entrance criteria?</i>				
<i>b. Conduct individual assessment?</i>				
<i>c. Conduct individual selection for IQ training?</i>				
2. Responsiveness (To what degree does the assessment and selection process respond to unit needs in:)				
<i>a. Overall aircrew production?</i>				
<i>b. Specific crew member production?</i>				
3. Relevance (To what degree does the:)				
<i>a. Gaining unit review assessment/selection criteria?</i>				
<i>b. Process adapt to meet changing needs?</i>				
4. Quality Assurance (To what degree does the:)				
<i>a. Regiment/MAJCOM evaluate candidate suitability?</i>				
<i>b. Gaining unit evaluate individuals selected?</i>				
5. Resource Allocation (The regiment/MAJCOM bears what portion of:)				
<i>a. Time invested in assessment and selection?</i>				
<i>b. Money invested in assessment and selection?</i>				
<i>c. Personnel invested in assessment and selection?</i>				
Assessment and Selection Total (out of 60)				
1=None 2=Minimal 3=Moderate 4=Considerable 5=Complete				

Table 2. Initial Qualification Analysis Matrix

	MC-130H	MH-47E	C-130	CH-47
1. Process Ownership (To what degree is/does:)				
<i>a. Training conducted within the Regiment/MAJCOM chain of command?</i>				
<i>b. Regiment/MAJCOM influence the process?</i>				
<i>c. Gaining unit review curriculum?</i>				
2. Responsiveness (To what degree is/does:)				
<i>a. Training account for individual experience?</i>				
<i>b. Training individually tailored?</i>				
<i>c. Training responsive to gaining unit needs?</i>				
3. Relevance (To what degree is/does IQ training:)				
<i>a. Geared towards METLs/TTPs?</i>				
<i>b. Account for specific AO needs?</i>				
<i>c. Produce mission-qualified crewmembers?</i>				
4. Quality Assurance (To what degree does the regiment/MAJCOM:)				
<i>a. Establish IQ flight evaluation criteria?</i>				
<i>b. Have oversight of IQ flight evaluations?</i>				
<i>c. Conduct flight evaluations of IQ instructors?</i>				
5. Resource Allocation (The regiment/MAJCOM bears what portion of:)				
<i>a. Time invested in initial qualification?</i>				
<i>b. Money invested in initial qualification?</i>				
<i>c. Personnel invested in initial qualification?</i>				
Initial Qualification Training Total (out of 75)				
1=None 2=Minimal 3=Moderate 4=Considerable 5=Complete				

Table 3. Continuation Training Analysis Matrix

	MC-130H	MH-47E	C-130	CH-47
1. Process Ownership (To what degree is/does:)				
<i>a. The unit influence the training needs determination process?</i>				
<i>b. Training done within the unit chain of command?</i>				
<i>c. The unit have autonomy to conduct training?</i>				
2. Responsiveness (To what degree is continuation training:)				
<i>a. Individually tailored?</i>				
<i>b. Responsive to unit needs?</i>				
3. Relevance (To what degree is/does continuation training:)				
<i>a. Geared towards METLs/TTPs?</i>				
<i>b. Account for specific AO needs?</i>				
4. Quality Assurance (To what degree does the unit:)				
<i>a. Determine flight evaluation criteria for continuation training?</i>				
<i>b. Conduct flight evaluations of continuation training instructors?</i>				
5. Resource Allocation (The unit bears what portion of:)				
<i>a. Time invested in continuation training?</i>				
<i>b. Money invested in continuation training?</i>				
<i>c. Personnel invested in continuation training?</i>				
Continuation Training Total (out of 60)				
1=None 2=Minimal 3=Moderate 4=Considerable 5=Complete				

CHAPTER 3

ASSESSMENT AND SELECTION

All [Special Operations Forces] candidates undergo a rigorous selection process . . . far beyond that required by conventional military [forces]. (2003, 7)

Marshall Billingslea and Charles R. Holland
Special Operations Forces Posture Statement 2003-2004

Special Operations Forces are comprised of a disparate blending of soldiers, sailors, and airmen. Any justification for the existence of such forces is outside the scope of this study; there exists a requirement to maintain forces with a wide range of capabilities in a variety of environments, such as land, sea, and air, that can act quickly and efficiently to satisfy the mission needs of the nation. Despite their widely varying specialties, SOF share certain characteristics, according to LTC Jeffrey Putz: “mature leadership, foreign language capabilities, regional focus, specialized equipment, skills and tactics, political and cultural [sensitivity], and a small, flexible joint force structure” (Putz 2001, 3). SOF missions place high demands on those who conduct them and it is essential that prospective candidates are carefully assessed and selected to ensure success not only during initial training, but also in combat.

At this time, USSOCOM does not conduct standardized assessment and selection for prospective candidates, nor should they ever do so. Those attributes deemed desirable by an Army Ranger may be completely incompatible with those of an AFSOC aviator. Currently, each discrete force within USSOCOM conducts an independent assessment and selection process in order to acquire those individuals best suited for its mission.

Despite their unique demands, however, one can model an ideal assessment and selection process that can be tailored to suit specific requirements.

Although some individuals outside the SOF community appreciate the unique requirements placed upon it, few would be willing to sacrifice their own mission capability in order to bolster that of SOF. Therefore, the process of assessing and selecting prospective applicants must reside within the community to which those candidates are ultimately bound. That is to say, Army SF are experts within their given sphere of capability and are eminently qualified to determine which prospective applicants are best suited to successfully complete training and enhance SF capabilities. By owning the assessment and selection process, SOF can determine entrance criteria, conduct an independent assessment of prospective candidates, and select those individuals the community feels are best suited to its specific needs.

The assessment and selection process cannot, however, remain fixed. In order to satisfy the needs of the SOF community it serves, the process must quickly respond to changes in mission sets, focus AOs, and personnel requirements. Guided by the understanding that initial qualification training may take several months or years to produce viable warfighters, the process must be imbued with the capacity to recognize potential force demands, identify those individual characteristics best suited to satisfy those demands, and rapidly institute changes to assessment and selection criteria. Any additional layers of bureaucracy would only serve to delay critical actions and potentially compromise standards.

It is impractical to suggest that individual field units should conduct assessment and selection independently. The current tempo of operations and the expense associated

with maintaining an independent assessment and selection process would render the practice prohibitive. Furthermore, by centralizing the process at the highest echelon of a specific SOF community, for example Army SF, Navy SEAL, and others, one would ensure a measure of standardization amongst field unit capabilities and would maximize the ability to allocate critical personnel resources where specific demand is greatest. This not to imply, however that field units should have no voice within the assessment and selection process. In fact, it is most often within the field units that critical capability shortfalls are first identified. Therefore, field units must maintain the ability to review and provide inputs with regard to assessment and selection criteria. These inputs should then be review, validated, and quickly implemented to ensure field units maintain combat effectiveness.

In order to determine whether or not the assessment and selection process is effective in producing SOF warfighters who successfully complete initial qualification training and contribute to mission success, it is imperative that process owners follow the progression of SOF candidates as they proceed through training and maintain visibility of those individuals as they transition to warfighters. By analyzing the successes and failures of a large pool of disparate individuals through training and combat, one can determine the viability of discrete assessment and selection criterion. This analysis will help refine and prioritize individual attributes in the assessment and selection process and not only recruit individuals with easily identifiable qualities, but also identify those individuals who may not “fit the mold,” but who have a high potential for ultimate success nonetheless. Furthermore, field units should be able to provide feedback to assessment and selection process owners on whether or not the candidates selected for

training do, in fact, satisfy their requirements. This avenue for feedback must be maintained to ensure that any historical modeling remains rooted in reality.

Finally, determination of the actual source of ownership of a process is often a function of resource allocation; whoever pays the bills makes the rules. Therefore, the time, money, and personnel invested to assess and select SOF candidates must be borne entirely by the SOF community served by that process. This is not to say that those resources are not allocated to a specific SOF community by a higher authority, for example USSOCOM, for the purpose of assessment and selection, but rather that a SOF community must remain autonomous on how it distributes those resources for that purpose. Any outside influence, no matter how benevolent it may be, may taint the process and ultimately compromise mission effectiveness.

With a model of an ideal SOF assessment and selection process, this study will now analyze the assessment and selection processes for not only the AFSOC MC-130H and 160 SOAR(A) MH-47E, but also, as a control, conventional C-130 and CH-47.

MC-130H Assessment and Selection

At this time, AFSOC does not conduct an independent assessment and selection process. Prospective applicants may contact field units or the AFSOC Directorate of Personnel (DP), but neither of those entities has the authority to either assess the viability of an applicant, or assign that individual to enter into initial qualification training.

Whereas AFSOC DP maintains a high degree of influence on the process, the ultimate authority lies with the Air Force Personnel Center (AFPC). In the past, an AFSOC initiative known as Commando Look enabled the command to actively recruit and select prospective applicants, but conventional C-130 squadron commanders complained that

they were losing too many of their most experienced instructors to AFSOC. The Air Force then decided to centralize the assignment process in order to manage the C-130 force. In order to accommodate AFSOC's demands for skilled, mature aviators, AFPC established an experiential requirement for prospective applicants. The prerequisite for a pilot to enter into MC-130H Mission Pilot Initial Qualification is for that individual to be "currently qualified for flying duty and [C-130] mission qualified (low-level and airdrop)" (Department of the Air Force 2005c). Absent is any minimum experience level defined by either years of aircraft experience or hours of flight time. Furthermore, if an individual does not meet the prerequisites, for example if he has no experience in a C-130, the waiver authority to enter into training resides within HQ AETC, not AFSOC. Although such waivers are nominally coordinated with AFSOC DP, there is no requirement to do so, and in the author's experience, unsuitable candidates have been entered into MC-130H initial qualification training despite the protests of AFSOC and the MC-130H community.

Within this framework, AFSOC has only a minimal degree of influence over the determination of entrance criteria (table 4, 1a, value 2). It does not conduct any independent individual assessment (table 4, 1b, value 1), nor does it select individuals to be entered into initial qualification training (table 4, 1c, value 1).

As AFSOC looks to increase the number of MC-130Hs in the fleet, consideration must now be given to selecting a greater number of individuals to form crews in order to operate them. The AFPC assignment process will be practically unaffected by the increased demand inasmuch as the refinement of assessment and selection criteria are concerned. The only challenge will be to find more applicants willing to fly the MC-

130H and providing waivers to those who do not meet the prerequisites (table 4, 2a, value 2). Similarly, in the wake the pilot exodus in 2000, AFPC did not alter MC-130H pilot selection criteria, but simply increased the numbers of waivers (Carroll 2005). Therefore, the process responded to the specific crewmember need in letter, but not in spirit (table 4, 2b, value 2).

There exists no formal mechanism by which MC-130H squadrons can review or submit revisions to AFPC assignment criteria. It is possible to channel requests for change via AFSOC DP, but these requests are not facilitated by a periodic review of criteria and ultimately the decision to amend assessment and selection criteria rests entirely with AFPC (table 4, 3a, value 2). Any adaptation of the process is mitigated by the needs of the Air Force, however dire the AFSOC personnel situation (table 4, 3b, value 2).

With regard to quality assurance, the only metric tracked by AFPC to determine the effectiveness of the MC-130H assignment process is the percentage of initial qualification training slots left unfilled (Stewart 2005b). No organization tracks individual candidate success or failure, much less overall contribution to mission success. There is no requirement for AFSOC to review a prospective MC-130H candidate, much less approve that individual (table 4, 4a, value 1). Furthermore, gaining MC-130H squadrons today often know little of the individuals selected for training until after training is complete and they report to the squadron for duty (table 4, 4b, value 1). This differs considerably from an anecdote heard from a former MC-130H commander. In the past, a squadron commander would assemble his staff and review prospective applicants. Each staff member was given two marbles: one white and one black. After each

application was thoroughly evaluated, a leather pouch was passed and each staff member placed within it a single marble. If, after the contents were revealed, a single black marble was found, that applicant was rejected without question.

The centralization of the MC-130H assessment and selection process at AFPC removes from AFSOC the responsibility to bear any of the burdens of allocating resources. Currently, there exists an informal connectivity between those staff members of AFPC responsible for selecting potential applicants and AFSOC DP, but that serves mainly to affect the assignment process of individuals currently serving within AFSOC. Occasionally, this conduit allows AFSOC DP to influence the selection process, especially to enhance an individual's likelihood of selection for training (table 4, 5a, value 2, 5c, value 2). However, as this informal process is more a matter of courtesy, no money is dedicated to sustain it (table 4, 5b, value 1).

MH-47E Assessment and Selection

In contrast to the MC-130H community, the 160 SOAR(A) has a robust and independent assessment and selection process. According to FM 3-05.60, "The competitive ARSOA [Army Special Operations Aviation] process, coupled with technological training and education, produces an ARSOA soldier who is adaptable, mature, innovative, culturally aware, self-assured, and self reliant" (FM 3-05.60 2000, 1-3). Although deeply rooted in US Army Aviation, the 160 SOAR(A), like Army SF, has an active system of in-service recruiting staffed with experienced SOAR aviators. These recruiters not only visit field units canvassing for potential applicants, but also provide a initial assessment of an individual's potential. Prospective candidates, regardless of airframe, then complete a twenty-two page application, which encompasses all aspects of

their personal, professional, physical, psychological, and financial background (Howard 2005). Individuals must also provide references from their current and past leadership. These applications are reviewed within the regiment to determine whether or not individuals may then progress to the assessment phase.

The 160 SOAR(A) assessment phase begins with a written test within the individual's Military Occupational Specialty, followed by a medical review, an Army Physical Fitness Test, a swimming test, a psychological screening, and a flight evaluation conducted using night vision goggles (NVGs) (Herrera 2005). This process, which may take several days or even weeks, culminates in a formal board to determine whether or not the applicant will be selected to attend initial training. If an individual is selected for initial training, the regiment then coordinates with the assignment with the individual's current unit and informs Army Personnel Command.

Although currently facing a dramatic expansion of force capability, the 160 SOAR(A) still retains total control of the assessment and selection process. The practice of establishing an experiential minimum requirement has dissolved with current regimental leadership willing to assess lesser-experienced individuals with potential (Herrera 2005). The regiment, therefore, retains sole control of entrance criteria determination (table 4, 1a, value 5). If an applicant succeeds in procuring an assessment opportunity, the entire process is conducted within the purview of the regiment (table 4, 1b, value 5). Furthermore, an individual's performance during the assessment phase is weighed against the needs of the regiment without consideration of outside agencies (table 4, 1c, value 5).

The increased demand for satisfactory applicants has placed a considerable strain upon the regiment's assessment and selection process, across all airframes. However, the process has adapted in order to respond, but not to the point where critical standards are lowered to accommodate a greater pool of selected individuals (table 4, 2a, value 5). When a shortage in specific crew member qualification arises, say MH-60L pilots separate or retire at above average rates, that need is quickly identified and translated into increased recruiting (table 4, 2b, value 5). Since the process is conducted entirely within the auspices of the regiment, the resulting connectivity between field units and either recruiter or assessor allows for "virtually instantaneous" changes to criteria (Howard 2005).

Throughout the 160 SOAR(A) assessment and selection process, gaining units continually review criteria for their specific aircraft and mission and weigh them against their discrete needs (table 4, 3a, value 5). A continuous feedback loop ensures the process adapts to meet the changing demands of the field units (table 4, 3b, value 5). In the words of one 160 SOAR(A) recruiter, "We work for the field unit commanders" (Howard 2005).

The regiment maintains oversight on a selected individual's suitability during initial qualification training, but any subsequent tracking as to whether or not certain individual attributes contribute to mission success are not conducted at the regimental level, but informally at the battalion or company level (table 4, 4a, value 4) (DeMilia 2005). Gaining field units are also afforded the opportunity to evaluate individuals selected for training and provide feedback to the formal selection board (table 4, 4b, value 5).

In keeping with the 160 SOAR(A) control of the assessment and selection process, virtually all of the costs in terms of time, money, and personnel allocated to recruiting, assessing, and selecting candidates for all of their aircraft types is borne by the regiment (table 4, 5a, 5b, 5c, value 5).

C-130 Assessment and Selection

Distinct from its special operations variant, the conventional C-130 is an entry-level airframe, that is to say, the only requirement for selection into training is completion of an undergraduate flying training program. No further qualifications are required and no waivers are granted (Department of the Air Force 2005b). Typically, candidates are drawn from either pilot or navigator training based on aptitude, which is determined by their performance in previous training, or their stated career preference. Occasionally, aviators enter C-130 training after flying a different airframe, but they may do so regardless of the type of airframe or specific mission set. For AFPC, the task of assigning individuals to C-130 initial qualification training is very much that of filling vacancies (Stewart 2005a).

Air Mobility Command (AMC) is tasked with employing conventional C-130 squadrons. Despite the fact that the entrance criteria for C-130 training are negligible, the determination of those criteria still resides with AFPC and, as with AFSOC, AMC can only affect those criteria minimally (table 4, 1a, value 2). Furthermore, individuals selected for C-130 training are never assessed by AMC DP (table 4, 1b, value 1) because AFPC retains the sole authority to select individuals for training, although AMC can informally recommend individuals for assignment (table 4, 1c, value 1).

The C-130 initial qualification training course is also responsible for training aircrews for all of the C-130 variants not only in the Air Force, but in the Navy, Marine Corps, and Coast Guard, along with those from foreign militaries. Despite the fact that AMC employs the preponderance of Air Force C-130 forces, the high demand for C-130 training does not often allow for dramatic increases in aircrew production requirements due to the finite number of training slots available (table 4, 2a, value 1). However, training units can provide some support to specific crewmember production by providing instructors as primary crew for training missions above and beyond the normal requirements for short periods of time (table 4, 2b, value 2) (Stewart 2005a).

Conventional C-130 squadrons share an extraordinarily high degree of mission commonality. In days past, some aircrews within selected units received special mission training in such tasks as Low Altitude Parachute Extraction System or Special Operations Low-Level, but currently standardization of tasks is the norm. Although there is little need for gaining AMC units to review selection criteria, the mechanism for implementing change is the same as that of AFSOC units. Recommendations are staffed through AMC DP to AFPC and if deemed appropriate, may influence a change to criteria (table 4, 3a, value 2). There is no recent example of the process adapting significantly to meet changing requirements, but it seems reasonable to infer that it would be similar to that of an AFSOC requirement (table 4, 3b, value 2).

As with AFSOC assignments, AFPC tracks relative success by minimizing initial qualification training vacancies. Because it makes assumptions regarding the relatively low experience levels of initial qualification candidates, AMC does not conduct any independent evaluation of candidate suitability (table 4, 4a, value 1), nor do conventional

C-130 squadrons maintain oversight on individuals selected to enter training (table 4, 4b, value 1).

The nature of the conventional C-130 mission and crew composition allows for recent undergraduate flying trainees to transition to effective C-130 crewmembers. Almost fifty years of experience has afforded AMC the understanding that it can accept inexperienced aviators and shape them into efficient crewmembers. As such, they have divorced themselves entirely from the initial selection process and bear none of the associated costs (table 4, 5a, 5b, 5c, value 1).

CH-47 Assessment and Selection

The CH-47 is similar to the C-130 in that it is also an entry-level airframe. As such, individuals need only complete formal flying training prior to assessment and selection. However, considerable differences exist between the organizational structures of Army Aviation and the Air Force, or even the 160 SOAR(A). For the purpose of this study, an analogy between aviation brigades within divisions and either the 160 SOAR(A) or the Air Force major command will be drawn. The advocate for conventional Army Aviation, including the CH-47, is the Aviation Proponency Office, which centralizes the management of personnel accession, similar to AFPC. The Aviation Proponency Office establishes entrance criteria, conducts individual assessment, and selects candidates to enter into CH-47 training. It is unclear whether or not aviation brigades can informally affect any change to entrance criteria, but no formal mechanism currently exists to do so (table 4, 1a, 1b, 1c, value 1) (Kutscher 2005).

The Aviation Proponency Office has established and maintains close ties with the aviation brigades and actively solicits inputs from field units. Although constrained by

initial qualification training throughput, the Aviation Proponency Office attempts to respond to unit requirements for increased aircrew production. However, discrete unit demands are mitigated by the needs of the overall CH-47 force (table 4, 2a, value 4). Furthermore, due to the differences in CH-47 pilot and crew chief training syllabi, crew training is only rarely done concurrently and the ability to respond to discrete crewmember production demands is retained (table 4, 2b, value 5).

Similarly, field units are afforded the opportunity to periodically review assessment and selection criteria, but because the selection threshold is relatively low, the need to do so is not critical (table 4, 3a, value 3). Furthermore, the Aviation Proponency Office will weigh the selection requirements of the entire CH-47 force against that of individual field units in an attempt to standardize force structure, resulting in a relatively inflexible process (table 4, 3b, value 2).

As with AMC, aviation brigades understand that conventionally oriented initial qualification training produces relatively inexperienced crewmembers that will require further training in the operational environment. Therefore, those brigades rarely conduct independent evaluations of candidate suitability (table 4, 4a, value 2), although the Aviation Proponency Office maintains oversight of the trainee's performance from selection through initial training. Gaining units do not evaluate selected initial training candidates against selection criteria at any time (table 4, 4b, value 1).

The responsibility for assessing and selecting prospective CH-47 candidates lies with the Aviation Proponency Office, whose centralized functions obviate the need for aviation brigades to allocate resources to the effort (table 4, 5a, 5b, 5c, value 1).

Summation of Assessment and Selection

A comparison of the assessment and selection processes of the MC-130H and MH-47E reveal significant differences. When measured against a model SOF assessment and selection process, as in Table 4, the MC-130H process scores a nineteen out of a possible sixty, whereas the MH-47E scores a fifty-nine. In fact, the MC-130H shares more in common with the conventionally oriented C-130 (sixteen) and CH-47 (twenty-three) than its SOF counterpart. The apparent reason for this divergence lies within the Air Force's centralization of its personnel management function. Although the Air Force recognizes the distinct nature of the MC-130H mission, AFPC still attempts to manage the C-130 personnel force structure as a whole. In doing so, conventional C-130 units retain a high degree of crewmember experience, at the expense of AFSOC MC-130H units which are unable to consistently acquire individuals with the attributes necessary to enhance mission success.

In an attempt to balance the competing requirements of Air Force MAJCOM and USSOCOM air component, AFSOC has been forced to divorce itself from the personnel assessment and selection function resulting in a steadily decreasing MC-130H force experience level. At this time, it is difficult to see what is so special about Air Force Special Operations, when the assessment and selection process is virtually identical to that of conventional C-130 units. LTC William Saier, a former MC-130H squadron commander, recognized this trend when he wrote:

If the Air Force is going to be equal partners with the Army and Navy in the special operations business . . . then the Air Force needs to be more selective and demanding in its personnel selection process. A deliberate assessment and selection process . . . will improve the quality of personnel serving in Air Force Special Operations and help insure that the Air Force component of the joint SOF effort is not the "weak link" in the chain. (Saier 1995, 36)

Table 4. Completed Assessment and Selection Analysis Matrix

	MC-130H	MH-47E	C-130	CH-47
1. Process Ownership (To what degree does regimental/MAJCOM leadership:)				
<i>a. Determine entrance criteria?</i>	2	5	2	1
<i>b. Conduct individual assessment?</i>	1	5	1	1
<i>c. Conduct individual selection for IQ training?</i>	1	5	1	1
2. Responsiveness (To what degree does the assessment and selection process respond to unit needs in:)				
<i>a. Overall aircrew production?</i>	2	5	1	4
<i>b. Specific crew member production?</i>	2	5	2	5
3. Relevance (To what degree does the:)				
<i>a. Gaining unit review assessment/selection criteria?</i>	2	5	2	3
<i>b. Process adapt to meet changing needs?</i>	2	5	2	2
4. Quality Assurance (To what degree does the:)				
<i>a. Regiment/MAJCOM evaluate candidate suitability?</i>	1	4	1	2
<i>b. Gaining unit evaluate individuals selected?</i>	1	5	1	1
5. Resource Allocation (The regiment/MAJCOM bears what portion of:)				
<i>a. Time invested in assessment and selection?</i>	2	5	1	1
<i>b. Money invested in assessment and selection?</i>	1	5	1	1
<i>c. Personnel invested in assessment and selection?</i>	2	5	1	1
Assessment and Selection Total (out of 60)	19	59	16	23
1=None 2=Minimal 3=Moderate 4=Considerable 5=Complete				

CHAPTER 4

INITIAL QUALIFICATION TRAINING

(W)hile SOF are a bargain in terms of the share of defense expenditures they consume, the people involved require extensive and intensive training and many of the specialized systems they employ have little utility across the broader structure of general-purpose forces. SOF can be dismantled overnight, but it can take a decade to restore them. (1989, 14)

R. Lynn Rylander
Special Warfare

SOF are employed to conduct specific and specialized mission sets, and to conduct these tasks they may use highly specialized equipment. Nowhere is this more evident than within the scope of SOA. SOA aircraft are typically highly modified when compared with their conventional counterparts, and the education and training necessary to employ these systems is considerable. Initial qualification training, encompassing academic lectures, aircraft simulator training, and actual flying training, facilitates the transition from previous conventional aircraft employment to that of SOA employment. Virtually all of the SOA initial qualification training researched included not only mission employment training, but classes on joint SOF history and mission employment in an effort to better prepare trainees for the USSOCOM operating environment.

Ideally, the process of SOA initial qualification training must reside within the gaining unit's chain of command. In doing so, a unit may retain the ability to impact training syllabi in an effort to satisfy the dynamic requirements of current operations. Formal structures must be established to ensure that gaining units can regularly review training syllabi and provide inputs as to the direction of current and future training.

However, these mechanisms would be impotent unless oversight and accountability resided within the highest echelon of a SOA community.

Although SOA communities strive to select the most experienced aviators to attend initial qualification training, the reality is that trainees have widely varying experience levels. Because training is resource intensive, training should account for individual experience. If a prospective MH-47E pilot has several thousand CH-47 flying hours, including NVG flight experience, initial qualification training should identify that experience, assess the individual's abilities during an accelerated training cycle, and, if warranted, advance the individual to the next phase of training. In fact, rather than apply a "cookie cutter" mentality to initial qualification training, the process should attempt to anticipate training requirements by tailoring syllabi to individual experience. It is important to emphasize that it would be nearly impossible to create personalized training syllabi, but rather, several syllabi should be crafted to accommodate various levels of experience. Paramount in the creation of a training syllabus, however, is the needs of the gaining units. Sometimes, mission skill sets that were in high demand are supplanted by new skill sets that arise from current operations.

Training syllabi must be developed while keeping the respective SOA community's established METLs and TTPs in mind. Although the relative utility of mission skill sets varies with time, one thing remains constant: SOA aviators must develop and maintain a wide variety of employment capabilities in order to adapt to current operations. METLs and TTPs are crafted in order to maintain a broad spectrum of capabilities, while operational needs then prioritize the training effort. Furthermore, if an individual's gaining unit is overseas, initial qualification training should include specific

AO training in order to enhance cultural awareness and better enable units to immediately employ incoming personnel. The ultimate goal for any initial qualification-training unit should be to produce combat-ready, mission-qualified aviators to field units. Anything less places the burden of follow-on training for incoming personnel on combat units whose training programs are already strained beyond capacity.

Ensuring initial qualification trainees are adequately trained falls within the realm of the flight evaluation process. Trainees are evaluated during real or virtual missions to ensure mission skill sets and knowledge are at an acceptable level to transition to the next phase of training or graduate from the course. The determination of flight evaluation criteria and acceptable levels of performance should reside within the chain of command of the SOA community served by the training. Similarly, the oversight of the initial qualification flight evaluation process should also remain within the chain of command. In order to monitor the effectiveness of initial qualification training, flight evaluators from within the gaining units' chain of command should be afforded the opportunity to evaluate initial qualification instructors. This practice ensures lines of communication between training units and field units remain open and guarantees accountability.

It is vital that resources allocated to initial qualification training are controlled by the SOA community served by that process. As with other facets of training mentioned in this study, sole authority to invest time, money, and manpower minimizes opportunities for outside influences to adversely affect the training process.

MC-130H Initial Qualification Training

The unit responsible for MC-130H initial qualification training is the 58th Special Operations Wing (SOW), which is not within the AFSOC chain of command, but rather

that of AETC. This relationship is not typical within AFSOC communities; for example, MC-130E and AC-130H/U initial qualification training is conducted by the 19th SOS, an AFSOC unit. The situation arose from AFSOC's desire to defray initial qualification costs by outsourcing the training to AETC (Casteel 2005). A memorandum of understanding was written to formally establish each MAJCOM's responsibilities, and despite various efforts by AFSOC to relieve AETC of the MC-130H training mission, they have retained the MC-130H initial qualification-training mission.

Therefore, MC-130H initial qualification is currently conducted outside of AFSOC (table 5, 1a, value 1). Although the 58th SOW leadership is typically chosen from a pool of experienced AFSOC aviators sensitive to the needs of the community, no formal process has been established for AFSOC to periodically review training syllabi. Each crewmember-specific initial qualification course, for example, pilot, navigator, and others, has a designated program manager within the 58th SOW who retains oversight of his respective syllabus. The 58th SOW must conduct a syllabus review of each training course biennially, but out-of-cycle reviews can be initiated if the program manager deems it necessary (Carroll 2005). AFSOC is invited to participate at the biennial reviews or, if the program manager is amenable, may request an out-of-cycle review, but there is no guarantee that their training syllabi revisions will be incorporated (table 5, 1b, value 3). If individual MC-130H squadrons want to review training syllabi, they must request copies from the 58th SOW (table 5, 1c, value 2).

All individuals entered into MC-130H initial qualification training are assumed to be at the same relative level of experience. However, if an individual demonstrates a consistently high level of performance, that individual may "proficiency advance" to the

next phase of training. However, there are two reasons why instructors at the 58th SOW are often reluctant to advance initial qualification students (Carroll 2005). First, individuals are assigned to training crews, a grouping of trainees from each crew position who fly mission profiles together while completing roughly parallel syllabi. If one individual progresses too rapidly, additional flying hours may be needed to satisfy that individual's training requirements as well as those of his former training crew. Secondly, in the event of any subsequent aircraft mishap, an individual's training records are thoroughly investigated to determine whether or not that individual received sufficient training. Too often, rather than face the possibility of scrutiny, instructors will forego advancing a trainee despite demonstrated proficiency (table 5, 2a, value 2). Additionally, the MC-130H initial qualification course does not attempt to tailor training to suit individual experience. If a pilot has several thousand MC-130E flying hours, he is still scheduled to undergo the full six-month MC-130H initial qualification course (table 5, 2b, value 1). Finally, operational MC-130H squadrons must staff recommended changes to training syllabi through every echelon from squadron through MAJCOM before that recommendation is presented at the syllabus review. If the recommendation survives the process unchanged, the time necessary to staff it through the various echelons and the timing of the 58th SOW program manager's syllabus review severely inhibits timely changes (table 5, 2c, value 2).

With the recent emphasis on integrating AFSOC TTPs into established Air Force tactical training manuals, current training syllabi are heavily geared towards instructing trainees to perform METLs using established TTPs (table 5, 3a, value 5), however, no training, whether academic or flight instruction, is geared towards imparting AO specific

demands, so students will require theater indoctrination upon arrival at overseas squadrons (table 5, 3b, value 1). Due to limitations in the training environment, it is not uncommon for initial qualification trainees to graduate from training and report to their gaining squadron without being mission-qualified (table 5, 3c, value 3). For example, the 58th SOW shares its runway with the city of Albuquerque, NM, and its primary drop zones are located within that shared airspace. Although low-level airdrops are easily accomplished, high altitude (in excess of 3000 feet above ground level) personnel airdrop training is difficult to complete due to the volume of civilian air traffic.

Perhaps the most problematic area of MC-130H initial qualification training is that of quality assurance. Although HQ AFSOC, Directorate of Standardization and Evaluation (DOV), establishes the flight evaluation criteria for each MC-130H crew position (table 5, 4a, value 5), initial qualification flight evaluations are administered by 58th SOW personnel. As was previously stated, the 58th SOW is under the command of AETC, not AFSOC, and as such the oversight for the MC-130H initial qualification flight evaluation process resides with HQ AETC DOV and no coordination with AFSOC is required (table 5, 4b, value 1). Despite operating the same aircraft, the instructors of the MC-130H initial qualification course are not subject to flight evaluation by AFSOC, the owning MAJCOM (table 5, 4c, value 1). During the author's tenure as HQ AFSOC Chief of MC-130H Pilot Standardization and Evaluation, an evaluator from the 58th SOW began to assess an inordinate number of flight evaluation failures to trainees, and the author was unable even to observe him administering an evaluation, much less countermand his evaluations.

As previously mentioned, the intent of the original memorandum of understanding between AETC and AFSOC for the conduct of MC-130H initial qualification training was motivated by the desire to split the cost of training. However, despite still contributing roughly one-half of money invested in initial qualification training (table 5, 5b, value 3), AFSOC does not invest any time (table 5, 5a, value 1) or manpower to the endeavor (table 5, 5c, value 1).

MH-47E Initial Qualification Training

As with the assessment and selection process, the entire MH-47E initial qualification training process is contained within the 160 SOAR(A) chain of command. The responsibility to conduct all regimental initial qualification training resides within the Special Operations Aviation Training Company (SOATC), more commonly known as “Green Platoon.” All trainees, regardless of the aircraft they have been selected to fly, begin their initial qualification course by “learning to fly the SOAR way” (Herrera 2005). Flying the MH-6, this first phase of training imparts the “basic skills and the knowledge necessary to conduct [NVG] helicopter operations . . . [in accordance with] 160th SOAR(A) Standard Operating Procedures” regardless of the experience level of trainees (FTG Basic Skills 2003, 1). After aircrew trainees complete the basic skills training, the SOATC instructs them in Survival, Evasion, Resistance, and Escape, navigation, combat skills, and aircraft-specific training over the next twenty-three weeks (Herrera 2005).

As mentioned, the SOATC is assigned directly to the 160 SOAR(A) and they conduct every phase of initial qualification training (table 5, 1a, value 5). This being the case, the regiment can monitor and adjust training syllabi, called Programs of Instruction (POIs), as situations require (table 5, 1b, 5). These POIs must be coordinated with the

Army's Training and Doctrine Command, but the SOATC has the ability to enact changes immediately. There is a high degree of communication between the Green Platoon and the field units, both formal and informal. The regiment conducts quarterly meetings to discuss safety and standardization where recommendations for POI changes are solicited (table 5, 1c, 5).

As with the 58th SOW, the SOATC will advance trainees if they display a high degree of proficiency in a phase of training, and they seem to be more willing to do so (table 5, 2a, value 4). Furthermore, the SOATC has instituted a policy of tailored training, but it applies only to trainees who previously served in the 160 SOAR(A) and who left a flying position within the last three years (SOAR Policy Letter 2002). All other trainees must complete the established POI for initial qualification (table 5, 2b, value 2).

However, as alluded to previously, POIs are dynamic; as field units assess their qualification requirements, the SOATC changes the POI in order to satisfy them.

Aviators from field units are encouraged to submit recommendations for POI changes (table 5, 2c, value 5).

SOATC initial qualification training is focused on current TTPs and their POIs and FTGs are geared towards and focused on gaining unit METLs (table 5, 3a, value 5). Currently, the 160 SOAR(A) maintains a presence overseas, but these units are deployed on a rotational basis. As such, crews receive AO-specific training prior to deployment, but not during initial qualification training. Some TTPs derived from current operations in a given AO may be emphasized during initial qualification training (table 5, 3b, value 2). An example of this is the addition of brown-out landing training, regularly experienced in Iraq and Afghanistan, to the initial qualification course (DeMilia 2005).

Occasionally, trainees are graduated from the initial qualification course despite a lack of training. An example of this is the lack of aerial refueling training due to the unavailability of tanker aircraft support. However, this is not an accepted practice and the graduation rate of mission-qualified crewmembers is “close to 100%” (Herrera 2005) (table 5, 3c, value 4).

The 160 SOAR(A) maintains complete authority over initial qualification flight evaluation criteria (table 5, 4a, value 5). Initial qualification flight evaluations are administered under the oversight of the regiment (table 5, 4b, value 5), and, unlike the Air Force hierarchical mindset regarding evaluations, initial qualification course instructors can receive their flight evaluations from field unit evaluators (table 5, 4c, value 5). This ability for the training consumer to evaluate the training producer results in a high degree of initial qualification training accountability.

Obviously, because the SOATC is a component within the regimental organization and conducts every aspect of initial qualification training, the regiment bears the full cost of training with respect to time, money, and manpower (table 5, 5a, 5b, 5c, value 5). Again, this reflects an emphasis on minimizing negative influences on initial qualification training from outside forces.

C-130 Initial Qualification Training

The tremendous volume of C-130 initial qualification training is conducted by AETC’s 314th Airlift Wing (AW), which provides academic lectures, aircraft simulator training, and flying instruction. All trainees complete Phase I of training, which entails basic aircraft handling and those bound for tactical airlift squadrons receive Phase II which covers formation flight, airland, and airdrop operations.

As a reminder, the vast majority of the initial qualification trainees are destined for AMC tactical C-130 squadrons, but none of the training is conducted within AMC's chain of command (table 5, 1a, value 1). As with MC-130H initial qualification training, the 314th AW has a program manager for all the various course syllabi, which are also subject to mandatory biennial review. Here, too, an out-of-cycle review may be requested, but owing to the large and dispersed nature of the fleet, this type of syllabus review is "difficult to coordinate" (Carroll 2005). However, in the case of the 314th AW, they share the same base with AMC's 463rd Airlift Group, which, in turn, occasionally lends a hand with the initial qualification course. This close relationship provides AMC a degree of indirect oversight of the training and effectively maintains an open line of informal quality control (table 5, 1b, value 3). However, those operational C-130 units not collocated with the 314th AW must actively request copies of the training syllabi (table 5, 1c, value 2).

As an initial qualification course for an entry-level aircraft, training assumes a very basic level of airmanship. In the event an individual is previously qualified in a different aircraft, initial qualification instructors may, as with MC-130H training, advance that individual if he displays an above average level of proficiency. However, for reasons previously stated, C-130 initial qualification instructors are reluctant to do so (table 5, 2a, value 2). Also, because of the nature of the course and the assumptions made regarding the trainees' experience level, the training syllabi are not tailored to compensate for a range of differing experience levels (table 5, 2b, 1). Furthermore, the emphasis of the course is teach only the most basic tactical skills to trainees in order to

populate the fleet, so if one particular unit has a specific need, the 314th AW does not adjust its syllabi to suit (table 5, 2c, value 1).

As with the MC-130H initial qualification course, the C-130 course is tied directly to the fleet's METLs using the most current TTPs (table 5, 3a, value 5). Unfortunately, the global dispersion of AMC's C-130 fleet makes AO-specific training impractical (table 5, 3b, value 1). On a positive note, recognizing that the tactical C-130 squadrons' operations tempos are so high, the C-130 initial qualification strives to produce crewmembers that require no additional training upon reaching their gaining squadron (table 5, 3c, value 4).

While AMC DOV establishes the flight evaluation criteria for all C-130 crewmembers, the initial qualification flight evaluations are, for the most part, administered by 314th AW flight evaluators (table 5, 4a, value 5). However, as with training, the 463rd Airlift Group often provides flight evaluators to assist with the workload. Again, this close relationship allows AMC to maintain visibility over the initial qualification flight evaluations despite its lack of formal oversight (table 5, 4b, value 2). However, Air Force regulatory guidance does not provide for AMC flight evaluators to administer periodic flight evaluations to AETC initial qualification course instructors, thereby establishing an additional barrier to AMC's oversight of the process (table 5, 4c, value 1).

AMC also maintains a memorandum of understanding with AETC regarding the allocation of resources for C-130 initial qualification training. It provides for the use of AMC instructors and evaluators during training (table 5, 5a, 5c, value 2) and for the sharing of monetary burden between the MAJCOMs (table 5, 5b, value 3).

CH-47 Initial Qualification Training

The 110th Aviation Brigade (110 AVN BDE) is responsible for the US Army's CH-47 initial qualification training. As with the other courses discussed, the course of study involves academic lectures, flight simulators, and actual flight time. This training occurs at Fort Rucker, Alabama, the Center for Army Aviation, and occurs in conjunction with every other helicopter initial qualification course the Army conducts.

The 110 AVN BDE provides centralized instruction in order to produce entry-level, basic qualified crewmembers in a process very similar to that of the C-130 initial qualification course. This approach obviates the need for operational units to provide this resource intensive training, but it results in training that is conducted outside the operational aviation brigades' chain of command (table 5, 1a, value 1). In the past, Training and Doctrine Command maintained oversight of initial qualification training POIs, but recently that authority has been delegated to 110 AVN BDE (Kutscher 2005). This has allowed the brigade to overcome the barriers resulting from its physical separation from operational units in allowing suggested changes to be quickly reflected in POIs. Ongoing combat operations have accelerated the community-wide review of POIs from once every three years to an annual requirement. Currently, operational aviation brigades have a "high degree of influence" in the CH-47 initial qualification process (Kutscher 2005) (table 5, 1b, value 4). Unfortunately, there is no formal process by which operational aviation battalions are provided copies of the POIs, but they can request them from 110 AVN BDE (table 5, 1c, value 2).

As with other entry-level initial qualification courses, the POIs were established with an inexperience trainee in mind, but as with other courses, an experienced trainee

may be advanced to a new phase of training if he demonstrates proficiency. Unlike in the Air Force, the instructors at 110 AVN BDE are slightly more inclined toward progressing students if the situation is warranted (table 5, 2a, value 3). Within the past year, 110 AVN BDE has departed from its single POI for initial qualification to an experience-based system with their new “Flight School 21” which allows exceptional aviators to advance more quickly, thereby accelerating crewmember production (Kutscher 2005) (table 5, 2b, value 3). As stated above, 110 AVN BDE has dramatically restructured its POI review process to ensure operational units are receiving aviators who have received training that is relevant to today’s conflict (table, 2c, value 4).

The 110 AVN BDE’s commitment to keeping POIs relevant for current operations ensures that CH-47 initial qualification training includes the most up-to-date TTPs in order to accomplish the METLs of operational aviation brigades (table 5, 3a, value 5). However, due to the worldwide basing of CH-47s, the 110 AVN BDE is unable to provide AO-specific training to its initial qualification trainees (table 5, 3b, value 1). Furthermore, in order to satisfy the demand for CH-47 aviators, a large portion of trainees are currently reporting to their gaining field units with some training outstanding. This is not, however, deemed an appropriate practice and the 110 AVN BDE is striving to provide the trainees with everything necessary to perform their missions (table 5, 3c, value 3).

The 110 AVN BDE establishes initial qualification flight evaluation criteria, but in this respect, the brigade acts as a central point for flight evaluation standardization. At Fort Rucker, the Department of Evaluation and Standards (DES) functions much like an Air Force MAJCOM DOV. A primary difference is the level of empowerment each

service bestows upon their flight evaluators. In the Air Force, flight evaluation profiles are fairly standard and flight evaluators may add, but not subtract, events as they deem necessary. In the Army, flight evaluators are expected to develop profiles that are appropriate for their unit. The DES only provides the bare minimum events necessary to satisfy Federal Aviation Administration (FAA) guidance on flight evaluations (Kutscher 2005). Therefore, although the operational aviation brigades do not establish initial qualification flight evaluation criteria, the profiles are commensurate with profiles being evaluated in the field (table 5, 4a, value 3). The operational aviation brigades do not, however, maintain direct oversight over initial qualification flight evaluations, because they are conducted by 110 AVN BDE DES, the office of primary responsibility for Army aviation flight evaluations (table 5, 4b, value 1). Additionally, 110 AVN BDE instructors receive their flight evaluations from DES and not from operational unit flight evaluators (table 5, 4c, value 1).

The CH-47 initial qualification training conducted by the 110 AVN BDE is resourced entirely by the US Army's Aviation Branch. The operational units contribute none of the time, money, or personnel needed to accomplish this training (table 5, 5a, 5b, 5c, value 1).

Summation of Initial Qualification Training

Once again, when compared against 160 SOAR(A) MH-47E initial qualification training, the training for MC-130H aircrews is rated substantially lower, although not to the degree seen when comparing assessment and selection processes. The MC-130H initial qualification training rated a 32 out of 75 (see table 5) whereas the training conducted for MH-47E aviators is a 67 out of 75. Referring to the conventional variants

of the two aircraft, the C-130 received a rating of 35 and the CH-47, a 34. It is interesting to note that MC-130H initial qualification training scored lower than two non-SOF platforms, although the fact that AETC conducts C-130 initial qualification training at an airfield collocated with AMC units helped to raise its rating significantly.

An area of similarity between MC-130H and MH-47E initial qualification training was that of relevance (table 5, 3). It is gratifying to know that SOF training units are grounded in TTPs, which satisfy METLs, but it is unfortunate that neither can provide AO-specific education for their respective trainees. This shortfall is probably a function of limited training resources; often, desirable programs are sacrificed in order to satisfy more basic needs and the responsibility is then divested to the operational units.

Perhaps the most serious issue MC-130H initial qualification training faces is that of process ownership. By empowering AETC to conduct this training, AFSOC has effectively divorced itself from its foundational training. Without direct oversight, AFSOC has limited influence on the quality of the MC-130H aviators produced during initial qualification training. This drains the manpower of operational MC-130H squadrons in two respects: first, the new aircrews may be unable to function satisfactorily in combat operations, and second, valuable squadron training resources will be devoted in order to provide required training to those new aircrews.

Table 5. Completed Initial Qualification Analysis Matrix

	MC-130H	MH-47E	C-130	CH-47
1. Process Ownership (To what degree is/does:)				
<i>a. Training conducted within the Regiment/MAJCOM chain of command?</i>	1	5	1	1
<i>b. Regiment/MAJCOM influence the process?</i>	3	5	3	4
<i>c. Gaining unit review curriculum?</i>	2	5	2	2
2. Responsiveness (To what degree is/does:)				
<i>a. Training account for individual experience?</i>	2	4	2	3
<i>b. Training individually tailored?</i>	1	2	1	3
<i>c. Training responsive to gaining unit needs?</i>	2	5	1	4
3. Relevance (To what degree is/does IQ training:)				
<i>a. Geared towards METLs/TTPs?</i>	5	5	5	5
<i>b. Account for specific AO needs?</i>	1	2	1	1
<i>c. Produce mission-qualified crewmembers?</i>	3	4	4	3
4. Quality Assurance (To what degree does the regiment/MAJCOM:)				
<i>a. Establish IQ flight evaluation criteria?</i>	5	5	5	3
<i>b. Have oversight of IQ flight evaluations?</i>	1	5	2	1
<i>c. Conduct flight evaluations of IQ instructors?</i>	1	5	1	1
5. Resource Allocation (The regiment/MAJCOM bears what portion of:)				
<i>a. Time invested in initial qualification?</i>	1	5	2	1
<i>b. Money invested in initial qualification?</i>	3	5	3	1
<i>c. Personnel invested in initial qualification?</i>	1	5	2	1
Initial Qualification Training Total (out of 75)	32	67	35	34
1=None 2=Minimal 3=Moderate 4=Considerable 5=Complete				

CHAPTER 5

CONTINUATION TRAINING

Throughout history, success by a small force against a strategic or operational objective usually has called for units with combinations of special equipment, training, people, or tactics that go beyond those found in conventional units. (FM 3-05.60 2000, 1-1)

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Army special operations forces aviation operations

As with any technical skill, flying proficiency is highly perishable. The majority of a flying unit's annual budget, typically measured in flying hours, goes to the maintenance of each aviator's flying skills. The cost per flying hour includes aircraft maintenance, fuel, flying range and airfield usage, among a host of other factors. Flying communities spend a great deal of time attempting to determine an optimal level of training commensurate with unit flying hours' allocation. Regulatory guidance will be issued, at whatever level, that dictates the type and frequency of flying events, from basic landings to tactical low-level flights, necessary to ensure a minimum acceptable training proficiency. There are a host of ground training events, from weapons training to chemical defense training, the each aviator is required to accomplish, but these are generally completed outside the flying unit and, as such, will not be discussed here.

In an ideal SOF flying community, training needs would be determined by the unit itself and conducted completely within the chain of command. The unit would be granted the autonomy to enact their self-determined training profile with unit readiness and performance as an indicator of proficiency. Training would, therefore, be individually tailored and extremely responsive to unit needs. Continuation training would

need to employ current TTPs and emphasize unit METLs. The requirement to cultivate culturally aware SOF aviators would necessitate AO-specific training.

Each unit would be responsible for determining the flight evaluation criteria it thought best to serve as an indicator of collective and individual proficiency and continuation-training instructors would receive flight evaluations within the unit chain of command to ensure standards were up to unit specifications. Finally, each unit must be allocated sufficient resources to accomplish this training and empowered with the authority to spend it free of any outside influence.

MC-130H Continuation Training

Continuation training requirements are set forth in AFI 11-2MC-130, Volume 1, which is maintained by the AFSOC Directorate of Training. At an approximately biennial rate, the MAJCOM sponsors a conference to discuss revisions to training and flight evaluation guidance. Squadrons will normally send representation, which is given the opportunity to voice training needs and concerns, but because training requirements are dictated across the fleet, compromises are often required. Any MC-130H crewmember can submit a recommendation for training revision, but this recommendation is staffed at every echelon from squadron to MAJCOM, and even if it endures the staffing process, may not be incorporated (table 6, 1a, value 2). However, virtually all of the MC-130H continuation training is conducted within the squadron, allowing the commander a high degree of training oversight (table 6, 1b, value 5). There are issues with autonomy, however, that sometimes inhibit training. For example, when a unit redeployed from Afghanistan, an MC-130H commander wanted his squadron to maintain the dry lakebed NVG landing capability that the unit had developed there. Although considered essential

to combat operations in Afghanistan, maintenance support units were reluctant to support this type of training due to the unusual maintenance requirements associated with it, and leadership at echelons above the squadron were uncomfortable with the risk involved. Consequently, a TTP developed to support current combat operations was never allowed during continuation training (table 6, 1c, value 3). In another case, the MC-130H community was granted an FAA exception to regulation in order to allow squadrons to fly low-level terrain-following operations in adverse weather conditions provided they coordinated with controlling agencies on their route of flight and developed a communication plan to facilitate flight following. This unique provision was made only for MC-130H operations based on the reliability of aircraft systems and aircrew proficiency, but the Air Force Flight Standards Agency refused to acknowledge the exception, thereby preventing the MC-130H community from adequately training its aircrews.

With current continuation training strained by combat operations, units must strive to prioritize their training effort. Two years ago, all MC-130H pilots had the same exact training proficiency requirements that is to say, a pilot with 5,000-flying-hours was required to accomplish the same number of tactical flying events that a 200-hour pilot did. Recognizing that highly experienced pilots did not require the same number of training events to maintain proficiency, AFSOC graduated the requirements based on flying hours. At this time, newer crewmembers are required to accomplish approximately twice as many flying events to maintain currency than their more experienced counterparts (AFI 11-2MC-130V1 2003, 25). Furthermore, the squadron commander can increase the requirement if the situation warrants (table 6, 2a, value 4). Unfortunately,

continuation-training requirements are not always responsive to a squadron's needs, especially those squadrons that operate overseas. Because the requirements set forth by AFSOC DOT are a minimum requirement based on optimal utilization, any training conducted above and beyond requirements is very difficult to accomplish. One overseas unit, unable to keep its aircrews proficient in a particular task, was forced to request a change to its METL in order to forego that training (table 6, 2b, value 3).

With regard to relevance of MC-130H continuation training, the requirements are developed with squadron METL proficiency foremost in mind, and squadron instructors use current TTPs in their day-to-day instruction (table 6, 3a, value 5). As alluded to above, overseas squadrons find it very difficult to conduct AO-specific training in garrison, but they strive to deploy within their theater often enough to enhance training (table 6, 3b, value 3).

As with training requirements, squadrons can make recommendations to changes in flight evaluation criteria through staffing channels with approximately the same expected outcome. Flight evaluators are required to evaluate specific profiles and they may add events to those profiles, but not eliminate items from them (table 6, 4a, value 2). Fortunately, the vast majority of flight evaluations are conducted within the squadron chain of command, providing the commander with a fairly accurate picture of his squadron's capabilities (table 6, 4b, value 5).

With regard to resource allocation, a squadron is provided a finite number of flying hours for a given year based on the number of aircraft that squadron employs. Each squadron, then, is required to use those hours within a 2 percent margin. Whereas it may be possible to add flying hours during the year, it is difficult to subtract from them.

However, as addressed above, units are fairly free to conduct that training as they see fit (table 6, 5b, value 5). Therefore, the squadron commander relies upon his squadron instructors to create a training schedule that will maintain the unit's combat capability (table 6, 5a, 5b, value 5).

MH-47E Continuation Training

Like the previously discussed training processes, MH-47E continuation training is closely controlled by the 160 SOAR(A). Although some requirements like those necessary to maintain FAA standards are mandated by the Army, the overwhelming majority of training is conducted as the field units see fit (table 6, 1a, value 4), and all continuation training is conducted under the unit chain of command (table 6, 1b, value 5). Due to their highly specialized mission, MH-47E units are virtually autonomous with respect to continuation training (table 6, 1c, value 5).

Unit commanders create task lists, which guide the training needs determination process, and units strive to tailor training based on individual need (Herrera 2005) (table 6, 2a, value 5). This process of developing training strategies based on the commander's vision and tailoring that training to individual needs results in continuation training that is highly responsive to unit needs (table 6, 2b, value 5).

This training practice is highly capable of supporting emerging mission sets using the most current TTPs (table 6, 3a, value 5). Furthermore, those units deployed overseas on a rotational basis are empowered to structure their training as they see fit in order to satisfy AO-specific training (table 6, 3b, value 5).

The flight evaluation process, which validates the training strategy, is markedly different from that found in AFSOC. Whereas MC-130H flight evaluations are conducted

hierarchically, with higher echelon flight evaluators administering evaluations to lower echelons, the 160 SOAR(A) flight evaluation process provides for evaluations both up and down the ladder. The units determine their flight evaluation criteria, adding only that criteria required by the FAA for instrument flight qualification, independent of outside influence (table 6, 4a, value 4). Whereas DES maintains oversight on the flight evaluation process, this is largely administrative owing to the fact that they do not maintain qualification in the MH-47E and, therefore, cannot administer flight evaluations. Regarding the evaluation of continuation training instructors, the unit maintains that responsibility, and all flight evaluations are conducted by unit flight evaluators (table 6, 4b, value 5).

The 160 SOAR(A) allocates flying hours to its units in much the same way that AFSOC does. Those units are then authorized to allocate the resources necessary to meet their flying hours allowance. Therefore, all the resources necessary to conduct continuation training are borne by the individual units (table 6, 5a, 5b, 5c, value 5).

C-130 Continuation Training

Continuation training in the C-130 community is virtually identical to that of the MC-130H. Biennially, AMC conducts a training and evaluation conference where units can suggest changes to guidance and even those aviators with the lowest levels of experience can propose changes albeit through the staffing process. The regulatory guidance that arises from these conferences is intended to serve the conventional C-130 community as a whole, and therefore, individual squadrons are often unable to contribute to the training needs determination process (table 6, 1a, value 2). Given their training requirements, squadrons then conduct continuation training within their own chain of

command (table 6, 1b, value 5). Unfortunately, they are afforded about as much autonomy as the MC-130H community for similar reasons (table 6, 1c, value 3).

Although C-130 requirements are also variable dependent upon individual aviator experience, in the C-130 community, the determination of qualification is left to the commander, not based on flying experience. This affords the commander the opportunity to better tailor training to individual needs (AFI 11-2C-130V1 2004, 4.3.2.) (table 6, 2a, value 5). This allows continuation training a higher degree of responsiveness than that found in the MC-130H community (table 6, 2b, value 4).

Continuation training requirements are driven by C-130 METLs and squadron instructors ensure squadron aircrews are employing current TTPs (table 6, 3a, value 5). However, the demands of the C-130 mission often prevent overseas units from doing much more than meeting established AMC training requirements, which results in diminished AO-specific training (table 6, 3b, value 2).

The flight evaluation process is identical to that of the MC-130H. Although the flight evaluation process nominally allows squadrons to affect changes to regulatory guidance, the reality is that C-130 units are greatly restricted with respect to the determination of flight evaluation criteria (table 6, 4a, value 2). However, the squadron continuation-training instructors receive their flight evaluations within the squadron chain of command (table 6, 4b, value 5).

Conventional C-130 squadrons receive flying hours in a parallel process to that of MC-130H squadrons. Once provided, the squadrons are solely responsible for their allocation and bear the entire cost with regard to time, money, and manpower (table 6, 5a, 5b, 5c, value 5).

CH-47 Continuation Training

Continuation training guidance for the CH-47 community is set forth in regulatory guidance maintained by the Army's Forces Command. This centralized guidance establishes the minimum required training events as opposed to the optimal number of events to maintain proficiency, and the remainder of the training is left to the field units to determine. The centralized guidance is revised periodically and while units can propose changes, the size of the CH-47 force and the reduced number of overall requirements combine to yield little input from the field (table 6, 1a, value 2). Because units are left to resolve to remainder of their training themselves, they have a great deal of autonomy in the conduct of that training (table 6, 2c, value 4) and the training is conducted within the units' chains of command (table 6, 2b, value 5).

This training, however, is not tailored to an individual aviator's experience level. An aviator with 5,000-flying-hours in the CH-47 must fly the exact training profile that a 200-hour aviator is required to fly although when the unit augments its basic training requirements, the focus is usually on its less-experienced aviators (Fleckenstein 2005) (table 6, 2a, value 2). In general, CH-47 continuation training is quite responsive to unit requirements (table 6, 2b, value 4).

The CH-47 community has been heavily tasked by combat operations in recent years, and continuation-training resources have become a rare commodity. Therefore, METLs are emphasized and current TTPs are heavily stressed during training (table 6, 3a, value 5). Also, overseas units have the latitude to emphasize AO-specific training, as do units preparing for deployment (table 6, 3b, value 4).

Army CH-47 flight evaluations processes resemble their MH-47E counterparts. Here, too, flight evaluations are administered up and down echelons of command, but DES has more influence because they have CH-47 evaluators on staff. Again, unit flight evaluators are given basic guidance, but then they are authorized to develop unit-specific flight evaluation criteria (table 6, 4a, value 4). Unit evaluators are also responsible for ensuring standards amongst unit continuation training instructors (table 6, 4b, value 5).

As with every previous example, each CH-47 field unit, following a flying hours allotment, uses that budget to ensure its aviators are combat ready. Although the number of hours is fairly fixed, the unit is free to use them however it deems is most appropriate to ensure flying proficiency (table 6, 5a, 5b, 5c, value 5).

Summation of Continuation Training

In the analysis of continuation training, this study concluded that the disparity between MC-130H and MH-47E processes is not as great as in the previous two areas of interest. The MC-130H process yielded a 47 out of a possible 60; the MH-47E, a 58 (see table 6). Once again, the conventional variants rated low, as expected when compared against a SOF-specific construct, with C-130s producing a 48 out of 60 and CH-47s a 50.

Although lower in four out of five sub-areas of evaluation, MC-130H continuation training deviated most in the area of process ownership. Although squadrons have some ability to influence the training needs determination process, the centralized nature of establishing training requirements inhibits squadron influence, and outside agents often veto training practices based on a conventional-minded perspective. Often, MC-130H core tasks are perceived as “unusual aerial activity” by Air Force agencies outside AFSOC and those perceptions can impose restrictions on essential training.

When comparing MC-130H and C-130 continuation training processes, we note virtually identical models. This is due, to a great extent, to the influence of the Air Force on squadron training. The established model, imposed by higher headquarters, is intended to ensure standardization of capability across the fleet. Unfortunately, it sometimes handicaps squadron commanders in their efforts to prepare their squadrons for combat operations.

Table 6. Completed Continuation Training Analysis Matrix

	MC-130H	MH-47E	C-130	CH-47
1. Process Ownership (To what degree is/does:)				
<i>a. The unit influence the training needs determination process?</i>	2	4	2	2
<i>b. Training done within the unit chain of command?</i>	5	5	5	5
<i>c. The unit have autonomy to conduct training?</i>	3	5	3	4
2. Responsiveness (To what degree is continuation training:)				
<i>a. Individually tailored?</i>	4	5	5	2
<i>b. Responsive to unit needs?</i>	3	5	4	4
3. Relevance (To what degree is/does continuation training:)				
<i>a. Geared towards METLs/TTPs?</i>	5	5	5	5
<i>b. Account for specific AO needs?</i>	3	5	2	4
4. Quality Assurance (To what degree does the unit:)				
<i>a. Determine flight evaluation criteria for continuation training?</i>	2	4	2	4
<i>b. Conduct flight evaluations of continuation training instructors?</i>	5	5	5	5
5. Resource Allocation (The unit bears what portion of:)				
<i>a. Time invested in continuation training?</i>	5	5	5	5
<i>b. Money invested in continuation training?</i>	5	5	5	5
<i>c. Personnel invested in continuation training?</i>	5	5	5	5
Continuation Training Total (out of 60)	47	58	48	50
1=None 2=Minimal 3=Moderate 4=Considerable 5=Complete				

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

It is clear that, at this time, AFSOC is still struggling with, as Scott puts it, an “identity dilemma” (1996, 13). In the attempt to serve as both Air Force major command and air component to USSOCOM, AFSOC falls short in its responsibilities to provide SOA. In each of the three areas of training this thesis analyzed, AFSOC MC-130Hs deviated significantly from an ideal SOF model, while 160 SOAR(A) MH-47s conformed almost perfectly. Although the criteria for analysis were largely self-determined and the evaluations arguably subjective, the interviews confirmed that the degree of disparity would still be evident, even if evaluated by a different source. What are the reasons for this marked difference?

Within the Army culture, SOF are recognized as elite soldiers. The loss of a highly experience CH-47 aviator to the 160 SOAR(A) may diminish the overall combat effectiveness of an aviation company, but that company takes a great deal of pride in the fact that it produced an aviator that was deemed worthy of joining an elite regiment (DeMilia 2005). Furthermore, conventional unit commanders often cite the standard set by the 160 SOAR(A) in an effort to inspire their aviators. This view is not as pervasive in the Air Force, where commanders often struggle just to keep their crews proficient. The loss of an experienced crewmember is often acutely felt, regardless of the esteem drawn from selection to a special operations squadron. Some C-130 aviators question what the value of special operations. Now, as conventional C-130 crews regularly perform NVG landings, the perceived gap in capability is seen to be shrinking.

The Air Force does not share the Army's philosophy on supporting special operations. Although quick to trumpet the success of "its" special operations aircrews, the Air Force continues to emphasize its traditional conventional missions. Whereas the Army gives a high degree of autonomy to both SF and SOA, the Air Force continually places barriers in the path of AFSOC with regard to conduct of the SOF mission. Unfortunately, USSOCOM, an Army-centric command, is reluctant to intercede on behalf of AFSOC, believing this matter to be outside their jurisdiction.

This thesis has determined, then, that the Air Force does not allow AFSOC to adequately select and train MC-130H aircrews in accordance with Title 10. In the past, AFSOC has granted concessions, willingly or not, that have divorced it from USSOCOM. Many of the processes that affect the combat effectiveness of MC-130H aircrews are constructed and conducted outside the purview of AFSOC. In order to improve these processes and ultimately enhance the impact of MC-130H operations, the following recommendations are offered.

Recommendations for Assessment and Selection

The complete lack of an MC-130H assessment program and a selection process that lies completely outside the AFSOC span of control have combined to prevent the command from recruiting and selecting the most highly qualified aviators available. One of the SOF Truths is "Quality is better than Quantity: A small number of people, carefully selected, well trained, and well led, are preferable to larger numbers of troops, some of whom may not be up to the task" (Billingslea and Holland 2003, 30). Unfortunately, AFPC does not share this philosophy with USSOCOM and is only concerned with filling training vacancies, giving little thought to "careful selection."

Therefore, the Air Force should recognize the importance of SOF manning and authorize AFSOC to conduct its own assessment and selection. MC-130H commanders currently hold tremendous sway over their subordinates' assignments and this should be extended to include potential MC-130H candidates. AFSOC should be permitted to visit conventional C-130 units in order to brief crews on command missions and capabilities, as well as recruit prospective applicants. The transfer of selected aviators would then be coordinated between squadron commanders, and AFPC would then be informed in order to produce necessary orders. The authority to approve any waivers required to facilitate the initial qualification training of an individual must be approved not by AETC, but by AFSOC. Finally, and perhaps most difficult, AFSOC must be adequately resourced, both by the Air Force and USSOCOM, to conduct assessment and selection.

Recommendations for Initial Qualification Training

AFSOC has limited control over the process that produces its MC-130H aircrews. The training relationship with AETC has helped AFSOC defray the cost of training new crewmembers, but at what price? The individuals responsible for developing training syllabi are not directly accountable to AFSOC, nor are any of the individuals responsible for instructing initial qualification trainees. Given this, the operational squadrons are forced to sacrifice valuable training resources in order to ensure their incoming aviators can contribute to mission success.

There is no Air Force requirement for initial qualification trainees to receive their training from AETC. Within AFSOC, the 19 SOS conducts that training for MC-130E and AC-130H/U aircrews and the 333rd Fighter Squadron, an Air Combat Command unit, provides the equivalent training to incoming F-15E crewmembers. The precedent

has been set for operational commands to conduct their own initial qualification training, and AFSOC should divest AETC of its training responsibilities with respect to MC-130H aircrews.

While it may be true that by conducting MC-130H initial qualification training, AFSOC would incur the tremendous costs associated with that training, the benefits are manifold. First, operational units would be relieved of the burden of committing training resources that should have been borne by the training unit. Second, by owning the initial qualification process, needed changes to training syllabi would be quickly integrated. Third, AFSOC flight evaluators would be able to ensure that initial qualification training was within established standards. Finally, the authority to allocate the resources required for initial qualification training would ensure that AFSOC could manage its training free of outside influence.

This evolution, owing to the costs involved, will not happen quickly. In the interim, AFSOC must be granted the authority to maintain training syllabi. Program manager accountability must be transferred from AETC to AFSOC in order to allow MC-130H squadrons to drive the content and tempo of training, not respond to it. Because the 58th SOW is geographically separated from AFSOC, liaison personnel would probably be required to manage the training syllabi until AFSOC can assume command.

The final recommendation regarding initial qualification training is that resources must be allocated to AFSOC in order for them to conduct MC-130H initial qualification training. The Air Force should make those resources currently provided to AETC for MC-130H training available to AFSOC, thereby obviating USSOCOM from the requirement of funding the training.

Recommendations for Continuation Training

The standard Air Force template does not satisfy the unique requirements of MC-130H continuation training. Squadron commanders struggle to ensure their aircrews complete the required training established by higher headquarters. Furthermore, although AFSOC DOT develops the requirements, changes to guidance must be coordinated with the Air Force headquarters staff. This results in a ponderous process that encumbers operational squadrons, not empower them.

The Air Force must recognize that AFSOC aircrews have special needs and afford them the opportunity to determine and establish them. AFSOC must reduce the overall number of training events required to maintain proficiency and delegate the authority to squadron commanders to determine their squadrons' needs and develop training strategies to meet those needs. Finally, squadron commanders must emphasize needs-based training on an individual level and hold instructors and trainees accountable using independently determined flight evaluation criteria.

Final Comments

Despite their "identity dilemma," there is no doubt those MC-130H aircrews possess highly specialized and unique mission skills, and these abilities have been amply demonstrated in numerous operations to date. This cannot, however, be construed as a validation of the status quo. This study did not find a compelling reason for the current MC-130H selection and training processes, nor did it uncover any exemptions or waivers to legal requirement. AFSOC's struggle to moderate between the demands of Air Force MAJCOM and USSOCOM air component has resulted in a subordinate force that fails to satisfy the intents of both masters.

Ultimately, USSOCOM has the responsibility for the training of its components' forces. The Army provides the 160 SOAR(A) the autonomy required to train special operations aviators. However, the Air Force, despite an equivalent context to that of the Army, maintains close scrutiny or even manifests control of AFSOC MC-130H selection and training processes. If the Air Force fails to recognize the critical nature of SOA, especially in current contingency operations, and grant sufficient autonomy to AFSOC, then USSOCOM may be required to intervene and assert their legal tenure.

As SOF continue to conduct global operations, an ever-greater demand will be placed upon SOA. This demand has already strained MC-130H selection and training processes, and there is no evidence that that strain will be alleviated. Therefore, in order to maintain viability in current, as well as future, operations, it is essential that MC-130H aircrews are carefully selected and thoroughly trained.

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