



READINESS: A COMMANDER'S RESPONSIBILITY

GRADUATE RESEARCH PAPER

Douglas A. Furst, Major, USAF

AFIT/GMO/ENS/01E-3

**DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY**

AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, Ohio

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Graduate Research Paper

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GRADUATE RESEARCH PAPER

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Douglas A. Furst, B.S., M.S.

Major, USAF

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Douglas A. Furst, B.S., M.S.

Major, USAF

Approved:

Lieutenant Colonel Alan W. Johnson

date

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Abstract

Military readiness has been and continues to be a paramount priority of our government and Department of Defense (DoD) to perform a broad spectrum of mission capabilities. The challenge to conduct and sustain the DoD missions with short notice to any point on the globe involves pulling together reliable equipment, proven procedures, and proficiently skilled personnel to respond to a contingency tasking, deploy with minimal delay, and conduct operations. Of this description, the mobility readiness of personnel remains a key enabling factor. A squadron commander directly affects the readiness of their troops by the priorities he or she places on: training core-skills, exercising realistic contingency scenarios, establishing a mobility mindset, and ensuring proficiency in wartime skills.

The primary research question addressed in this paper is: *“How does a commander most effectively measure, track, interpret and affect the personnel readiness of his/her mobility squadron?”*

This research solicited insight and feedback from mobility experts and past commanders. This insight consolidated into seven readiness-enabling factors to serve as a practical guide for new commanders, providing a perspective from which to approach their role and responsibility in enabling personnel mobility readiness.

READINESS: A COMMANDERS RESPONSIBILITY

I. Overview

Background

The purpose of the military, when not engaged in contingency operations, is to prepare to perform its wartime mission. This research effort focuses on the role of a commander to facilitate the process of preparing his or her deployable squadron members to achieve a state of readiness. “As a commander or supervisor, you assume full responsibility for the accomplishment of your unit’s mission.”¹ A considerable amount of research and analysis has been dedicated to the materiel and equipment aspect of readiness, therefore this effort emphasizes measures to prepare troops to achieve a mission-capable, readiness posture. The conclusion of this research is a set of readiness enabling factors and supporting comments to serve as a guide for new commanders of mobility squadrons as they assume command and start defining priorities. This first chapter discusses background factors that define why readiness is a concern, and outlines the flow of concepts in subsequent chapters.

Air Force basic doctrine begins with this fundamental truth: “The overriding objective of any military force is to be prepared to conduct combat operations in support of national political objectives—to conduct the nation’s wars.”² The men and women who work for the Department of Defense, while assigned to one of the services, direct their efforts, resources, and energies to accomplish this preparation by training, organizing, and equipping forces to produce mission capabilities. These capabilities include the equipment, information, skills, supplies, strategies, tactics, plans, agreements, and knowledge which contribute to a squadron’s Designed Operating Capability (DOC)³.

This process of merging military technologies, resources, and troops into an able national instrument of power is the *process of developing readiness*. From a Major Command (MAJCOM) perspective, the Air Mobility Command emphasizes the readiness aspect of their mission as:

Today, more than ever, our nation needs rapid, flexible and responsive air mobility. America's Global Reach promotes stability in regions by keeping America's capability and character highly visible. Joint military exercises display military capabilities and bolster U.S. ties with allies.

Humanitarian missions strengthen relations with recipient nations and show the watching world America's compassion. Projecting influence can be an effective deterrent to regional conflicts. Should deterrence fail, Global Reach allows for the rapid and decisive deployment of combat power.⁴

We prepare to stand ready for rapid contingency response. Figure 1 outlines the preparation process in order to execute the military instrument of power when needed by the National Command Authority (NCA).

This conceptual process traces the purpose of military preparedness as defined in the Promotion Fitness Examination (PFE) under the general functions of the military departments.⁵ Comparing the *activities* necessary to prepare our forces to an appropriate state of readiness with what we actually *do* on a day-to-day basis, I suggest that our squadrons can very easily lose a readiness focus, if improperly led, by pursuing non-mission essential objectives. Troops at the squadron level do the activities that support the priorities and focus of their squadron commander. In the oaths of office, Officers swear to perform the duties of the office they are about to enter⁶ and Enlisted members swear to obey the orders of the officers appointed over them.⁷ General W.L. Creech states “Leaders lead by example and set the tone.”⁸ Following this logic, if the

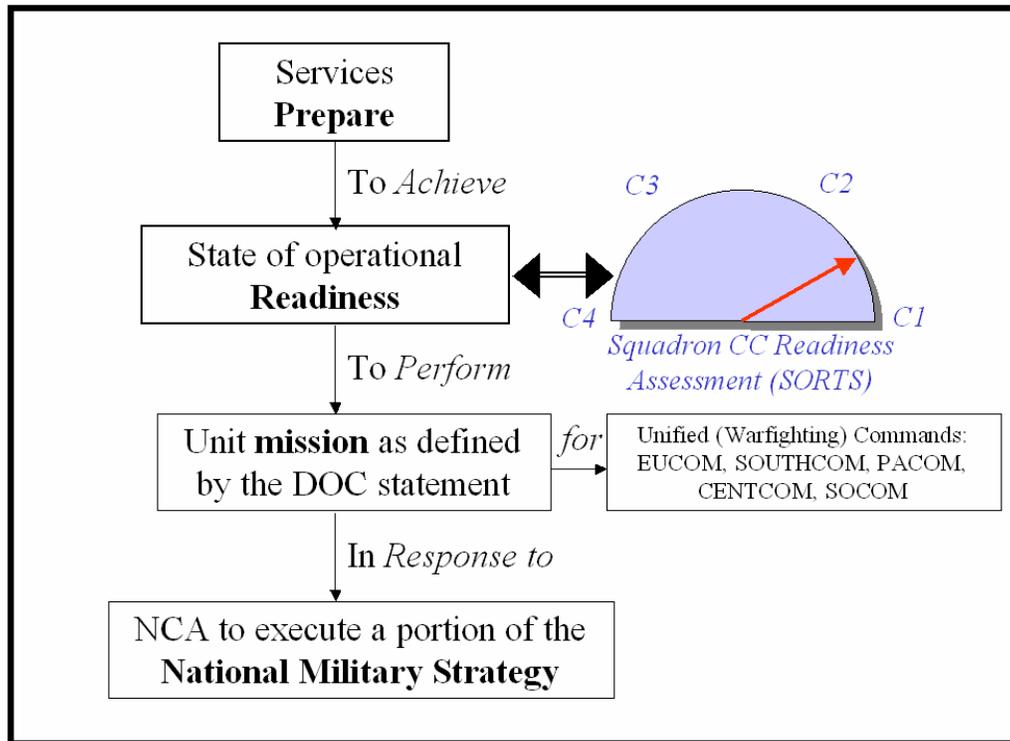


Figure 1. Purpose of Preparing

commander fails to ensure his or her troops stand ready with adequate mobility and field survival skills, training, and experience, those deployed from that unit will risk facing contingency challenges without the adequate confidence, knowledge, and capability to succeed.

In order for a commander to tackle the readiness issue, he or she needs a plan, a tactical set of readiness indicators pointed toward achieving an overall strategic state of readiness. This concept is the foundation of the strategic planning process of analyzing the mission, envisioning the future, assessing capabilities, performing a gap analysis, developing strategic goals, and formulating a plan. This research effort developed and prioritized a series of readiness concepts by consolidating mobility readiness enabling

factors provided by experts as a consensus. These readiness enablers stand to serve new commanders as an “expert” perspective of preparing an organization for contingency operations as the data was derived from mobility experts. These readiness enablers will help a commander with the first strategic planning step of analyzing the mission and assessing capabilities. Air Force Handbook 90-502 provides additional information on the strategic planning process.⁹

Some officers learn to command effectively from extensive personal experience deploying to these challenging contingency operations, and others build a good perspective from close mentorships. This research effort combines the benefits of both experience-building paths by pulling the expertise from many senior NCOs and officers who have “been there, done that” in order to help squadron commanders at the wing level determine the most important decisions in establishing a focus that results in providing a readiness posture to the DoD.

Now that you understand *what* this research set out to achieve, *who* the results are geared for, and *what type* of conclusions it produced, I challenge you to consider the implications and your motivation for reading on. A readiness posture determines how well an organization responds to a 1730 Friday afternoon phone call from the execution cell at your MAJCOM requesting a *22-man package to deploy on verbal orders within a few hours to operate in field conditions, for an undetermined duration, to a cold and wet climate, at a classified location with a moderate threat*. Does your squadron adequately prepare your troops for this challenge?

How We Prepare

In spite of the challenging nature of this scenario, this is the unpredictable and volatile world we live in, as well as the nature of our job. Further, consider what occurs at a typical airlift wing on any given day. Based on personal experiences from the past 14 years, one would most probably observe activity involving many on-going processes.

Home station troops perform their specialty skills such as transporting cargo and passengers on regular schedules between pre-defined channel locations, maintaining and protecting aircraft, importing and exporting supplies, shipping equipment and household goods, and most ostensibly: flying training sorties to maintain aircrew proficiency. The personnel at home station not only perform their job functions, but most perform additional duties as well: marching in the wing honor guard, serving on evaluation boards, performing details for the wing, squadron, or flight, attending wing and squadron meetings, and participating in public ceremonies. These activities are in addition to studying for the annual specialty skills knowledge testing (SKT), attending college classes at night, and taking Professional Military Education (PME) courses. Very little of this home station activity prepare an individual to “think mobility” or maintain readiness.

Deployed troops perform specialty skills on temporary duty (TDY) to a location while the vast majority of the time living in hotels with *minimal risk* of criminal or terrorist threats. This experience fails to teach contingency situational awareness, ability to survive and operate, while communicating a false sense of security which leads to complacency. Complacency becomes a vulnerability in an actual contingency.

Wartime skills training is the least time-and-effort consuming operation as troops accomplish annual refresher training in chemical warfare, self-aid/buddy care, weapons (M-16/M-9), and infrequently deploy for a few days in support of an exercise.

From this limited and generic perspective, there is concern that preparedness for deployed operations does not take much priority in day-to-day life for many officers and enlisted members and may not adequately enable our forces to the necessary readiness level. Without external impetus to generate experiential training scenarios, the human-nature of your troops will lead to a readiness entropy to the minimal requirements. General Fogleman states that as a commander, “you are responsible for everything your unit does.”¹⁰ The reason why readiness degrades is twofold: 1. Readiness is a proficiency level with a shelf-life requiring refresher training and exercising to maintain currency¹¹ and 2. Readiness incurs a cost in both effort and budget. The total resources available to pay these costs are finite and compete with many conflicting priorities. Because readiness is perishable it is necessary to train ideally at the time an individual loses the abilities to perform the skills, but not train constantly as to expend all the time, money, and energy of a squadron.

Why We Prepare

The point to addressing mission readiness in relation to the amount of time spent in wartime skills training is that without the challenge and regular exposure to wartime situations, experiences, and environments, troops risk losing a perspective for what it takes to quickly deploy, survive, and endure high-tempo operations in the field; these are many words to describe that it is easy to “get soft.” Tactical Air Command Manual 2-1 points out:

The pace of modern high intensity war will not allow time to polish skills, develop new procedures, new techniques, and new organizational structures as the crisis develops or after hostilities begin. Hence, training for aircrews, training for the battle staffs, and training for our maintenance people [and all other troops deployed in the contingency environment] must be as realistic as possible ¹²

This attitude is an intangible concept yet critical to mission effectiveness. Future readiness needs are clearly emphasized in the following statement from Air University:

These will be fight-anywhere, fight-anytime wars, where “anywhere” and “anytime” will largely be defined by the enemy. The battlespace will be characterized by sudden and awesome lethality. The outcome will be determined in large part by the readiness of US forces to engage the enemy.¹³

Losing sight of readiness will distract and distort an individual’s perspective of why they wear the uniform and degrade their ability to identify and address threat activity. As a result, they will fail to automatically react with the needed skills to rapidly mobilize, establish operations in an austere environment, and sustain a safe, effective, and reliable capability to fight. The cost of not being ready could be catastrophic.

The United States may be faced with an adversary who seeks to offset United States’ advantages by using asymmetric means and threatening the use of chemical and/or biological weapons, information attacks, terrorism, urban warfare, or anti-access strategies. Thus, America must quickly seize the initiative from the aggressor. *Military capability that is vulnerable to preset time lines risks attack of those time lines. Delay in decisively and quickly halting an enemy may force a difficult and costly campaign to recover lost territory.* ¹⁴

It is this issue of personnel readiness that warrants study and focus. The concept is complex and requires an understanding of many factors to include: technical job knowledge, an acute understanding of how to operate in the contingency environment, and an ability to give and receive direction and orders. Readiness extends beyond the prior three factors to encompass less direct aspects such as maintaining physical fitness and ensuring personal family affairs are in order. Figure 2 captures the relationships between the concepts associated with building readiness and the outputs resulting from it.

This is a tool to visualize what readiness does in relation to the troops, the commander, and the mission. The inputs on the left characterize the actions taken to prepare for readiness.¹⁵ The feedback process in the lower right corner identifies the assessment of readiness. Finally, the right-hand block captures the impact of readiness. The (+) and (-) can be read in the following terms, “as the level of readiness *increases*, there is a corresponding positive (in the case of “(+)”) correlation with the speed of deployment”

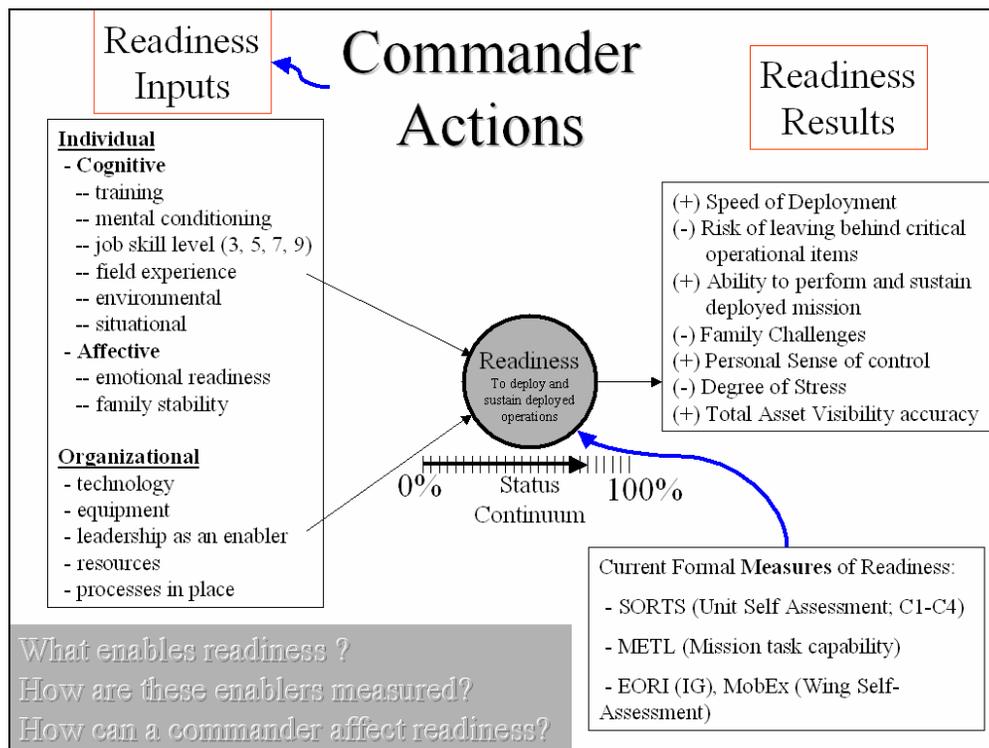


Figure 2. The Readiness Process

Cost of Failure to Prepare

The failure to stand ready results in a breakdown of emotional and physical performance which ultimately reduces mission capability. In order to prevent history from repeating itself, all airmen, soldiers, and sailors should understand why 2,400 men and women died on 7 December 1941 at Pearl Harbor when the radar technician saw and

reported the warning of a potentially massive attack, “a larger number of planes than he had seen before on his [radar] scope.”¹⁶ **Lt Tyler, upon receiving this message in the Fighter Information Center, failed to respond in any way to inquire further or report the observation up the chain of command and took no defensive actions. The leadership failed to ensure an appropriate level of readiness.**

Troops do not naturally achieve readiness for war by performing day-to-day job skills and attending annual refresher training. More specifically, if troops are focused year after year on peacetime operations and steady-state environments within a wing, their attention will most probably focus on minimizing costs by optimizing **efficiency**. On the other hand, the focus in war is **effectiveness**: to achieve the mission while minimizing the loss of people or equipment.¹⁷ The attitudes, goals, and perspectives of efficiency and effectiveness are different. Both efforts are important but must be understood with proper perspective. Priority decisions between the two objectives require different preparation, focus, and training.

Efficiency is necessary given the realities of the post-Cold War environment characterized by the American public’s desire to benefit from a “peace dividend” which translates to reduced military spending. The National Campaign for the Peace Dividend resolve:

We, the People, believe that the United States of America should remain the world's strongest nation, but we find current levels of military spending to be unnecessary, unwarranted, and excessive. We direct our representatives in the Federal government to begin an orderly long-term program to substantially reduce military spending to levels more in keeping with the close of the Cold War and with our national economic capabilities.¹⁸

Yet, effectiveness to conduct military operations at all times is critical to maintain the national military objective of a credible deterrence. Effectiveness is the positive ability to perform the mobility readiness challenge discussed in the past few pages, but this effectiveness becomes vulnerable when over-tasked. Figure 3 clearly conveys the concept of over-tasking as a result of increased workload with fewer personnel.

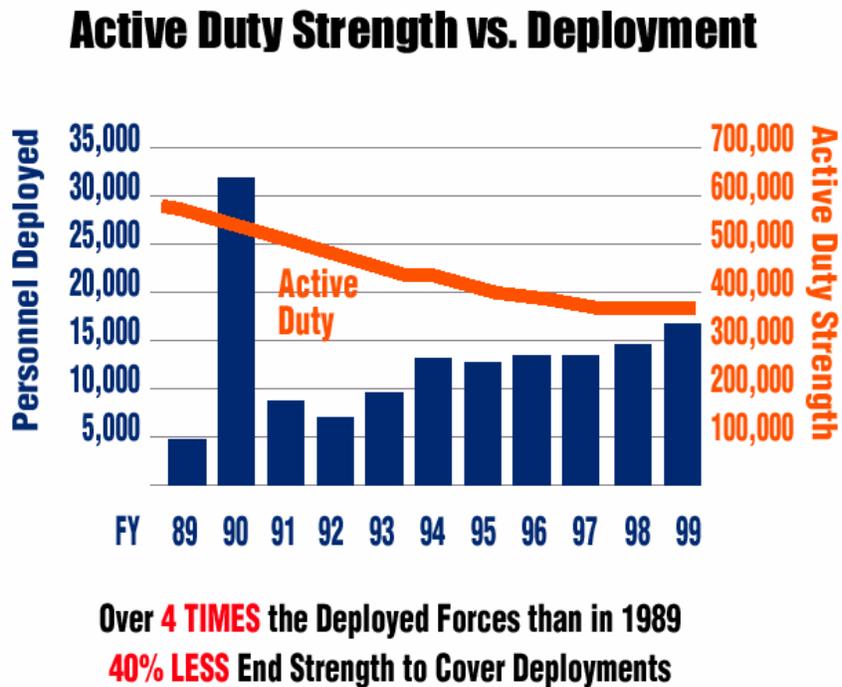


Figure 3. Doing More With Less¹⁹

A proper perspective between readiness and Operations Tempo (OPSTEMPO) does not naturally occur but requires deliberate planning, readiness proficiency monitoring and responsive training. Commanders determine when to perform in-house training, when to push for wing exercises, and when to request time to “stand-down” the forces. This balance of OPSTEMPO, real-world mission needs, and readiness levels is a critical equilibrium to consider.²⁰ These decisions cannot result from a pre-programmed

checklist because every command situation is different. Therefore a set of guidelines or commander-heuristics may prove helpful in making these tradeoff decisions. It is the intent that the result of this research to provide these guidelines

Research Question

The focus of this research effort centers on the commander's role and perspective on readiness and the resulting impact of their actions as a leader on the degree of effectiveness of their unit to perform its wartime mission. This equate to the following research question: "*How does a commander most effectively measure, track, interpret and affect the personnel readiness of his/her mobility squadron?*" The key words in this question are *measure, track, interpret and affect*. Although this focus will not cover the aggregate issue of readiness which includes equipment and resources, answering this question will provide useful insight to new commanders in preparing their units for mobility readiness.

Research Objectives

To adequately answer the research question, the research will build on itself through four distinct phases. The results of this research will produce an expert opinion guide on how commanders enable readiness. It is my intent for this guide to serve as a standard resource for implementation into MAJCOM pre-commander training courses.

The phases of this effort are as follows:

1. Develop an operational *definition* of readiness from literature, regulations, doctrine, and experts
2. Aggregate current readiness-evaluation processes from the Status of Resources and Training System (SORTS), Mission Essential Task List (METL), and

Expeditionary Operational Readiness Inspection (EORI) and identify deficiencies in effectively providing timely pertinent readiness feedback

3. Prepare a commander's readiness tool in the form of a short top-level guide: Mobility Personnel Readiness –Enabling Factors: A Comprehensive Guide for Commanders

4. Submit these research results to HQ AMC to augment their new commander training program during the readiness blocks of instruction by the AMC/IG

Each phase will follow a specific methodology described in section III and results detailed in later chapters to answer not just the research question, but more specific investigative questions. These sub-questions provide depth to further clarify facets of the research question. The investigative questions are outlined below:

Investigative Questions

Personnel readiness is an intangible concept that does not fall into concrete black and white characteristics. This research effort broke down the readiness concept into further detail by attempting to answer investigative questions.

1. What is readiness?
2. What methods are useful to measure readiness?
3. What factors enable readiness?

Scope and Assumptions

Not all active-duty, wing level squadrons mimic the activities outlined in the day-to-day description above. Many squadrons such as the Air Mobility Operations Groups and USAFE's Combat Readiness Groups (CRGs) perform deployment readiness preparation actions daily while in garrison therefore this research is not written specifically for these units. Similarly, flying units deploy as their primary core

competency and rarely endure operating and living in field conditions for long periods.²¹ This research is scoped primarily to focus on deployable support squadrons who deploy irregularly on a contingency basis.

The conclusions in appendix D are not a discrete “yes” or “no” solution or an optimized linear program result, but a composite set of best practices and consensus opinions organized by consistency of support. This set of readiness enablers would most ideally serve as a living document to grow as commanders continue to build their personal experiences.

Preview of Remaining Chapters

The discussion in chapter I sets the stage for clarifying the importance of individual readiness as an important field of study to individuals who have accepted the responsibility for preparing troops. The following chapters expand on this subject with a literature review discussing other work and perspectives on the personnel readiness issue from lessons-learned to the readiness feedback mechanisms. At the conclusion of chapter II, the emphasis on past and current readiness discussions end and the initiation of discovering readiness enablers begins. Chapter III explains the Delphi technique and the data results attained. Chapter IV discusses how these readiness enabling factors may be implemented by a new squadron commander and what aspects of this field warrant further research.

The logic flow from characterizing the problem, discussing related literature on the subject, laying out and conducting “expert opinion” data solicitation and consensus, and suggesting conclusions and implementation concepts are all to achieve a basic

objective: determine a set of guidelines to guide new commanders in fostering mobility readiness from a personnel perspective.

II. Literature Review

Introduction

The majority of literature on military readiness centers around mission capable rates of weapon systems based on spare parts, repair supply levels and available spare assemblies such as engines, radar systems, and Line Replaceable Units (LRUs). This partial focus is a funding justification process consuming considerable analysis in Washington.²² The people side of readiness is a concept mostly discussed in aggregate terms of recruiting rates, career-field manning strengths, and top-level training statistics on how many have achieved a 5, 7, and 9 skill level in their specialty. Very few articles specifically addressed the critical component of personnel readiness such as how an organization develops attributes in a deployable member that enables them to perform the mission in a contingency environment.²³ The following articles about readiness attempt to develop a deeper understanding of how this proficiency of mobility readiness occurs.

Define Readiness

Readiness is a concept with different meanings to different DoD services, MAJCOMs, career fields, and ranks. The most common definition to troops and commanders focus attention on the facets captured in the Status of Resources and Training System (SORTS). The following three definitions converge on similar aspects:

1. United States Code, Title 10 identifies “The Military Departments are responsible to recruit, organize, supply, equip, train, service, mobilize, demobilize, administer, maintain, and provide facilities for **wartime readiness**.” Readiness could then be considered the result of doing the above activities.²⁴
2. **Readiness** - Ability of forces, units, weapon systems, or equipment to deliver their designated outputs. This includes the ability to deploy and employ without unacceptable delay.²⁵

3. **Ready:** a: *prepared mentally or physically for some experience or action*; b: prepared for immediate use; willingly disposed. Readiness is the noun form of “ready.”²⁶

The problem with these perceptions of readiness is that for anyone receiving a short notice deployment order, their perspective of readiness is far more involved than the first two definitions. Because our systems are designed and proven to get to the fight, readiness does not appear too complex, but it is the capability to perform under austere conditions and the ability to sustain deployed operations that truly embody the effect of readiness. Therefore the above definitions are a good start, but they require a more comprehensive explanation. This definition will receive more attention in chapter VI.

Perspectives on Readiness

All members wearing the uniform with a wartime specialty skill should have a mobility attitude and an expectation that they may need to perform their mission under the threat of a contingency scenario. After Desert Shield/Storm, Army Lieutenant Colonel Stevenson makes the following statement about deployability:

Perhaps the lessons regarding deployability can best be summed up by noting that deployability is a basic requirement of soldiering, much like being able to qualify with one’s individual weapon, or being able to don a protective mask within the required time. Commanders at all levels would do well to insist that no soldier be permitted to remain on active duty who is permanently non-deployable.²⁷

As LTC Stevenson implied, deployability and the ability to perform military operations in field conditions is a military core competency built on skills. To best understand readiness, it is helpful to explore challenges and experience from historical major contingencies. The following literature discussions provide some of these historical perspectives.

Logistics Lessons Learned from Desert Shield/Desert Storm: the Joint Universal lessons Learned System (JULLS) is a tremendous source of information on the impact of problems with personnel readiness.²⁸ These reports confirm many of the concerns mentioned previously with troops deploying without medical and on the job training (OJT) records, training, equipment, or sufficient preparation. Many of these problems were attributed to exercising artificially which failed to adequately test capabilities or build the comprehensive set of skills needed to succeed without incurring unnecessary costs. “Mobility simulations did not reflect actual mobility movements. People were unprepared to mobilize. Equipment was shorted. Bags were not ready. Wills and power of attorney changed.” Additionally, this report highlighted the significant problems encountered with personnel who were not filling a mobility position “on the books” who deployed anyway. These people experienced the most emotional and performance problems as a result of little to no preparation. Lastly, of the *personnel* findings, JULLS identified the positive value of deploying units together as unified team in contrast with the common practice of piece-mealing units together.

Desert Storm Readiness Example: the US Army’s 141st Signal Battalion was a poignant example of how readiness factors affect mission effectiveness²⁹. Many readiness factors described in a report by LTC Donald Fowler serve as good justification for the necessity to understand personnel readiness from a training, equipment, and emotional perspective. In summary, this unit stood down its readiness posture during an equipment upgrade transition. Old equipment was sealed and turned in, no longer serviceable or available. The new system had not arrived, therefore the unit was not mentally or operationally prepared to perform their wartime mission. A point not

mentioned in the analysis was their reported SORTS status. This may have been a case of a unit commander's assessment claiming C1 – operationally capable when they were not.

This unit deployed to Operation Desert Shield on 24 December requiring a significant spike in last minute activity retrieving all the old turned-in equipment, packing all spare parts available, and preparing a group of individuals who had considered this transition time as undeployable. This emphasizes the importance of C-rating accuracy when reporting a unit's status.

The second factor related to personnel readiness was their exercise experience. They were well prepared for 1 week “contingencies” as they performed their exercises, but this preparation did not prepare them for the desert. Many child care plans were set up for short periods, but had no ability to last an undetermined time therefore troops, once deployed, had to return to home station to bring their children to family or other long term arrangements. The other major family issue occurred with pregnancies. In a unit which historically had 5-6 pregnancies at any given time, this number spiked to 26 pregnancies and other soldiers turned up pregnant in theater requiring them to return home. This indicates a lack of emotional preparedness of troops for facing the reason they wear a uniform. Commanders can have an impact on this type of situation with realistic training and propagating a mobility mindset where all activities in peacetime track with a connection to the contingency mission.

A commander may not eliminate all situations like the ones experienced by the 141st signal battalion, but he or she has a direct impact on mitigating these problems that reduce our ability as a military force to perform the mission.

Readiness Relation to Leadership: senior leaders have for years emphasized readiness as the top priority of the military services and use it to justify the need for funding to support new equipment and spare part needs. Air Force chief of staff, General Michael Ryan, discussed his FY2000 priorities with the following:

Our Air Force men and women and their commanders, have done great work keeping control of readiness declines despite heavy tasking and tough fiscal constraints. Nonetheless, the mission-capable rates have declined.” The ...three readiness priorities are people, equipment and the training to employ them. He said if he “could put a bubble around this that enables it all to happen, it would be leadership.”³⁰

He goes on to say that the essential component of readiness is “the confidence in their capabilities to do what we ask them to do, and that involves equipment, training, and leadership.”³¹ The readiness challenge is further exacerbated with increased OPSTEMPO. Recalling Figure 3, the force today is 33% less manned than it was ten years ago and the relative deployment workload exceeds 400% of what it was. This OPSTEMPO affects all personnel, deployed and at home station as the base unit continues its mission with fewer people. After enduring this environment, uniformed men and women of all ranks and career fields respond with high numbers leaving the service at the earliest possible opportunity. This emphasizes the importance of protecting “leave” and “recovery” periods after deployments as justification for dropping readiness assessments when needed to give troops a chance to achieve some form of control and balance.³²

The Washington Times reported in Aug 2000 comments on military readiness: “Equipment wore out. Spare parts dried up. And personnel, weary of months overseas, quit.” This report goes on to discuss recruiting and retention issues as a result of low readiness situations and discusses possible causes. It describes the President Reagan

years of the 1980s as the time of the finest military ever with unmatched esprit de corps as a result of strong military support and growth. This emphasized the need for adequate military funding and the importance of communicating the value of the troops to the nation. Finally it discusses the Marine corps and why they are the only service achieving their recruiting numbers. It again comes down to leadership and motivation. The Marines promise competence, status, and team integrity. These values and status attract recruits.³³ Leaders at all levels can learn from the Marines as opposed to focusing on how much we can give in financial compensation. The findings of this research effort support this position.

Importance of Realistic Combat Training: In the Air Force Issues library, a 1995 report on combat training emphasizes the need for training our forces how they will fight. It describes this training, “not as a luxury, but a necessity.” This justifies continuing the 50+ major joint and combined exercises around the globe each year in spite of their high cost. The focus of these exercises is to “arm our people with experiences that emulate actual combat in its most demanding phases.” This report cautions our leaders to avoid the temptation divert money from readiness to contingency operations late in the fiscal year to balance the budgets. This practice prevents new personnel from building experiential knowledge that has no equal in the classroom. Direct experience does translate to action on a bare base deployment at any given location on the globe to turn that geographic point to an operational airfield and overcoming inter-service and foreign, host-nation challenges.³⁴

Family and Readiness: A report done in 1997 by the Washington Consulting Group investigated the influence of family factors on individual readiness, retention, and

job commitment. They determined that certain demographically grouped servicemen had significantly more difficulty deploying and performing the mission based on family concerns. In particular, families with children, female service members, and younger personnel required the most attention as they coped with short notice deployed contingency operations. The most adaptable groups that responded efficiently and effectively with a minimum amount of conflicts were the older, more experienced personnel – this finding emphasizes the opportunity and value of encouraging mentoring as a professional responsibility of the senior NCO corps to the younger. This study continues to describe many actions to minimize the problems by focusing on preparing the individual and his or her family to maximize individual readiness by fostering information exchange between the deployed serviceman and the spouse, educating spouses to take over money issues, augmenting child care services, and providing employment assistance. Most importantly, it emphasized the need to communicate the squadron support network to the spouses and that the commander and first sergeant are available to help.³⁵

Therefore commanders must recognize that readiness is not simply a training issue as SORTS would suggest. It is therefore necessary to look beyond the SORTS story to assess a unit's readiness situation and consider other factors. As the Washington Group research indicated, the most significant causal factor for AWOL actions during Desert Storm were family problems.³⁶ This is a deployed mission capability issue that requires definite top-down attention to maximize opportunities and minimize risks.

Readiness Evaluation Tools

Status of Resources and Training System (SORTS) is a DOD-wide readiness tracking and evaluation system designed to communicate unit readiness status data to the National Command Authorities and the Chairman of the Joint Chiefs of Staff during crisis situations and peacetime planning to assist Course of Action (COA) decision-making.³⁷ The Air Staff watches readiness concerns closely to mitigate periods of vulnerability with respect to our ability to perform certain missions.

Starting from the top, squadron commanders collect data on manning strengths broken down by specialty codes and levels of training in each code as well as equipment status. This is the primary means to collect data on who is available and ready to execute their wartime tasking. The final assessment is a “C level” rating from C1 specifying fully mission capable to execute the wartime mission to C5 as fully incapable to execute any mission.³⁸ This final assessment is a subjective decision by the squadron commander based on insight beyond the objective numbers. Unfortunately, SORTS has had considerable criticism as to its accuracy, ambiguous and unenforced reporting standards, and usefulness.³⁹

Some perceive the commander assessment as a reflection on their leadership and therefore may tend toward a higher readiness rating than warranted. The US Special Operations Command manager for the JOPES estimated in 1996 that up to half the SORTS data that supports the JOPES was outdated and inaccurate.⁴⁰ The report concludes that SORTS “is largely distrusted and ignored at the national and joint user levels.”⁴¹

For the purposes of this research, SORTS is the common readiness status indicator used by all units and discussion basis for addressing readiness issues.

Unfortunately, it fails to capture more important aspects of readiness such as field experience, family situation, skill proficiency, physical fitness, and attitudes of the troops which impacts their ability to deploy, survive, and operate in contingency environments at least as critically as their training. In spite of these limitations, commanders must fully understand the message their SORTS report communicates. As a commander surveys his or her squadron readiness with respect to ability to deploy certain Unit Type Code (UTC) packages, SORTS would not be effective in providing real-time information to base mission capability decisions at the time of a tasking. For this reason, commanders must build other readiness assessment feedback systems to adequately evaluate capability to deploy and sustain UTC taskings. Understanding the facets and implications of the readiness enabling factors in appendix D help posture commanders to better respond to large-scale deployment scenarios.

Mission Essential Task List (METL): the METL document at the squadron level is a list of the primary wartime tasks that support the contingency mission defined in the squadron's DOC statement. Mission Essential Tasks (METs) listed in the METL are the mission-critical tasks taken from the Air Force Mission Essential Tasks (AFMET) which in turn is a portion of the overall DoD system of Universal Joint Task List (UJTL). The UJTL is a comprehensive list of tasks to support Joint Force Commanders, the ultimate customer of the services. This system of nested tasks is designed to guide units to focus training, exercises, manning strength, budget decisions, and organization to work toward achieving readiness to fulfill their wartime roles. Figure 4 captures the nesting of tasks from tactical up to strategic national levels.

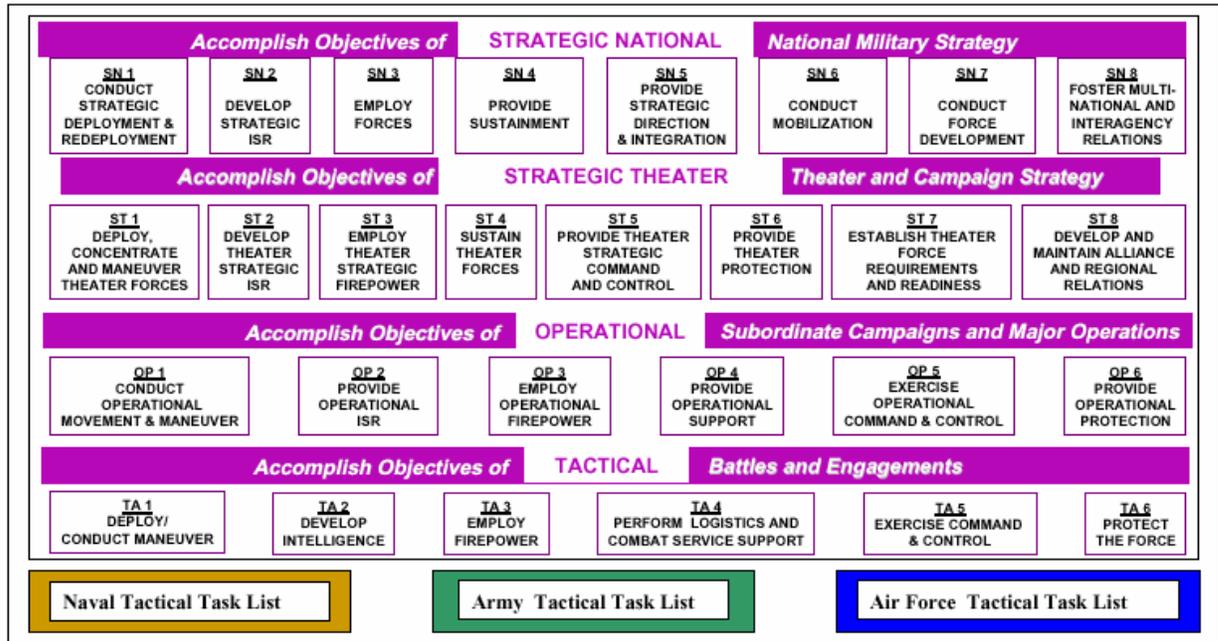


Figure 4. Mission Essential Task Hierarchy⁴²

The METL provides a conceptual framework for squadron commanders to not only direct his or her unit, but also monitor the status or degree of readiness in these various mission areas. Units record METL status in a stoplight chart (green, yellow, or red) with respect to each taskable UTC. This provides MAJCOMs the ability to monitor their aggregate tasking capabilities with visibility down to each deployable unit. This will be discussed more in the following IGX discussion. Since units create their own METL elements, each squadron differs on what tasks they support. For this reason, it is not possible to evaluate the feedback shortfalls between the readiness elements and existing METLs to identify those areas of concern for squadron commanders.

METLs are a relatively new concept to the Air Force in relation to the Army who derives almost every action in conjunction with a METL. As the Air Force IGs move further away from SORTS and incorporate more dependence on METLs and the

capability aspect of readiness, units will need to ensure all their troops understand and incorporate METLs into day-to-day business. In its current form, METLs do not provide timely feedback to squadron commanders in readiness assessment. METLs are refined annually and used as reference points during budget, new program, and manning reviews as well as readiness inspection assessments. For this reason, METLs are important but not a viable system to maintain a track of personnel readiness.

Inspector General Exercise (IGX)/Expeditionary Operational Readiness Inspection (EORI)

The AMC IG traditionally performed ORIs by tasking a wing to execute large-scale deployments to evaluate their ability to deploy and forward deploy as a demonstration of readiness and the ability to survive and operate in austere conditions. The current approach to inspecting readiness incorporates the performance on “real-world” deployments and the evaluation of expeditionary concepts which typically combine portions of UTC into “rainbow” units. This approach intends to reduce time away from home and evaluation operations as we would perform in actual contingencies.

The data collected from the evaluation of units is stored in a database called RUBICS (readiness UTC-based indicators for commanders) Cube which combines a semi annual commander’s assessments and the IGX/EORI results based on a units ability to perform their METLs per UTC. The combined assessment develops a multi-dimensional matrix of results forming a 3 dimensional cube or 4 dimensional series of cubes which highlight problem areas from a top-level perspective with the ability to quickly drill down and view the details of problems. As with the METL discussion, this approach provides useful information back to commanders to assess a more continuous

readiness assessment as opposed to a readiness surge every IG ORI cycle.⁴³

Unfortunately, since IG inspections occur infrequently the IGX/EORI process also fails to provide near-real time readiness status information

In spite of the promise and capabilities of these feedback mechanisms, if they are designed either too theoretically or narrowly focused to omit the more intangible aspects of individual readiness, they will also fail as SORTS has failed to capture certain critical aspects of true mission-readiness. This concept emphasizes the need to ensure that the training and preparation experiences of the troops are captured and reflected in the METs.

General Ryan as Chief of Staff emphasizes METLs with the following statement:

Air Force organizations are authorized and encouraged to expand on the lower-level tasks in order to express their mission-specific requirements. This final detailing provides the necessary flexibility for major air commands (MAJCOMs), numbered air forces (NAFs), and units to develop accurate and organization-specific Mission Essential Task Lists (METLs) which will identify the organization-specific essential tasks that must be performed to designated standards under specified conditions. Through this task assurance process a commander will have the tools and indications to provide a continuous picture of the overall mission performance health of the organization. **Careful application of the AFTL and METL approach will insure our wings stay mission-healthy, our headquarters stay focused on the critical and important tasks, and we remain the most respected Air Force in the world.**⁴⁴

Joint Readiness Assessment, Planning Integrated Decision Support System (JRAPIDS)

JRAPIDS was a research study done in 1996 for the Chief of Staff of the Air Force to explore concepts and control capabilities necessary to support future operations as defined in Joint Vision 2025. The focus of this study described deficiencies with a SORTS-based readiness assessment system on its snapshot limitations. This assessment relies on subjective judgment with limited ability to extrapolate useful information on capabilities at the unit, joint force, and national level.⁴⁵ These limitations are a result of

the process that SORTS captures a monthly snapshot based on a subjective interpretation of personnel, supplies, and equipment which fails to consider how these variables change. Therefore to provide decision support for the future, the DOD leaders require a dynamic system that automatically updates as personnel and equipment status aspects change.

The JRAPIDS proposal focuses on the *readiness output capability of the total force* as opposed to the SORTS approach of tabulating the numbers and conditions of the available resources. This approach requires the focus to emphasize the force efficiency, effectiveness, and flexibility as primary drivers of force management. This perspective identifies some good time relevant considerations such as:

Readiness for when? How long to [maintain a] “ready” [state]?
Readiness for what? “Ready” to perform what tasks?
Readiness for where? “Ready” for what theater or combat environment?⁴⁶

This concept of military readiness co-exists with another concept of sustainability. A team that has adequate readiness, capability, doctrine, and training proficiency to mobilize, deploy, set-up operations, and execute for five days has a capability limitation if the needed mission duration is 90 days. Therefore, the critical measure for assessing mission readiness must consider and report on the sustainability aspect as well.⁴⁷

I discuss JRAPIDS in my research because it explores the need to understand readiness in terms broader than SORTS and requires commanders to emphasize preparing forces and equipment in terms of the outcome capability to most efficiently make priority and funding decisions according to the importance of these outcomes. JRAPIDS would fulfill the decision support shortfalls created by SORTS and provide a better understanding of our force capabilities which is a much more pertinent factor of interest than the micro-analysis of manning, training, and equipment.

Conclusion

The resources explored in this chapter discuss aspects of readiness in terms of contingency lessons-learned and readiness feedback systems. This coverage of Desert Storm experiences and SORTS shortfalls round out the previous position that the intangible aspect of mobility readiness has valid implications to the Nation yet our tracking systems fail to feedback corrective actions to prevent uniformed members to deploy with inadequate preparation. The following chapters explore readiness from a less traditional view by capturing what the experts say enables readiness. These factors then lead into discussions the final chapter on how to implement these concepts in a practical way.

III. Methodology and Data Collection

Introduction

The challenge of this research effort is to capture mobility readiness expertise, and organize these findings into thematic categories as a guide for new commanders. The most challenging of these efforts was to capture the expertise. One technique to accomplish this without the benefit of face-to-face contact with the experts is known as the Delphi technique. This chapter discusses how the Delphi research process was used to capture mobility readiness.

Technique

Delphi iteratively solicits information from a panel of experts and evaluates consensus in the results. Delphi was used for this research because air mobility and deployability experts are dispersed across the Air Force and around the globe. Delphi solicitation using email and telephone interviews worked exceptionally well to capture opinion from this diverse group.

The Delphi method begins in a brainstorming phase, providing an unrestrained environment for experts to contribute their input without constraint or knowledge of the other experts to produce an initial set of data. Email was an excellent data collection and organization tool since the originator performed the data recording function. These notes were easily copied into a relational database for data organization and grouping. I captured telephone and personal interviews on a notepad then transcribed them into the database.

After the brainstorming phase, this data is then organized into a set of statements found in appendix E, then consolidated into like-concepts. I sorted these concepts by the number of supporting positions resulting in a prioritized list of readiness enabling factors. This aggregated list culminated phase I and became the starting point of phase II as the data formed the basis of the second questionnaire found in appendix C. I sent this second questionnaire to all individuals who provided inputs for the first phase and requested their feedback. This second phase begins the rounds of consensus. In a traditional Delphi the experts continue to provide new input and work out conflict, the list is updated and sent back out until the product stabilizes.

To solve this problem the Delphi Technique involved a team of experts who were kept in the dark as to who the other team members were. The team never met and acted without the influence or interference of other team members. Each individual's forecast was taken and correlated and a consensus was then determined. Any individual whose forecast fell outside the consensus was then asked to either defend his forecast with statistical evidence or rethink his conclusions. This process would be repeated several times until a reasonable hypothesis was concluded.⁴⁸

Risks to this approach when the experts face each other include group-think and compromise, particularly when certain members outrank others in position, grade, and breadth of experience. Other risks include non-converging data into groups, non-consensing opinions, and lack of interest to respond to phase II. The technique of using email and isolated interviews itself minimizes the risk of group-think, as a result of anonymously. Not achieving consensus was a concern, yet in the actual execution, this was not a problem. In the second phase, none of the feedback conflicted on a core issue, therefore a second iteration of consensus was not necessary, the objective was achieved.

Data Pool

The research pooled data from individuals with various backgrounds and levels of seniority. I chose to aggregate data from all individuals who have experience in air mobility operations or seniority. I defined “experience” as an officer within the field-grade ranks or a Non-Commissioned Officer (NCO) within the Senior NCO (SNCO) ranks. This ensured participants drew from experience of at least 12 years of service. Criteria to claim “subject matter expertise” required the individual had first-hand experience receiving a tasking, deploying, and operating in a major contingency operation. The participants with the most credibility were those with the most seniority, having commander experience, and the most comprehensive history leading and directing mobility operations. During the brainstorming process in phase I of data collection, the most credible members of the data pool received the most scrutiny and questioning detail during interviews and email exchanges. A more scientific approach to data-collection would be to implement the same question to all members and segregate data by either grade or experience level. Since my objective was to aggregate all perspectives and group them according to frequency of suggestion then send back out as a prioritized list for validation, the rigidity of data source validation was not a critical issue. 41 individuals provided input during phase I with the rank distribution shown in Figure 5. Since squadron commanders are predominantly Majors and Lieutenant Colonels, the distribution intentionally centers on these grades. Of these 41 respondents, 36 participated with inputs in phase II.

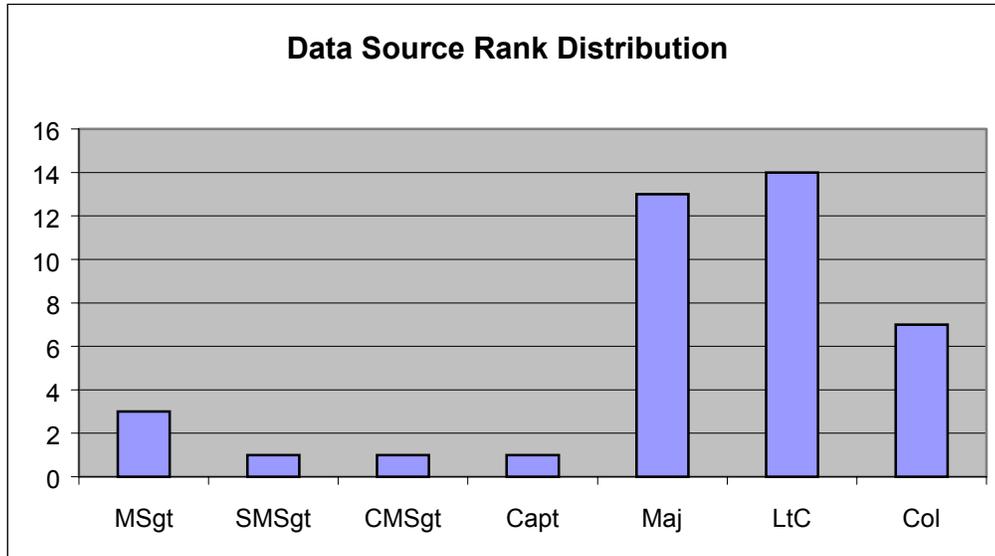


Figure 5. Phase I Data Source Rank Distribution

Data Results

The research phases and results are captured in appendices B, C, D, and E. The following discussion will explain how the Delphi method achieved these results.

Appendix B begins the process with the initial question. This question was an evolution of ideas derived by mobility experts in Air Mobility Command⁴⁹, 21st Air Force⁵⁰, and analysts from the Air Staff⁵¹. These discussions helped focus the subject on what would be of most value to improving mobility readiness at the squadron level. I used this question to generate the phase I feedback from 41 individuals over the period of two months. The brainstorming data continued to come in after initiating phase II. These data were ignored unless they provided new insight.

Appendix E lists out all the data received from the phase I questionnaire grouped by like responses. This became the basis for concept grouping which culminated in the Appendix C document.

Appendix C initiated the second phase of data solicitation with a proposed set of readiness enabling factors and supporting details. The recipients were asked, “How would you change the results below in terms of content or priority?” Of the 41 second round documents were sent, 36 returned. This became the first and only iteration of consensus. Although the Delphi technique recommends three to four iterations, I determined that no opinions stood opposed to each other and therefore there was no consensus violation to resolve.

Appendix D became the research product which incorporated the feedback from phase II. The majority of changes were the addition to supporting details which expanded the original page and a half to two and a half pages. One primary deletion was the elimination of item 6d. which respondents consistently objected. The final change was to shorten the enabling factors into more concise wording.

Conclusion

This experience was very rewarding and surprising with how quickly the experts concurred on a concept such as personal mobility readiness that lacks standardization. After having performed this process, I would recommend as a lesson learned that the researcher pay considerable attention to tracking when each individual questionnaire is sent out and the dates of response. I had difficulty separating inputs from round one to round two feedback. The consistent positive feedback and strong opinions contributed to the research momentum. I was encouraged that this is an important topic and is worth consideration for driving toward standard operating procedures in the readiness guidance our MAJCOMs provide to new commanders.

The following chapter takes these results and explores how they may be used and implemented as a new commander transitions from the change-of-command to deploying troops.

IV. Implementation: A Commander's Role in Readiness

Do essential things first. There is not enough time for the commander to do everything. Each commander will have to determine wisely what is essential, and assign responsibilities for accomplishment. He should spend the remaining time on near essentials. This is especially true of training. Nonessentials should not take up time required for essentials.

General Bruce C. Clarke⁵²

Introduction

The concepts discussed throughout this paper are useless unless implemented. There exists a short period of opportunity when an officer takes command of a deployable squadron to set the tone and communicate priorities. During the first few months of command, troops will observe and interpret the priorities, degree of resolve, and commitment of a commander and based on these observations, respond accordingly. If a commander enters this position of responsibility with a series of vectors pointing toward building up to and achieving readiness, he will better serve the war-fighting CINCs to provide the forces and capabilities required in times of contingency. The key is his or her success lies in the actions taken within the first few months. This chapter will discuss readiness in more practical terms to provide a perspective from which to start considering how this research may be used.

In the previous literature review, readiness was defined as a result of training and equipping for rapid deployment and sustained operations. Based on the Delphi inputs received and the perspectives gained in the literature review, I propose readiness in the following terms:

Readiness Defined

Readiness to deploy and sustain deployed operations is the mental and physical ability to effectively, reliably, and safely respond to a deployment order to carry out the contingency commander's intent. This capability based definition incorporates further details such as accomplishing the deployment within the unit's DOC statement, in the prescribed timeframe, with the appropriate team, equipment, and supplies, to carry out the mission for the necessary duration with an ability to flexibly respond to changing scenarios and requirements. This type of readiness is not a product of attending annual refresher training or "filling the square" in achieving a 5 or 7 skill level. This type of readiness results from experience, teamwork, attitude, and persistent effort to overcome weaknesses. A commander's role in achieving this readiness product involves and understanding of the deployed environment and what it takes to survive and operate.

This research concluded that of all the readiness enabling factors, the first two factors, *establishing a mobility mindset* and *exercising with intensity*, experts recommended over two times more often than the third and subsequent factors. Based on this observation, commanders ought to place proportional emphasis on these two. The following five factors could be considered best practices and operational suggestions on how to improve the efficiency and effectiveness of the deployment process.

Table 1. 7 Enabling Factors for Personnel Readiness

1. Establish A Contingency/Mobility Mindset	Key Commander Emphasis
2. Exercise With Intensity	
3. Standardize Mobility Processes	Best Practices
4. Hold Individuals Accountable	

5. Train Core Tasks And Mobility Skills	Best Practices
6. Create A Sense Of Status For “Mobile Ready”	
7. Evaluate Using Your Most Experienced Troops	

It is this collection of 7 factors and their supporting details that culminate this research but before applying them to your squadron blindly, consider the issue that no two squadrons are identical. To effectively lead, it is necessary to know the unit. There is no better way to gain this insight than to personally deploy. This first hand perspective will quickly shorten the learning curve and help a commander relate to the needs of future teams.

Implementation Suggestions

After taking command and the ceremonial dust settles, commanders face a steep learning curve as they drink from an information fire hose. This part of the process is unavoidable, but to prevent reaching a plateau of mission status-quo, the research supports taking the following three steps to develop and maintain a healthy personnel readiness understanding and perspective.

- 1) Deploy on a UTC tasking to experience a first-hand account of contingency operations
- 2) Review squadron DOC statement, UTC tasking requirements, historical trip reports, and past and current SORTS reports to develop a conceptual mission perspective
- 3) Review what the squadron does to prepare individuals to take on these challenges and how the commander tracks these preparation processes.

Chapter II discussed existing tracking and evaluation procedures and emphasized the fact that the SORTS and METL fail to provide reasonable feedback on taking a

readiness pulse from your troops. None of the systems track outcomes except IG assessments but a commander requires current readiness status frequently to adequately command. Therefore commanders either remain in the dark and let readiness run on autopilot in a reactive mode or develop an understanding of readiness status “blind spots” and develop internal processes to overcome this shortfall and proactively respond as the environment changes. Since the challenge of readiness involves the feedback process and current methods exhibit limitations, the following discussion explores a commander’s role in squadron exercises as a form of periodic readiness feedback.

Exercise Options: Since readiness proficiency is a perishable capability it requires periodic refresher training. One relatively simple way to comprehensively track field experience currency while conducting refresher training is to set deployment currency shelf lives and execute realistic in-house exercises as needed. The research indicated that how exercises are conducted is just as important as having them at all. Item 2 of appendix D suggests 10 considerations for exercising with intensity with an emphasis on realism and building experiential-based capabilities as opposed to troops achieving only knowledge of capability. The following scenario suggests how to implement an in-house exercise program.

- 1) Select a standard UTC team to deploy a few miles from base to set up a portion of a bare base operation and execute a specific aspect of the mission.
- 2) Establish new SrA and SSgts to lead younger airmen to accomplish certain objectives such as setting up communication systems, materiel tracking systems, performing operator maintenance and troubleshooting on vehicles, AGE, and MHE.

3) Challenge the team to work through difficult scenarios experienced by previous teams on past IGX and contingencies.

4) Mentor and discuss operational risk management (ORM) concepts and how past accidents could have been avoided.

Throughout the contingency expose the participants into role-playing with rules of engagement, law of armed conflict, communications security, entry control point procedures, and anti-terrorism measures. There are many other field-survival skills to challenge teams, but the point to this discussion is assessing no-notice capabilities. After performing this type of training assessment a few times, commanders can develop a fairly accurate sense of how prepared the squadron as a whole remains. All these training actions ought to carry with them realism, a sense of urgency, and a challenge to push individuals out beyond their comfort barriers to build a new sense of confidence and capability. It is this confidence that provides force multipliers when truly needed.

The officers, senior NCOs, and the commander play a critical role in the success of using an exercise as a readiness building and assessing opportunity. This role comes down to actively participating and monitoring exercise progress. The research heavily endorsed the importance of commander involvement and refraining from the temptation to simulate events. As this research indicates by the #1 readiness-enabling factor, mobility attitude is the most critical aspect. The commander sets the tone that leads to attitude. If the troops recognize that the commander cares about readiness and expect all members reflect his or her priority, they will most likely respond accordingly.

The first chapter of this research initiated the purpose for readiness and narrowed the discussion to the individual as opposed to resources. Later chapters proposed the

concept that traditional methods to view readiness are lacking by nature of assessment methods using SORTS as opposed to tracking the proficiency and scenario capabilities. The research therefore attempted to ascertain what truly enables personnel readiness and how should a new commander best focus his or her energies to maintain an appropriate mobility posture. This research produced three pages of readiness enabling concepts in appendix D that answer the question of what enables readiness. This set of enablers are finally considered in relation to existing readiness status feedback mechanisms and culminate in a discussion of implementation strategies. The final pages pull together why this subject is so necessary and ends with suggestions for further study.

Conclusions

This research began with the intent to counter an important leadership problem seen in many operational squadrons from 14 years of personal observation. As a result of human nature and the shortfalls inherent in the current readiness reporting systems, commanders often experience increased emphasis placed upon home-station, day-to-day activity than ensuring all members of a squadron are prepared to deploy and operate on short notice in all conditions. Since readiness is a capability and not a tangible asset, it is difficult to proactively track and manage. Our squadron commanders respond to challenges and projects tasked to them by group and wing commanders to propagate peacetime base-level activity whose fundamental mission is to organize, train, and equip forces. If taken to an extreme, squadron members expend limited resources on home-station priorities which come at the cost to readiness.

As airmen join the service and go through basic training, they experience setting up a bare-base operating location and austere living conditions to provide an

understanding of what they could be expected to perform. As they leave and are handed the Airman's Manual, they begin their first assignment with only an artificial understanding of how to survive and operate in true contingency conditions. Commanders, officers, and senior NCOs share the responsibility to replace inexperience with ability-substantiated confidence through robust processes that monitor true readiness indicators and consistently challenge outdated or ineffective skills and equipment with realistic exercise and training programs. In doing so, we will continue to "make it happen" whatever aspect of "it" in the National Military Strategy expects us to do by request of the National Command Authority. In doing so, we will continue to evolve as our constantly changing world continues to age and make obsolete our skills of yesterday. It is this effort of leaning forward that truly and effectively enables readiness.

This top-level look at the seven readiness enabling factors provides a framework from which to compare how well an existing squadron prepares troops for contingency operations. It is the authors intent that this type of analysis and emphasis continue as standard operating procedures as MAJCOMs prepare new commanders for the challenges they will face.

Looking historically we as a nation have stood up our military forces and capabilities to accomplish tremendous victories and provided relief to victims of natural disasters. It is our people from which our strength and capabilities reside. The difference between a ready force and an ill-prepared force is their confidence, attitude, decisiveness, and endurance. The costs run deeper than combat survival, but consider family stability and the retention of experienced troops to propagate the capabilities only achieved after years of training and exercising. Commanders make a difference by the priorities they

communicate. This research is a challenge to all who command to take a close look at readiness preparation efforts. Are your troops prepared?

Recommendations for Future Research

The research in this effort focused on a scoped aspect of the common desired outcome: effective, sustainable, and survivable contingency operational capability. This scope predominantly related to preparatory actions taken before receiving a deployment order. A more comprehensive study would incorporate analyzing readiness from a systems perspective from rumor through redeployment back home from an operational risk management (ORM) approach. Other ideas include the following:

1. Evaluate opportunities for a more accurate and timely readiness evaluation and tracking system to build upon the JRAPIDS research
2. Take the concepts explored in this research and lay out an ideal first six months of readiness priorities, challenges, and milestones of a new commander as a best practice benchmark
3. Perform a comprehensive analysis of logistics problems that have occurred within the past ten years on contingency operations and lay out a prioritized list of training action changes to minimize the risk of repeating these problems.
4. Perform an Instructional System Design (ISD) analysis of ancillary training programs in relation to the desired outcomes using the desired wartime skills to drive training needs.

Appendix A: The Delphi Technique by Alan Cline

1. **Select a panel of experts.**

The panelists should have an intimate knowledge of the projects, or be familiar with experiential criteria that would allow them to prioritize the projects effectively. In this case, the department managers or project leaders, even though stakeholders, are appropriate.
2. **Identify a strawman criteria list from the panel.**

In a brainstorming session, build a list of criteria that all think appropriate to the projects at hand. Input from non-panelists are welcome. At this point, there is no "correct" criteria. However, technical merit and cost are two primary criteria; secondary criteria may be project-specific.
3. **The panel ranks the criteria.**

For each criterion, the panel ranks it as 1 (very important), 2 (somewhat important), or 3 (not important). Each panelist ranks the list individually, and anonymously if the environment is charged politically or emotionally.
4. **Calculate the mean and deviation.**

For each item in the list, find the mean value and remove all items with a mean greater than or equal to 2.0. Place the criteria in rank order and show the (anonymous) results to the panel. Discuss reasons for items with high standard deviations. The panel may insert removed items back into the list after discussion.
5. **Rerank the criteria.**

Repeat the ranking process among the panelists until the results stabilize. The ranking results do not have to have complete agreement, but a consensus such that the all can live with the outcome. Two passes are often enough, but four are frequently performed for maximum benefit. In one variation, general input is allowed after the second ranking in hopes that more information from outsiders will introduce new ideas or new criteria, or improve the list.
6. **Identify project constraints and preferences.**

Projects as a whole are often constrained by total corporate budget, or mandatory requirements like regulatory impositions. These "hard constraints" are used to set boundaries on the project ranking. More flexible, "soft constraints" are introduced as preferences. Typically, hard constraints apply to all projects; preferences usually apply to only some projects. Each panelist is given a supply of preference points, about 70% of the total number of projects. (For example, give each panelist 21 preference points if 30 projects have been defined.)
7. **Rank projects by constraint and preference.**
 - a. Each panelist ranks the projects first by the hard constraints. Which project is most important to that panelist? Some projects may be ignored. For example, if the total corporate budget is 100 million, the panelist allocates each project a budget, up to the maximum requested for that particular project, and such that the total of all budgets does not exceed the \$100 million. Some projects may not be allocated any funding.

- b. Next each panelist spreads their preference points among the project list as desired. Some projects may get 10 points, others may get none, but the total may not exceed the predefined maximum (21 in our example above).
8. **Analyze the results and feedback to panel.**

Find the median ranking for each project and distribute the projects into quartiles of 25, 50, and 75-percentiles (50-percentile being the median). Produce a table of ranked projects, with preference points, and show to the panel. Projects between the 25th and 75th quartile may be considered to have consensus (depending on the degree of agreement desired); projects in the outer-quartiles should be discussed. Once the reason for the large difference in ranking is announced, repeat the ranking process.
9. **Rerank the projects until it stabilizes.**

After discussing why some people (minority opinion) ranked their projects as they did, repeat the rankings. Eventually the results will stabilize: projects will come to a consensus, or some will remain in the outlier range. Not everyone may be persuaded to rank the same way, but discussion is unnecessary when the opinions stay fixed. Present the ranking table to the decision makers, with the various preferences as options, for their final decision.⁵³

Appendix B: Delphi Questionnaire I - Brainstorming Phase

MOBILITY READINESS: A SQUADRON COMMANDERS ROLE Questionnaire I – Identify Readiness Enablers

Purpose: to capture the factors that enable our ability in AMC to effectively, efficiently, and rapidly deploy by air and establish sustained mobility operations in a contingency environment.

Goal: to organize consensus perspectives on the most important 'mobility readiness enablers' in the form of a guide to new commanders. This effort will attempt to provide a perspective that captures the consolidated "wisdom of experience" to justify why it is important for a Squadron Commander to perform many actions such as:

- Exercise a unit deployment to the local drop zone with a middle of the night recall in austere weather with realistic challenges
- Ensure all squadron members know how to operate a kerosene heater, put up a GP medium tent and the countless details that enable long-term success in the field
- Perform pallet buildup and vehicle prep for air shipment
- Be aware of long-term personal health indicators: frostbite, dehydration, fatigue, lifting technique, nutrition, hygiene, sleep, mental health

The concern for why this is needed is a personal observation that we in AMC been simplifying and minimizing mobility exercise activity leaving us vulnerable at a time when low retention affects high turnover leading to low overall experience. It is this low experience that is being partially replaced by "book knowledge" in the Airman's Manual⁵⁴ and tabletop simulation. This combination of factors concerns me as a **readiness vulnerability** due to a lack of actual hands-on deployment and sustainment experience. This personnel readiness aspect lacks the same emphasis placed on equipment reported in SORTS which takes center stage emphasis for senior leadership when addressing readiness issues.

In an attempt to capture this collective wisdom, I solicit your opinion and who you may know who may have credible perspectives on this subject.

1. What preparation factors enable individuals within a unit to effectively, efficiently, and rapidly deploy by air and establish sustained cargo and passenger mobility operations in a contingency environment? (all thoughts and perspectives are welcome)

2. Who do you know who may have first-hand insight or expertise on this subject?

Appendix C: Questionnaire II:
Request for Feedback on Consolidated Data From Phase I

Mobility Personnel Readiness – 7 Enabling Factors
A Comprehensive Guide to Commanders

The following seven readiness enablers reflect the inputs and feedback from 47 Air Force leaders with personal experience deploying and directing mobility operations. The factors are recorded in order of importance with the most emphasis on first two.

Purpose: provide new commanders an understanding of their role in enabling the readiness of their deployable personnel to perform their wartime missions.

Question: How would you change the results below in terms of content or priority?

1. **Establish a mobility MINDSET within all deployable personnel (22)**
 - a. Operational mobility readiness is not an event but a continuous process
 - b. Ensure troops understand **their** role in mobility operations
 - c. Deploy all personnel at least once per year to maintain perspective
 - d. Ensure all personal inventory, maintain, break-in, and inspect their personal gear and specialty equipment for short notice deployment
 - e. Ensure all mobility members understand departure expectations: government credit cards, shots, threat briefing, chemical gear etc.
 - f. Maintain physical fitness as a deployable asset enabler
 - g. Understand UTCs, OPLANs, DOC stmt, TPFDDs and all implied tasks
 - h. Track historical SORTS deficiencies
 - i. Define personal readiness as a center of gravity
 - j. Establish mobility as unit priority: strong CC advocacy=force multiplier

2. **Exercise with INTENSITY: mobility processing, field survival & operations (21)**
 - a. Maximize participation in joint, combined exercises and courses
 - b. Perform quarterly unit recalls, task actual UTCs
 - c. Perform monthly readiness training panels; evaluate proficiency levels
 - d. Exercise large packages annually with ARC takeovers (Patriot Partner)
 - e. Benchmark AMOGs, TALCEs for readiness training, proficiency tracking
 - f. Attend Phoenix Readiness (AMWC) & JRTC exercise opportunities
 - g. Resist the "we do it in our job every day" mentality to justify reducing training scope - minimize simulation and table-top drills
 - h. Exercise as you would experience actual contingency

3. **STANDARDIZE mobility processes (9)**
 - a. Establish a deployment order process: purpose, climate (hot/cold, wet/dry), duration, size, threat, and intensity; determines what to bring
 - b. Minimizing confusion expedites squadron preparation tasks; maximizes personal time with family before departing
 - c. Modularize equipment, supplies into standard discrete field containers
 - d. Ensure pre-deployment planning attendees deploy to emphasize buy-in

4. **Hold individuals ACCOUNTABLE for personal readiness (7)**
 - a. Single equipment manager for mobility equipment
 - b. Troop commanders for their chalk
 - c. Team chiefs for overall mission success and troop safety
 - d. Maintain personal mobility folder for each deployable member: will, power of attorney, shot record, dog tags, form 93, insurance forms, ancillary training, form 623, child care plan, government credit card etc.

5. **TRAIN core tasks and mobility skills (5)**
 - a. Ensure proficiency of contingency technical skills
 - b. Train proportionally to most likely contingency scenario
 - c. Establish proportional readiness levels relative to deployment potential
 - d. Train to multiple climates

6. **Establish STATUS for individuals who achieve **MOBILE READINESS** (4)**
 - a. Define “Mobile Ready” status and develop pride in capability
 - b. Provide distinguishing mark; re. issue unit-engraved Gerber pliers
 - c. Define “Team Chief Qualified” emphasize as position of trust and respect
 - d. Send good people and equipment to contingencies while keeping non-performers at home to prove themselves and step up to the standard

7. **EVALUATE using your most experienced troops to monitor posture (4)**
 - a. Take pride in your contingency capabilities as a squadron motivator
 - b. Focus on shortfalls as an opportunity to raise the bar of readiness
 - c. Standardize team chief training; perform aircrew style checkrides

Appendix D: Research Product
Post Questionnaire II: Refinement of 7 Enabling Factors from Phase II

Mobility Personnel Readiness – 7 Enabling Factors
A Comprehensive Guide for Commanders

The following seven readiness enablers reflect the inputs and feedback from 50 Air Force leaders with personal experience deploying and directing mobility operations. The factors are recorded in order of importance with the most emphasis on first two.

Purpose: provide new commanders an understanding of their role in enabling the readiness of their personnel to perform their wartime mission.

1. Establish a contingency/mobility MINDSET

- a. Mobility readiness is not an event but an attitude requiring persistent effort
- b. Understand UTCs, OPLANs, DOC stmt, TPFDDs, tasking process
- c. Ensure troops understand their role in mobility operations and why their actions are critical to overall mission success
- d. Deploy all personnel at least once per year to maintain perspective
- e. Ensure all personnel inventory, maintain, break-in, and inspect their personal gear and specialty equipment for short notice deployment
- f. Ensure all mobility members understand departure expectations: government credit card, passport, shots, threat briefing, chemical gear, duration...
- g. Maintain physical fitness as a deployable asset enabler
- h. Recognize your METLs – this is the set of skills you contribute to the fight
- i. Track historical SORTS deficiencies and lessons learned– if mission areas are still valid, ensure the fixes are effective; ensure SORTS integrity
- j. Build an expectation for “situational awareness” every day
- k. Communicate the concept of personal readiness, the ability to deploy with little to no notice and operate effectively, as a unit center of gravity
- l. Establish mobility as unit priority: strong Sqn CC advocacy=force multiplier
- m. Advocate troops to access historical deployment information; learn from the past – develop a risk management perspective
- n. Budget for mobility equipment and readiness as a top priority

2. Exercise with INTENSITY

- a. Minimize simulation and table-top drills – these fail to properly prepare leaders and troops for actual contingency complications and challenges
- b. Maximize participation in joint or combined exercises and courses
- c. Perform quarterly unit recalls, task actual UTCs
- d. Exercise large packages annually with ARC takeovers (Patriot Partner)
- e. Benchmark AMOGs, TALCEs for readiness training, proficiency tracking
- f. Attend Phoenix Readiness (AMWC) & JRTC exercise opportunities

- g. Resist the "we do it in our job every day" excuse to not exercise
- h. Exercise operations as you would experience them in the actual contingency; use tents, generators, chemical gear, and INMARSAT vs hotel rooms
- i. Mentor leadership skills in the younger officers and SNCOs by giving them opportunities to fail or succeed; both situations teach with lasting results
- j. Focus on proficiency – not just familiarization

3. STANDARDIZE mobility processes

- a. Establish a deployment order process: purpose, climate (hot/cold, wet/dry), duration, size, threat, and intensity determines what to bring
- b. Ensure deployment teams receive CONOPS, commander intent, joint/combined command relationships/authority, etc. as opposed to just a fragmented AMT
- c. Standard operating procedures (SOP) minimize confusion, expedite squadron preparation tasks, & maximize family time before departing
- d. Modularize equipment, supplies into standard discrete field containers
- e. Ensure pre-deployment planning attendees deploy to emphasize buy-in
- f. Comply with AMC standards; minimize location-specific SOPs
- g. Establish workarounds as a last resort – not as a standard practice
- h. Success during fast moving, fluid situations depends on following highly practiced, proven processes
- i. Never experiment with the troops!

4. Hold individuals ACCOUNTABLE

- a. Establish equipment managers for mobility equipment readiness
- b. Ensure troop commanders understand their responsibilities for their chalk
- c. Specify role of team chiefs for overall mission success and troop safety
- d. Establish personal mobility folders for each member: will, power of attorney, shot record, dog tags, form 93, insurance forms, ancillary training, training (form 623), child care plan (must be validated), government credit card, passport etc.
- e. Motivate troops with non-deployable profiles to work toward resolving the issues to reach mission capable status, otherwise, question their intent
- f. Squadron Commander remains ultimately responsible
- g. Responsibility is never delegated – only authority can be delegated
- h. Ensure no “wall-flowers” in mobility; everyone has responsibility in a team toward common mission objectives

5. TRAIN core tasks and mobility skills

- a. Ensure proficiency of contingency technical skills; maximize wing ATSO
- b. Train proportionally to most likely, worst-case contingency scenarios
- c. Establish proportional readiness levels relative to deployment potential

- d. Incorporate “vigilance” training to build a persistent focus on situational awareness
- e. Train to multiple climates; consider the spectrum of terrains – do not omit urban challenges such as driving equipment and supplies through foreign roads with potential terrorist threat
- f. Ground combat skills are used in hostilities under unfair conditions; these are rest, hygiene, creature comforts, austere conditions; train accordingly

6. Create a sense of STATUS for individuals who achieve **MOBILE READINESS**

- a. Define what it is to be “Mobile Ready;” develop pride in that capability
- b. Peer competition is a powerful motivator; use it to your advantage
- c. Provide distinguishing mark; re. issue unit-engraved Gerber pliers
- d. Define “Team Chief Qualified” emphasize as position of trust and respect
- e. Send good equipment to contingencies; vehicles, communications, MHE, AGE, and equipment are much more difficult to fix in the field

7. EVALUATE using your most experienced troops

- a. Define deployment readiness measures-of-success
- b. Take pride in your contingency capabilities as a squadron motivator
- c. Focus on shortfalls as an opportunity to raise the bar of readiness
- d. Use “below standard” results to improve your operations!
- e. Standardize team chief training; perform aircrew style checkrides
- f. Proficiency requires periodic practice; perform no-notice team evaluations with a random selection of a small UTC to set up an ATOC, MOC, heater
- g. Evaluate personal field health factors not formally tracked such as proper knowledge of: lifting, frostbite, heat stress, mental health, nutrition, sleep
- h. Perform monthly training panel evaluations to take readiness “pulse”

Appendix E: Aggregate Research Data

Enabling Factors and Supporters

Achieve a sense of "status" for mobile ready (proficient) troops that promotes confidence

LtC
Maj

all 52,000 active duty AMC personnel—should consider themselves as mobility assets and therefore should prepare to a state of readiness

LTC ret

all AMC personnel who could deploy should deploy at least one time per year to maintain a personal understanding of what it takes

LTC ret

Benchmark Annual training/proficiency tracking from the AMOG/TALCE units

Maj
LtC
LtC
Maj

Capitalize on training conducted by other units; join in with the APS pallet buildup classes, the SF urban sniper training...

Maj

Compliance oriented performance evaluations which drive units to excellence

LTC ret

Dedicate individuals to monitor and evaluate personnel readiness and cargo readiness separately

Maj
Capt
Maj

Determine the mission-critical mobility core competencies - track proficiency levels on these

Maj

Develop automated progress indicators while mobility in progress: C2IPS times, EET members, senior mobility NCOs

Col

Each individual maintain a personal folder for mobility: passport, ancillary training, form 93, insurance forms, checking arrangements

Col

Emphasis on combat and austere ops (ability to survive and OPERATE) not 1 or the other; This is not fun training, but essential

Maj

Ensure all deployable members have all gear inventoried, fitted, broken in, trained, inspected

Col

Maj

Ensure continuous proficiency training is accomplished for all mobility personnel

LtC

Capt

Ensure each member on mobility understand what they need as an individual before departing: threat briefing, chem gear, web belt, weapon, gov credit card...

Col

Col

Ensure Team Chiefs/Troop Commanders assume responsibility for troops and mission

LtC

Ensure thorough technical training is accomplished

LtC

Establish personnel readiness (personal fitness, training currency, personal field hygiene, mobility requirements) as a center of gravity

Maj

LTC

Establish tasking evaluation process: how long (up to 30 days 1 team 7 days/week-longer requires augmentation), hot/cold, wet/dry

Col

Evaluate training performance - critical to train and assess, then cycle again until instictual

Maj

Incorporate mobility readiness proficiency for all troops who are on mobility status into existing airlift doctrine

LTC

Know UTCs, OPLANs, TPFDDs to understand what you are preparing for

Maj

Know your DOC statement thoroughly and all implied tasks that flow from it - as a minimum; MRC will streach capabilities and resources

Maj

LTC ret

Col

Maj

Maintain a separate folder for each UTC pallet, listing each item for standardization, stacking, and status

Maj

Capt

Maintain equipment to facilitate breaking down for mobility (eye on leaks, oiling of hinges needed for breaking down etc)

Col

Maintain mobility mindset; think lean packages to perform the specific mission; larger packages require more support; instill that mindset into them from day one!

Maj

LtC

Maximize sending troops through Phoenix Readiness and JRTC - AMC's mobility and deployed operations training program

Col

Maj

mindset of the folks in the field, sense of importance; Leaders need to fully understand why the mission is important

Maj

Minimize training simulation and table-top paper exercises; resist the "we do our job everyday" mantra; physically mobilizing trains by experience

Maj

Mobilizing as a team from one squadron works much better than aggregated deployed units from many sources

Col

Modularize UTC equipment requirements and standardize packaging in discrete containers

Capt

Col

Maj

Maj

Operational readiness and mobility is not an event. Readiness is an on-going process needing constant attention. Frequent assessments needed to identify and fix problems

SMSgt

Maj

Perform pre-deployment meeting with mobility members who will deploy - ensures buy-in

Col

Practice: The more a unit performs bag-drags [mobility processing] and cargo JI exercises, the better they were able to respond to mobilizing

LtC

Capt

Maj

LTC

Maj

Maj

Quarterly unit recalls, task a UTC with vehicles requiring LTI (annual is not enough), semi annually task a large UTC

LtC

Review past SORTS reports - identify areas of mobility deficiency it fails to capture

Maj

Run a monthly Training Readiness Panel: evaluate individuals training and level of proficiency

LTC ret

Send good people and equipment to the contingency. Keep the non-performers at home where you can deal with them.

Maj

Standardize team chief training and build aircrew style periodic "checkrides" to ensure proficiency

Maj

Strict adherence to a 12-hour muster requirement to include mobility processing

LTC

Train like you will fight; perform Combat Readiness Exercises where the unit deploys w/ ATSO, tent buildup, and deployed mobility ops

Maj

Col

Maj

train proportionally to your most likely scenario; tier I, II, III concept with proportional readiness levels for each

LTC ret

train to multiple climates; countless examples of accidents and delays caused by people unfamiliar with handling themselves in temperature extremes

Maj

Train with other units in mini-MOBEX deployments (CE-prime beef, SF, Supply, Maintenance, Trans, APS...)

LtC

Units that have strong Commander involvement were quick responders [for mobility]

Capt

Bibliography

-
- ¹ Department of the Air Force, Guidelines for Command, AU-2, Air University Press, May 1995, p3
- ² Department of the Air Force, Air Force Basic Doctrine, AFDD 1, <http://afpubs.hq.af.mil/pubfiles/af/dd/afdd1/afdd1.pdf> , September 1997, p7
- ³ Snyder, David M. Lt Col, USAF, Dieryck, Penny J. Maj, USAF, Long, Wesley W. Maj USAF, Philipkosky, Thomas G. Maj, USAF, Reis, Ronald, Lt Cmdr, USN, Joint Readiness Assessment and Planning Integrated Decision System (JRAPIDS): Combat Readiness and Joint Force Management for 2025, Apr 1996, Research Paper presented to Air Force 2025, <http://www.au.af.mil/au/2025/volume1/chap05/v1c5-1.htm>, p2
- ⁴ Department of the Air Force, Air Mobility Command. . .Providing America's Global Reach, Internet reference: <http://www.transcom.mil/missions/amc.html>, 27-Sep-99
- ⁵ Department of the Air Force, Promotion Fitness Examination, AFPAM 36-2241, Vol. I, U.S. Government Printing Office, 1 July 1999, p25
- ⁶ Air Force Officer Oath of Office, <http://sun.vmi.edu/hall/oath.htm>
- ⁷ Air Force Enlisted Oath, http://www.luke.af.mil/protocol/oath_e.doc
- ⁸ Department of the Air Force, Guidelines for Command, AU-2, Air University Press, May 1995, p2
- ⁹ Department of the Air Force, The Quality Approach, Air Force Quality Institute, Air Force Handbook 90-502, 1 Aug 96, p20-25
- ¹⁰ Department of the Air Force, Guidelines for Command, AU-2, Air University Press, May 1995, pIX
- ¹¹ Snyder, David M. Lt Col, USAF, Dieryck, Penny J. Maj, USAF, Long, Wesley W. Maj USAF, Philipkosky, Thomas G. Maj, USAF, Reis, Ronald, Lt Cmdr, USN, Joint Readiness Assessment and Planning Integrated Decision System (JRAPIDS): Combat Readiness and Joint Force Management for 2025, Apr 1996, Research Paper presented to Air Force 2025, <http://www.au.af.mil/au/2025/volume1/chap05/v1c5-1.htm>, p10
- ¹² Department of the Air Force, Tactical Air Operations, TAC Manual 2-1, 15 Apr 78, 10-2
- ¹³ Glasser, Lance A., Today's Technology Begets Tomorrow's Military Readiness, Internet address <http://www.au.af.mil>, ARPA Press Release, 1 Feb 95

¹⁴ Department of the Air Force, Air Force Basic Doctrine, AFDD 1, <http://afpubs.hq.af.mil/pubfiles/af/dd/afdd1/afdd1.pdf> , September 1997, p42

¹⁵ Holt, Danny Captain, USAF, Professor, Air Force Institute of Technology, diagram developed during personal interview, March 2001

¹⁶ Navy Court of Inquiry, Joint Congressional Committee Exhibit No. 146, pp 446-460, question 30, Internet reference: <http://www.ibiblio.org/pha/myths/radar/>, July 24 to Oct. 19, 1944

¹⁷ Norcross Lieutenant Colonel, USAF, TALCE Commander, Personal interview, Dec 2000

¹⁸ National Campaign for the Peace Dividend, Internet address <http://www.fas.org/pub/gen/mswg/ncpd> and further emphasized by the Bonn International Center for Conversion, <http://www.bicc.de/budget/budget.html>

¹⁹ Department of the Air Force, USAF Posture 2000, internet address: http://www.af.mil/lib/afissues/2000/posture/postur_2000.pdf, p7

²⁰ *ibid*, p8

²¹ C-130 Navigator and C-130 Pilot Personal Interviews, June 2001

²² SAF/XOOA, Readiness Division, Pentagon, Telephone interview, Sept 2000

²³ Individual and Family Readiness for Separation and Deployment: Results from the 1992 DoD Surveys of Officers and Enlisted Personnel and Military Spouses, Washington Consulting Group, DMDC Report No. 97-003, Apr 97

²⁴ Department of the Air Force, Evaluation Report on the Status of Resources and Training System, Office of the Inspector General Evaluation Report, Arlington VA, DTIC: ADA371536, 15 Mar 96, p7

²⁵ Snyder, David M. Lt Col, USAF, Dieryck, Penny J. Maj, USAF, Long, Wesley W. Maj USAF, Philipkosky, Thomas G. Maj, USAF, Reis, Ronald, Lt Cmdr, USN, Joint Readiness Assessment and Planning Integrated Decision System (JRAPIDS): Combat Readiness and Joint Force Management for 2025, Apr 1996, Research Paper presented to Air Force 2025, <http://www.au.af.mil/au/2025/volume1/chap05/v1c5-1.htm>, p2

²⁶ Mirriam-Webster, Collegiate Dictionary for the entry “readiness,” internet address <http://www.m-w.com/cgi-bin/dictionary>

-
- ²⁷ Stevenson, Mitchell H., Lieutenant Colonel, USA, Desert Shield/Storm Logistics, US Army War College, 15 Apr 1993, p4
- ²⁸ Hagel, Stephen J., Major, USAF, et al., Air Force Desert Shield/Desert Storm Logistics Lessons Learned, Air Force Logistics Management Center Final Report: LX912097, Gunter AL, March 1992, pp23-24, 41
- ²⁹ Fowler, Donald E. II, LtC, US Army, The 141st Signal Battalion Experience in Operations Desert Shield and Desert Storm: Combat was different From Training and Doctrine, US Army War College Study Project, 12 May 1993
- ³⁰ Peters, Whit, Secretary of the Air Force, Air Force Policy Letter Digest, Internet address: www.af.mil/lib/policy/letters/pl199-02.html, February 1999, p2
- ³¹ *ibid*, p3
- ³² Mobility Forum: The Journal of the Air Mobility Command's Magazine, Interview with General Charles T. Robertson, Jr., Jan/Feb99, Vol. 8 Issue 1, p7
- ³³ Scarborough, Rowan, "Readiness is Not Improving," Washington Times, August 28, 2000, www.ebird/dtic.mil/aug2000/e20000828readiness.htm , p3
- ³⁴ Widnall, Dr. Sheila E. Secretary of the Air Force, FY96 Joint Posture Hearing Statement presented to Congress, "Maintain Combat Readiness," www.af.mil/lib/afissues/1995/sec3.html, 1995, p4
- ³⁵ Individual and Family Readiness for Separation and Deployment: Results from the 1992 DoD Surveys of Officers and Enlisted Personnel and Military Spouses, Washington Consulting Group, Bethesda MD, Apr 1997, DTIC ADA324054, pp1-4
- ³⁶ *ibid*, p3
- ³⁷ Evaluation Report on the Status of Resources and Training System, DTIC: ADA371536, Office of the Inspector General Evaluation Report No. 96-086, Arlington VA, 15 Mar 96, p2
- ³⁸ *ibid*, p4
- ³⁹ *ibid*, p5
- ⁴⁰ *ibid*, p7
- ⁴¹ *ibid*, p17

-
- ⁴² Department of the Air Force, Air Force Task List, AFDD 1-1, 12 Aug 98, p12
- ⁴³ Expeditionary Operational Readiness Inspection (EORI) Message 310815Z AUG 99
- ⁴⁴ Department of the Air Force, Air Force Task List, AFDD 1-1, Cover Statement, 12 Aug 98
- ⁴⁵ *ibid*, p3
- ⁴⁶ Snyder, David M. Lt Col, USAF, Dieryck, Penny J. Maj, USAF, Long, Wesley W. Maj USAF, Philipkosky, Thomas G. Maj, USAF, Reis, Ronald, Lt Cmdr, USN, Joint Readiness Assessment and Planning Integrated Decision System (JRAPIDS): Combat Readiness and Joint Force Management for 2025, Apr 1996, Research Paper presented to Air Force 2025, <http://www.au.af.mil/au/2025/volume1/chap05/v1c5-1.htm>, p9
- ⁴⁷ *ibid*, p2
- ⁴⁸ Armstrong Martin A., The Delphi Technique, Princeton Economic Institute, 1989, Internet address: <http://www.pei-intl.com/Research/MARKETS/DELPHI.HTM>
- ⁴⁹ Discussions with AMC/DOZ, AMC/DON
- ⁵⁰ Discussions with 21AF/DOZ
- ⁵¹ Discussions with CHECKMATE and AF/ILT
- ⁵² Department of the Army, Field Manual 25-101, Chapter 2, “Mission Essential Task List (Metl) Development,” internet address: http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/25-101/fm251_3.htm
- ⁵³ Cline, Alan, Prioritization Process Using Delphi Technique, White Paper, Carolla Development, internet address: <http://www.carolla.com/wp-delph.htm>
- ⁵⁴ Department of the Air Force, Airman’s Manual, AFM 10-100, internet address: <https://commweb.hill.af.mil/AMT/>, 1 Aug 1999

Vita

Major Douglas Furst attended the Rensselaer Polytechnic Institute receiving a Bachelor of Science degree in Electrical Engineering and his Air Force commission through the ROTC in May 1987. In 1992, he received Master of Science degree in Transportation Management from the Air Force Institute of Technology, Wright Patterson AFB, OH.

Major Furst started active duty in 1987 with the 2nd Mobile Aerial Port Squadron, Little Rock, AR, experiencing aerial port operations in the Air Terminal Operations Center, Aerial Delivery, and Vehicle Operations and Maintenance. This initial assignment established a perspective for the need to physically and mentally prepare to operate in contingency environments through deployments to provide transportation capabilities for earthquake relief and UN peacekeeping operations. From there, Major Furst moved to a remote assignment to Kunsan AB, South Korea as the Officer in Charge, Combat Readiness and Resources of the 8th Transportation Squadron. After a Masters degree and three acquisition assignments as a reliability engineer, logistics technology engineer, and test director, he led the transportation training branch at the Air Mobility Warfare Center followed by serving as an executive officer for the commander. In Charleston, SC, he led the Aerial Port Mobility Flight and directed operations of the 437th Aerial Port Squadron. In May 2000, Major Furst was assigned to the Advanced Study of Air Mobility program. Upon completion in June 2001, he will attend Air Command and Staff College at Maxwell AFB, Alabama.

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14. ABSTRACT Military readiness has been and continues to be a paramount priority of our Government and Department of Defense (DoD) to perform a broad spectrum of mission capabilities. The challenge to conduct and sustain the DoD missions with short notice to any point on the globe involves pulling together reliable equipment, proven procedures, and proficiently skilled personnel to respond to a contingency tasking, deploy with minimal delay, and conduct operations. Of this description, the mobility readiness of personnel remains a key enabling factor. A squadron commander directly affects the readiness of their troops by the priorities he or she places on: training core-skills, exercising realistic contingency scenarios, establishing a mobility mindset, and ensuring proficiency in wartime skills. The primary research question addressed in this paper is: "How does a commander most effectively measure, track, interpret and affect the personnel readiness of his/her mobility squadron?" This research solicited insight and feedback from mobility experts and past commanders. This insight consolidated into seven readiness-enabling factors to serve as a practical guide for new commanders, providing a perspective from which to approach their role and responsibility in enabling personnel mobility readiness.					
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