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IN SEARCH OF THE PERFECT TRAINING DOCTRINE

by

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14. ABSTRACT

This paper examines the training challenges that face US Army aviation. It summarizes the training process as outlined in Army capstone manuals, illustrates the aviation training deficiencies, then diagrams the ?perfect solution? to training. The end result is to describe the doctrinal training process in simple, usable terms. This approach delivers the military trainer a model that not only uses the experiences of numerous individual trainers but also employs a model currently used by the infantry and armor training centers. With the training dollar getting smaller, the military continuously searches for new ways to improve its use of training doctrine. The challenges that face military forces require a fundamental change in how aviation personnel are both trained and employed. The challenge is to improve doctrinal manuals so that the trainer has a clear understanding of warfighting training requirements. This demands an exacting level of specificity in task and purpose which results in clearly defined training. Today?s trainer needs a doctrine that clearly outlines requirements and can be easily applied in today?s tactical units. The doctrine must distinctly link training fundamentals with the realistic requirements to ensure that quality training results from efficiently focused resources and soldier effort expended. The training model outlined in this paper will offer such an outline. The intent is to assure this effort produces a specific product with minimum resources and minimum disruption to the soldier that makes a better use of training time. The concept is to apply clearly focused training tasks backed by written doctrine. A well defined doctrine, alone with simulation, are a critical part of this process.

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Contents

Page

Illustrations

Page

Abstract

This paper examines the training challenges that face US Army aviation. It summarizes the training process as outlined in Army capstone manuals, illustrates the aviation training deficiencies, then diagrams the "perfect solution" to training. The end result is to describe the doctrinal training process in simple, usable terms. This approach delivers the military trainer a model that not only uses the experiences of numerous individual trainers but also employs a model currently used by the infantry and armor training centers.

With the training dollar getting smaller, the military continuously searches for new ways to improve its use of training doctrine. The challenges that face military forces require a fundamental change in how aviation personnel are both trained and employed. The challenge is to improve doctrinal manuals so that the trainer has a clear understanding of warfighting training requirements. This demands an exacting level of specificity in task and purpose which results in clearly defined training.

Today's trainer needs a doctrine that clearly outlines requirements and can be easily applied in today's tactical units. The doctrine must distinctly link training fundamentals with the realistic requirements to ensure that quality training results from efficiently focused resources and soldier effort expended. The training model outlined in this paper will offer such an outline. The intent is to assure this effort produces a specific product with minimum resources and minimum disruption to the soldier that makes a better use of

training time. The concept is to apply clearly focused training tasks backed by written doctrine. A well defined doctrine, alone with simulation, are a critical part of this process.

Chapter 1

Introduction

Aviation Branch does not use the Army's core training documents to design its training programs. This paper demonstrates this fault by walking the reader through a the current aviation doctrinal training process using the attack helicopter battalion as an example. Then, in section three, the Army's training doctrine is applied to show the correct process.

The US Army training system is built around a series of base documents. At the top of the document hierarchy are Field Manual (FM) 25-100, *Training the Force* and FM 25-101, *Battle Focused Training*. These two documents constitute the Army's capstone training manuals and as such outline its training philosophy.

Central to the training development process, and the capstone training manuals, are the Mission Training Program (MTP) manuals for each type unit and their associated how-to-fight manuals. Aviation Branch, however, does not use the MTP or its how-to-fight manuals doctrinally. Instead, aviation commanders normally built their training programs around the appropriate unit's *Aircrew Training Manual*, Training Circular 1-210 *Aircrew Training Program Commander's Guide to Individual and Crew Standardization* and the appropriate aircraft operating manual. Using these manuals to design a unit training program is not only contrary to the Army's training doctrine but

produces a clouded training focus which is inconsistent from unit to unit or from commander to commander. This training method increases the training tempo and the associated cost of training aviation units. In using these documents, the basic question of what will the training produce is not answered. The unit becomes trapped on a journey with no destination.

In spite of the best attempts of several unit commanders, the branch continues in denial about the lack of training doctrine. An example of this is found in the October 1996 edition of "Army Aviation" magazine. The article, entitled *The Future Is Now In Simulation,* outlined a training strategy used for an evaluation of a unit. In the article an attack helicopter company trained in a virtual environment that resulted in a 95% pass rate on all collective tasks tested. The unit was presented with tactical scenarios which consisted of three night missions of "increasing complexity" which included a deep attack, movement to contact, deliberate attack and hasty attack.[1] During the training, observer/controllers from the National Training Center graded each crew on the "execution of collective tasks as defined in the ARTEP."[2] While this sounds genuinely tactical, no such crew-level "collective task" exists. No doctrine exists which outlines how to conduct a movement to contact or a hasty attack. There are no training plans from Training and Doctrine Command (TRADOC) which delineate those collective tasks. There are, however, crew tasks that could be built into collective team and platoon tasks if they existed, in actuality they do not. While the article was not well substantiated but it did convey a growing concern about slowing the training tempo and the associated cost of live training. This article, however, demonstrated the lack of depth the aviation doctrinal training manuals.

A second example occurred during a 3-day working session designed to review, discuss, and consolidate ideas concerning the current state of attack helicopter doctrine, both training and employment. Participants included representatives from the aviation cell at the National Training Center, the Joint Readiness Training Center, the Directorate of Doctrine and Training from the Aviation Center, two serving brigade commanders, two serving and one former attack helicopter battalion commanders. All together, there were about fifteen representatives in attendance. Of all the effort expended to arrive at a consensus concerning attack helicopter doctrine, two overarching issues stood out during the conference. First, almost no one had read the base attack helicopter doctrine nor the capstone training doctrine. Secondly, extremely few in attendance understood how to develop a Mission Essential Task List (METL) or even how to apply the training doctrine. This development process will be discussed in Section II of this paper. The problem, if not already apparent to the reader, is that senior leadership and major geographic training center representative are not educated on the Army's basic training processes. This will be echoed again in Section I of this paper.

Notes

[1] Adams, Ronald E., MG, "The Future Is Now In Simulation" Army Aviation, (31 October 1996). p 6

[2] ibid., p8

Chapter 2

Doctrinal Disorganization

Minds are like parachutes. They only function when they are open.

—Sir James Dewar

General

The military places great emphasis on both its doctrinal development and military preparedness. This paper outlines the not only the problems currently facing aviation units but also outlines the requirements for conducting quality training. It presents a training model that trainers can use to ensure that they are ready to conduct tactical operations on short notice.

No soldier would dispute the fact that military forces exist to conduct warfighting. It should follow that maintenance of critical warfighting skills during peacetime is the focus of training. If preparation for war is the focus of peacetime training, then there should be a defined criterion to which training must adhere. To ensure that training is uniform throughout all units, the Army uses doctrinal training manuals to outline acceptable levels of performance for that training. It is that doctrine which provides a training blueprint for the Army's leaders. It provides a level of specificity which narrows the focus on what to train and makes efficient use of time and resources.

Time is probably the most precious of training resources. There is never enough time to train on all tasks. This is why it is essential to ensure that training is standardized and selective in order to ensure continuity between similar units. Considering the normal amount of personnel turnover which can occur within tactical units, it is necessary to have a doctrinally defined standard to help focus training. There must be a defined set of standards which provide an image of what a unit's training goal looks like. If not, the unit will continuously focus on individual tasks. Such is the problem Aviation faces today.

Training is about repetition. It involves repetition of specific tasks, both individual and collective. This ensures that each member of any given unit can conduct their duties in the most austere of circumstances.

The Problem

Understanding and building quality training programs in units require leaders who are willing to spend long hours focused on learning and understanding how to apply the training doctrine. Matching training doctrine with unit capabilities demands an understanding of how to apply the doctrine to maintain the combat proficiency of any unit. Training can be broken into three phases; planning, preparing and executing. All too often, units focus on *executing* training and do not conduct any *planning* or little *preparation* for that training. Designing training during the planning or preparation phases demands a clear training vision of what must be accomplished coupled with selected individual and collective training tasks. This only comes from having an understanding of training requirements.

For Army aviation's training managers, there is no excuse for not understanding and using training doctrine. In the preface of Field Manual (FM) 25-100, the Chief of Staff of the Army wrote "our duty as leaders is to provide demanding and realistic training for our soldiers (and) I expect all officers and NCOs…to understand and apply the methods discussed in it…."[1] The intent is clear. To employ the intent requires a well-defined training doctrine.

Aviation requires a doctrine that connects individual and collective tasks. Platoon-leader manuals and company-level documents should outline the employment and training responsibilities for lieutenants and captains. The responsibility to implement the capstone training doctrine falls squarely on the Army's leadership. In aviation, there has been an over-reliance in maintaining individual pilot focused training instead of linking the individual pilot tasks to collective platoon and company skills. If the goal is more efficient training with the use of fewer flight hours, then the leaders must understand the doctrinal linkage between individual and collective tasks. The problem which confronts trainers today is the guidance on how to link the tasks is nonexistent. To illustrate the discrepancy in aviation manuals, Figure 1 depicts a comparison between infantry and attack helicopter doctrinal manuals.

On the right are the manuals which an Infantry trainer has to establish and maintain training. On the left are the manuals that the attack helicopter training has to conduct the corresponding training. There are no manuals which bridge the relationship between the crew training manual and the battalion commander's manual for unit employment. It is precisely because of this gap in doctrinal manuals that the platoon leaders and company commanders focus most of their energies on conducting individual training (ATM, CTT,

MQS, SQT). As a result, the leaders, unit First Sergeants and commanders, have difficulty conducting even the weekly training meetings.

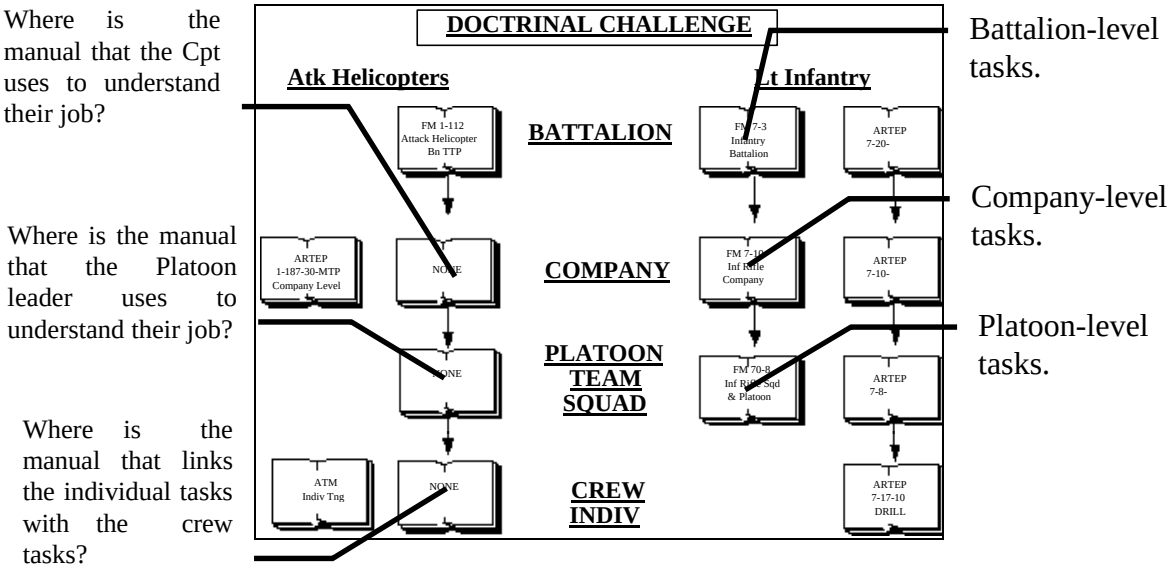

Figure 1. Doctrinal Disconnect

With the realities of today's decreasing budget, aviation forces must revise, develop where necessary, then apply training doctrine in order to reduce some of the training costs. This requires doctrinal manuals that provide the task definition necessary to control aviation training's operating tempo (OPTEMPO).

The challenge is to draft manuals that assure units are not only conducting warfighting training but also training efficiently. By doing so, proficient leaders conduct better and less expensive training at the platoon-, company- and battalion-level. The end-state for these manuals would be better training task clarity and better investment of the training dollar to produce lethal warriors.

The lack of training documents and understanding in the aviation community impacts on every other arm within the service. An example is the infantry brigade. There is currently no linkage between collective aviation tactical tasks and the infantry

commander's collective training. The problem is that aviation doctrine and its training manuals are either nonexistent, extremely vague, or not used.

An example of not using the training doctrine is illustrated by using the US Army's premier combat training centers, located at Fort Irwin, California—the National Training Center (NTC). At the NTC, the aviation controllers do not use the training doctrine. They have little understanding of the purpose of the Mission Training Plan (MTP) or its use in the development of the unit's requested tour at the center. As a result, units arrive without a clear understanding of how focused training produces lethal units, and are 'assisted' by observer/controllers who are less proficient then they. One of the senior officers from the training center stated to this author that; "We do not allow the mission training plan to be used here at the training center." An interesting comment seeing that the armor and infantry trainers at the same location use the manuals extensively.

Another reason that aviation units require a detailed objective set of training tasks revolves around leader turnover in units. If a unit's training vision changes each time a new leader arrives, then the subordinate leaders never arriving at the training destination. Figure 2 illustrates what units can experience in today's decreasing force. This is an actual chart from a unit conducting a force modernization fielding plan which involved changing the unit's aircraft from one type to another. The chart only depicts the key officer changes. The same is experienced with the noncommissioned officers. This turnover, coupled with the lack of training vision impacts the whole unit. In units where leaders transition from the unit to another, this lack of focus produces muddled training and frustrated leaders.

The search for a clear training vision in Army Aviation is not new. When applied to the use of attack helicopters, aviation has suffered from a lack of vision since their inception.

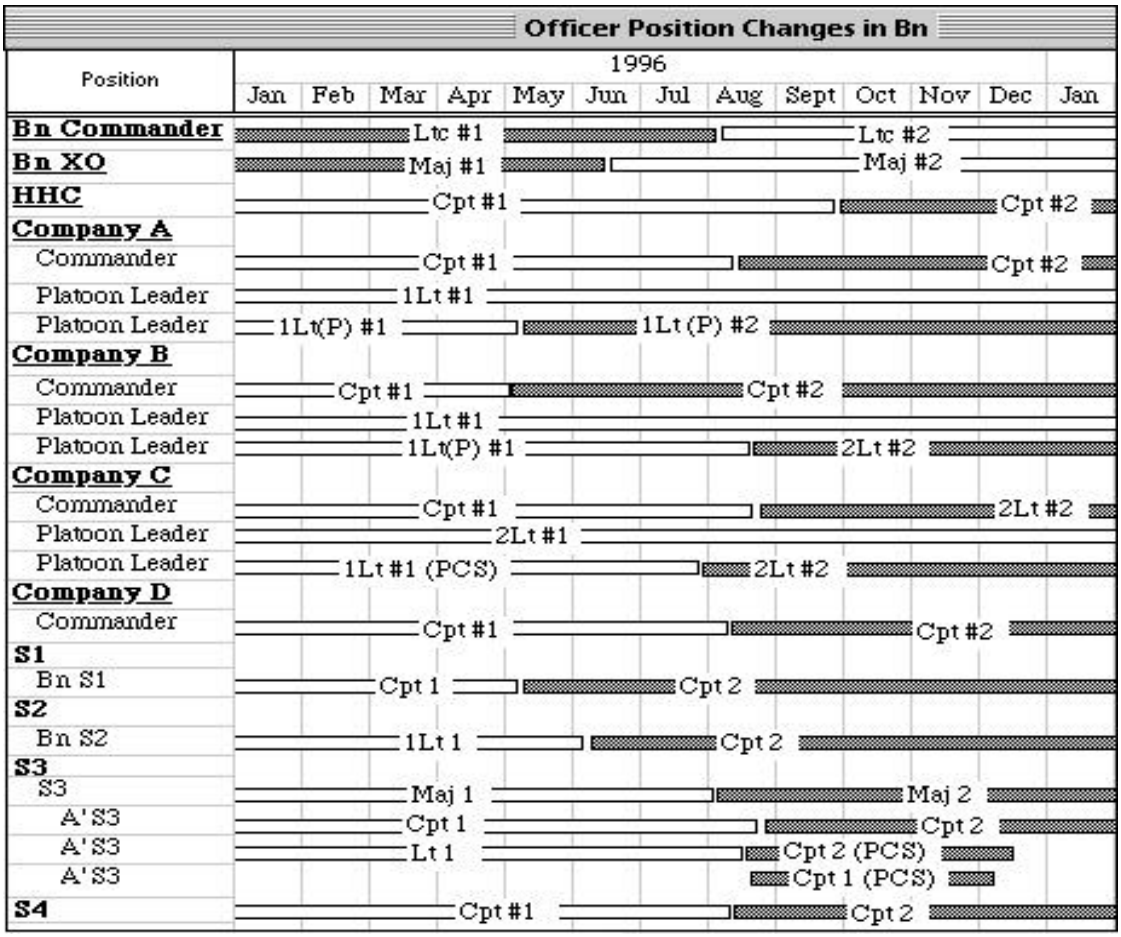

Figure 2. Battalion Officer Position Changes

In 1956, a study's group developed the armed helicopter as a fire support platform. In 1964, with the entrance of the AH56A Cheyenne, the Army began to develop the Advanced Aerial Fire Support System (AFFSS). This was followed by Bell Helicopter introducing the Model 209, commonly known as the "Cobra," in 1965. This aircraft answered the Army's requirement for a faster, armed escort helicopter for the conflict in Vietnam. In the 1980s, with the focus was toward destroying the Soviet Pact follow-on

forces in Europe, this eurocentric focus produced battalions of AH-64As. At present, the latest in aircraft development is the OH-58D (KW) from its application in the Persian Gulf with the US Navy and finally the AH-64 Longbow. These aircraft are now being produced for all the attack and cavalry battalions and squadrons in the Army and are part of the Force XXI aviation plan. During all this time, the aviation has had no training manual concerning the collective training of the tactical unit or the employment of this weapon system. Today, this lack of doctrinal focus has even undermined the Army's stated role for the Comanche.[2]

Roughly thirty-one years have passed since the first attack aircraft made its debut. Heinz Geuderian, the pioneer of German tank employment in WWII, wrote about his displeasure concerning the lack of doctrinal references while he wrote, "It is high time that official historiography got down to describing how they performed."[3] This view could easily apply to today's insufficiency of doctrinal vision. It is high time that Army Aviation documents the tactical role of attack helicopter units across the spectrum of operations. It is also important to ensure this employment fits within the capstone US Army training doctrine.

Since the introduction of the Army's Mission Training Plans (MTPs), FM 25-100, *Training the Force* and FM 25-101, *Battle Focused Training*, its capstone training doctrine has been clear. These manuals are the centerpieces of US Army training programs. These manuals were sent to all units and unit commanders conducted briefings within their commands on the new training methodology. In spite of this emphasis, the training doctrine is still does not well understood.

The faults with our training doctrine are not new. LTC John D. Rosenberger, a former senior brigade trainer at the National Training Center (NTC) at Fort Irwin, California, expressed his concerns in an article while attending the US Army War College in 1996. His conclusions suggest that the training lens should be focused more sharply. He wrote (author's emphasis added):

> "After observing, teaching, and coaching combined arms brigades…(for)…over the past year, I believe …**we can't accomplish our missions** because we…do not have the skills and ability to synchronize and apply the capabilities of the combined arms team at the right time and place to achieve the outcomes we expect.…**We do not know how to do it. We have not been trained to do it.** We are trying to do graduate-level work with a high school education…**Simply put, we can't perform these tasks because we haven't been trained to do them**.
>
> Why should we be surprised? **We have no structured training process**…to develop and sustain proficiency in these skills. As an Army, we have not identified the individual and team tasks every (soldier) must perform during the planning, preparation, and execution of operations.
>
> **The current MTPs…are completely inadequate**. We need to identify the right tasks with the right performance standards to deliver the outcome we expect.
>
> Only through repetition-repetition-repetition can we build and sustain our ability to synchronize the combined arms team."[4]

Very few officers understand the purpose of an MTP and a unit METL. There is a lack of understanding between the relationship of MTPs and METLs to weekly training meetings and quarterly training briefs as required by FM 25-101. Part of the problem relates directly to what LTC Rosenberger stated. The other half of the problem relates to the fact that no US Army training manual addresses training requirements for aviation units. There is not manual a leader can use to cross-reference collective tasks with individual tasks. Junior aviation leaders do not have the references to guide them in establishing their training programs.

In the attack helicopter community, the doctrinal manuals do not clearly address the complexity of requirements that leaders could be expected to face on potential future battlefields. The current capstone manual for the employment of attack helicopters is Field Manual 1-112, *Tactics, Techniques, and Procedures for the Attack Helicopter*. It does not address any tactical mission other than the employment of the entire battalion in the conduct of a deep attack. It does not address the employment of attack helicopters assigned to light, air assault, or airborne divisions. These divisions account, at least for the moment, for four of the ten active Army divisions and have been employed into combat and peacekeeping mission more often than the other six divisions. The manual does not outline operations in built-up areas or expected employment during the non-combatant evacuation operations even though the Army has been conducting these operations since the early 1970s.

The next critical manual used in training is the mission training plan. For the attack battalion there currently is only one. The critical chapter in an MTP is chapter 2 because it contains the Operations-to-Collective Tasks Matrix. This matrix is the link between operations and collective tasks which produces a clear training focus. Instead of the matrix, there is a comment that tells the reader that the mission of the unit is contained within the appropriate units Table of Organization and Equipment (TO&E). As a further example of the problem, the Assault Helicopter Battalion MTP has no reference to the mission, operations or the TO&E. Neither of these MTPs comply with the guidance contained in FM 25-100 or FM 25-101. Because of this the leadership in the field become confused when attempting to establish their METL. In Section II, this problem will be illustrated by diagramming seven current attack helicopter battalion's METLs.

Commanders require adequate doctrinal references in order to conduct battle focused training. US Army attack helicopter units do not have the adequate doctrinal training task focus with which to orient their training. As a result, aviation training predominately focuses on what it always has, the individual level. The training of the individual aviator, this is the most expensive training that aviation conducts because it consumes flight hours. It is at this level that training doctrine can make its most vivid impact, by using flight hours more effectively through a doctrinally focused training program which saves money. Any attempt today to ask someone to quantify how many training flight hours it will take to train an attack helicopter platoon to standard can not be answered. This problem can be traced back to the beginning of any flight training program. No warrant officer aviator can explain how many hours it will take to train an aviator in any particular task. This is because the individual aviation training task has never been linked to a warfighting requirement. And that warfighting requirement has never be documented in any type of doctrinal training manual.

The next employment of aviation units may not be known, but they must be prepared to fight and win when tasked. To ensure they are prepared, the units must be prepared to deploy and conduct their missions at any time, anywhere in the world and have based this preparedness on training.

To best complete this goal, emphasis should be placed on designing a clear training process which assists units in designing a focused training program. This demands a clear, standardized training model to be produced and leaders who understand the collective aviation training tasks and how they fit into the warfighting requirement for their unit.

As stated in Training Circular 25-10, *A Leader's Guide to Lane Training*, "Training today's Army demands a battle-focused, structured, and innovative training process which maximizes availability of training time by orienting on specific tasks derived from a unit's METL."[5]

Notes

[1] US Army, FM 25-101, *Battle Focused Training*, 1994

[2] GAO/HSLAD-92-204. United States General Accounting Office, Report to the Chairman and Ranking Republican Member, Subcommittee on Investigations, Committee on Armed Services, House of Representative. Comanche Helicopter; Program Needs Reassessment Due to Increased Unit Cost and Other Factors. May 1992.

[3] Guderian , Heinz, Major-General, "Achtung - Panzer! The development of Armoured Forces, Their Tactics and Operational Potential," Arms and Armour, 1993.

[4] Rosenberger John D., LTC, "The Burden Our Soldiers Bear :Observations of a Senior Trainer (O/C)" United States Army War College, (1996).

[5] US Army, TC 25-10, *Leader's Guide to Lane Training*, (1996) p.6

Chapter 3

Doctrinal Training Requirements

General

The US commitment to project military forces worldwide in support of operations ranging from disaster relief to full scale war represents significant training challenges for Army aviation attack helicopter units. At no other time has an analysis of training doctrine taken on greater importance—not only in terms of diverse mission requirements and threat capabilities, but also in terms of the diversified geographical conditions in which a force projection army will operate. Attack helicopter units must be prepared to execute its mission in extremely diverse environments. In many cases, each environment could demand unique tactics, techniques and procedures be employed. This represents the importance of having a standard set of individual and collective tasks. Today, units face a world of military contingencies far divorced from the comforting certainties of dealing with the European Communist threat. Today's force-projection Army requires attack units which are prepared to deploy anywhere in the world on short notice potentially organized with units from other locations. This demands commonality with training tasks. Projection and standard training tasks must be flexible enough so that the leadership can conduct training to meet the training challenges.

The source for standardized individual and collective training tasks is the MTP. The MTP should assist in defining training priorities for attack helicopter units in the field. This is where the collective tasks are found which form the attack helicopter unit's Mission Essential Task List or "METL." The MTP provides a unit of common unit of measurement for the unit's critical wartime operational requirements. When a task is not listed in the MTP, the unit commander develops realistic conditions and standards which are realistic and adequate to measure units' combat readiness.

At the tactical level of war, the level which the MTPs and most Field Manuals are designed, there is an insufficient amount of doctrinal material designed to assist focusing attack helicopter units in training for collective tasks. This insufficiency results in a wasted effort in properly using flight hours, man hours and thus wastes training dollars.

To ensure that this does not occur, aviation leadership must fully understand its training methodologies as they pertain to training development. This will balance limited resources available with the correct mixture of training efforts resulting in a trained unit. Only with a thorough understanding of training doctrine can aviation units approach the state of readiness which will allow successful deployment onto the battlefield of tomorrow while operating in the constrained budgets of today.

Leader Responsibilities In Training

In 1996, the US Army War College published a booklet called the *Battalion Commander's Handbook*. This book is directed toward new commanders and contains lessons learned from former battalion commanders. Central throughout this document was the recommendation that commanders should know the unit's METL and have cross-

referenced all collective training tasks from battalion to individual level. Without a clear understanding of why it is important, it is impossible to understand the training development process. It is the METL tasks that focuses unit training. The trainer should cross-referenced each task to validate resource requirement. This is why the process should be standardized and why this is important that commanders use a MTP manual and design their training accordance with doctrinal. This process supports the quarterly training briefing process as outlined in FM 25-101. This ensures that every training event is evaluated against a standard set of doctrinal requirements, the commander's guidance, and is then assigned resources once approved by the commander. The training brief reinforces the planning and preparation process by ensuring each subordinate leader has selected the correct individual and collective training tasks. By laying out training requirements, subordinate leaders prepare for the conduct of the weekly training meetings as outlined in FM 25-101. These meeting are important because this is where junior leaders are taught about training standards. The subordinate leaders learn to describe, in detail, what they require for training three weeks to six weeks from the meeting.

The War College class also recommended conducting lane training with each company running one lane for the other units in the battalion. Organizing and running lane training ensures that training tasks and scenarios are validated by a higher headquarters. At the same time, training areas, flying hours requirements, food, transportation, to name a few, are also placed against the training requirements.

This process supports another recommendation from that class. When faced with a major training event, the commander generates a detailed plan which addresses individual and collective training as well as unit gunnery skills requirements. The focus orients on

training the METL tasks at all levels. The relationship between platoon battle drills implementation in the overall training plans was also highlighted as is absolutely essential.

As for individual aviator training, they recommended that commanders ensure that Aviator Readiness Level (ARL) training be linked to unit tactical training and the unit's METL. Along with this, commanders must control the overall aviator training program or else the Instructor Pilot and Standardization Instructor Pilot bureaucracy will take over, and they may not achieve METL training.

There are four key points to take from this list. First, METL is the focus of training. Second, the METL must be cross-referenced and validated with the individual tasks required for training. This ensures that subordinates know their training requirements. Third, lane training must be structured from the METL requirements. Lastly, the Aircrew Training Program and its associated aviator requirements are individual tasks which must be linked to the platoon collective tasks and are a commander responsibility.

The cost of an attack helicopter's flying hour program is high. It is important that battalion trainers ensure that crew training is connected to the platoon, company, and battalion collective task and just does not just produce more flight hours for the individual aviators logbooks.

A monograph written by Major Mark N. Mazarella outlined several problems with both aviation training and employment doctrine. He concluded that "present US Army attack helicopter (Doctrine, Tactics, Techniques and Procedures) only marginally meets the requirements for employment in support of the full range of Army operations doctrine. This conclusion is based on a lack of versatility and flexibility within current

doctrine and on the lack of tactics, techniques, and procedures (TTP) and evaluative criteria to fulfill doctrinal employment. These shortcomings are attributed to a highly centralized command and control system, an almost exclusive focus on the employment of the ATKHB in a maneuver role in a mid-to-high intensity armor-rich environment, and a comparatively narrow focus on TTPs and mission training at the execution level."[1]

Need For Aviation Training Doctrine

If the current doctrine does not support units in the field, then what should be changed? This can be answered in two parts. First, the place to start viewing a good training doctrine is at the US Army Infantry and Armor Training Centers. Both have produced extensive doctrinal literature and fairly detailed MTPs. These two branches schools have fielded manuals starting from individual through brigade employment. There are no such manuals in aviation as indicated in Figure 1 earlier. The second is to understand the depth of the problem with aviation doctrine. Currently, aviation has only one field manual, FM 1-112, *Tactics, Techniques, and Procedures for Attack Helicopter Battalions*. This manual was written exclusively to support one operation, the Deep Attack for the Army's AH-64. This manual is not a doctrinal manual where a set of doctrinal principles can be found, but rather a method of employment book termed a Tactics, Techniques, and Procedures (TTP). [2] The next two books, FM 17-50-1, *Attack Helicopter Team Handbook* and FM 17-50-2, *Crew Drills for Aeroscout and Attack Helicopters* are out-dated and not used at all. The Aircrew training manual, TC-1-209, *Aircrew Training Manual Observation Helicopter, OH-58D Aviator/Aeroscout Observer* uses non-doctrinally approved terms in training the aircrews.

So what manual does a platoon leader or company commander use when determining training requirements for their unit? For them, the only manual is ARTEP 1-187-30-MTP, the MTP for the Attack Helicopter Company dated May 1989. This MTP outlines tasks for the attack company which are not collective task for companies or platoons but designed for aircraft crews. This manual is currently outdated and being superseded by the Attack Helicopter Battalion MTP in 1996. This new MTP, entitled ARTEP 1-385-MTP, *The Attack Helicopter Battalion,* was not adequately researched but pasted together from several disjointed sources and sent to field units in order to meet the requirement to update the manual. The manual is totally unusable. It is interesting to note that the MTP for the light infantry, mech/armor company team and platoons are well written and have great commonality. They allow any trainer to organize and conduct an external evaluation on a mechanized infantry or armor company or platoon. In Army aviation, no one can figure how to conduct an evaluation on aviation units. As a result, it is not uncommon it find that when an evaluation is required, everyone looks to an aviation branched officer to organize and execute the evaluation.

The only manual which a leader, at any level and any branch, can reference, FM 1-112, *Tactics, Techniques, and Procedures for the Attack Helicopter Battalion* (ATKHB). This is the backbone, read this as only, manual which the junior leader can reference to find doctrinal guidance concerning the employment of the attack company.

This manual does not utilize doctrinally approved terms and only skims the surface of combat operations. Out of 418 pages which make up the manual only *110 words* are used to describe attack helicopter employment in defensive operations and offensive operations received *11 paragraphs*. The manual is laid out to cover Attack Planning and

Terrain Analysis (which covers initial entry and qualification course acronyms) in 13 pages; Air Combat Operations in 9 pages, a mission which army aviation has never conducted; Deep operations received 40 pages (for AH-64); NBC Operations received 38; Suppression of Air Defense is covered in 4 pages; Movement in 26 pages; Risk Management in 8 pages (the Army Safety Center does a better job); Command Post Annex to a Tactical SOP is covered 67 pages (well documented if your are assigned to a armor or mechanized division); Target Coordination and Laser Designation (23); Kiowa Warrior Employment (outdated) in 43 pages, glossary in 10, References in 7, Index in 14 pages. Nowhere does this manual describe *how* the attack battalion maneuvers during an offensive missions such as movement to contact, occupying attack by fire or support by fire positions, it does not address actions on contact and what principles would the leader follow.

A number of roles that attack helicopter commanders find themselves in are not addressed in the manuals. When assigned to a light infantry division (be it airborne, air assault, or light infantry) what is the role of the attack helicopter during a search and attack mission, during the establishment of an airhead, during the conduct of an attack, or during the defense? How would attack helicopters over watch another maneuver (aviation or ground) element as it maneuvers to conduct an attack on an objective? None of these questions are addressed. The capstone manual for the employment of attack helicopter leaves more questions then answers and requires rewriting.

Mission Training Plans

As described earlier, after the doctrine employment manuals, the next most important document is the MTP. MTPs provide tasks, conditions and standards for each collective tasks which support mission on the attack helicopter unit will be required to perform. In doing so, the mission training plan serves two critical functions. First, it provides a common reference to formulating unit training plans, and second it serves as a standard means of measuring unit operational readiness.[3]

Having reviewed the Assault Helicopter Battalion, Attack Helicopter Battalion and the older Attack Helicopter Company MTPs, it is clear that the person who wrote them had no idea why they are necessary. This problem is not easy to fix as it potentially cuts deep into the core of Aviation leadership. Currently, almost no aviation commander has ever used the MTP for training. The National Training Center does not use the MTP in training. That means there are lieutenants, captains, majors, lieutenant-colonels, and colonels who potentially have not used and do not understand the process. Meanwhile, ground maneuver commanders assume that Aviation doctrine mirrors theirs. This translates to disconnects both in training expectations and during deployment execution.

So where does the MTP fall into the training process? Each MTP is designed to contain "guidance for planning and executing training on critical tasks to wartime standards. The MTP is the linkage between the "how to train" doctrine in the 25-series manuals and the "how to fight" doctrine in FM 1-112."[4]

The purpose of a combat unit is to be successful in combat when assigned a mission. The only method to achieve this in peacetime is by conducting a successful training. The training program must be have a standard by which the progress of the unit can be

measured. These standards must also be linked to the units critical wartime operations as a component of the Army's Combined Arms Training Strategy. "The purpose of the CATS is to provide direction and guidance on how the Army will train and how the resources required to support that training can be identified."[5] The METL is a direct link to the Army's Standard Army Training System (SATS). SATS is a program which automates training doctrine in Field Manuals 25-100 (Training the Force), 25-101 (Battle Focus Training), and 100-5 (Operations) and links to a unit MTP**.** The program is a tool designed to help commanders develop training and scheduling down to company and platoon level. It can produce training schedules, calendars, resource requirements, and training assessments. The program can assist in anticipating requirements for training areas, ranges, and other training facilities and resources. The base requirement to use this Army standard training program is to have a approved MTP. CATS and SATS support a unit's training program through the use of the Mission Essential Task List. Again, the ground maneuver unit leadership assumes that aviation has the same documents to support CATS and SATS.

Building A Mission Essential Task List

The heart of the warfighting training strategy in the Army's capstone manuals is a unit's METL. A METL is the listing of specific training requirements and tasks identified as critical to wartime mission accomplishment for a given unit. The battalion METL is developed jointly by the brigade and battalion commander, and is based on the wartime missions, brigade battle tasks, and guidance provided by the Division or Corps commander. Subordinate unit METLs are developed in the same manner. The METL

approval does not have to be in writing for active component units but must be in writing for reserve component units. The reason for this is simple. Active component units conduct weekly training meeting with their higher headquarters and the reserve component units' wartime headquarters, the METL approving headquarters, may not physically see the unit for months.

The critical wartime operations, located in Chapter 1 of an MTP, normally are the basis for a battalion METL. The collective tasks, in Chapter 5, have been selected as critical to successful METL implementation for each units' operations as designated in Chapter 2 of their appropriate MTP.

Contingency plans help identify the conditions under which the training should occur. FM 25-101 illustrates the METL development by walking the reader initially through the process at battalion-level. In this process, the METL is developed based on an already developed division and brigade missions and METLs. First, the battalion commander conducts an analysis of the higher headquarters mission, METL, and war plans. Then the commander analyzes any other directives which may direct any specified or implied wartime tasks.

Using the operation-to-collective task matrix, shown in a representative diagram at Figure 3, found in Chapter 2 of the unit's MTP, the commander determines the collective tasks that support of the critical wartime operations for that unit. These tasks are the Training and Evaluation Outlines (T&EOs), Figure 4, for each collective task which support the units operations. The Aviation MTP Chapter 2 is entitled, *Training Matrix*. It is defined but there is nothing listed in the chapter. Paragraph 2 in that chapter states:

"The…operation statements and critical task to BOS matrix (located in Chapter 5) provide a graphic portrayal of the operation, collective task, and BOS relationship."[6]

COLLECTIVE TASK	OFFENSE	RECON AND SECURITY	MOVEMENT TO CONTACT
Maneuver			
Occupy Assembly Area 15-3-3001	X		
Perform Tactical Road March 15-3-3002	X		X
Perform Passage of Lines 15-3-3003	X	X	X
Move Tactically 15-3-3004	X	X	X
Cover Passage of Lines 15-3-3006	X	X	
Attack 15-3-3006	X	X	X
Attack/Counterattack by Fire 15-3-3008	X	X	X
Perform Raid (Deep Attack) 15-3-3018	X		X
Bypass Enemy Force 15-3-3021	X		X
Reorganize 15-3-3022	X	X	X
Consolidate 15-3-3023	X	X	X
Perform Screen Operations 15-3-0312	X	X	
Intelligence			
Perform Intelligence Operations 15-3-3905	X	X	X
Perform S2 Operations 15-3-3906	X	X	X

Figure 3. Collective-to-Operations Task Matrix

ELEMENT: COMPANY

TASK: PERFORM an Attack by Fire (15-2-0311)

ITERATION 1 2 3 4 5 (circle)

TNG STATUS T P U (circle)

CONDITION: The company is operating as part of a battalion force and is given a general position and ordered to attack enemy position or moving enemy element. It is given a sector of fire or other fire control measures. The company commander orders the company to attack the position by fire. Enemy is in hasty defensive positions or is a moving tactical force.

TASK STANDARDS: The company detects and destroys 75 percent of the enemy elements in the company sector. Friendly casualties do not 10 percent.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO GO
***+1. Company commander plans and company prepares for attack/counterattack by fire.**		
a. Assigns fire control measures and engagement criteria to ensure complete coverage of enemy and ability to mass/shift fires.		
b. Positions subordinate elements. Provides mutual support fields of fire, cover, and room for dispersion.		
c. Chooses route with cover/concealment that provides for rapid occupation/displacement.		
d. Plans instructions, preparations, reconnaissance, and occupation.		
e. Prepares instructions for maneuver to allow repositioning and shifting of elements.		
f. Preparations are made as time allows (preparation of range cards/sector sketches).		
+2. Company occupies position.		
a. Company is in position at directed time.		
b. Enemy is not able to disrupt occupation.		
c. Company loses no aircraft during occupation.		
3. The company prepares for an attack by fire.		
a. Located visible armor targets to destroy with Hellfire missile.		
b. Suppress dismounted enemy troops and engage enemy light-skinned vehicles with .50 cal machine gun and rockets.		
+4. The company attacks by fire keeping a continuous and consistent rate of fire on the enemy position.		
a. Scans for enemy elements.		
b. Platoon alternate firing positions as necessary.		
c. The company adjusts overwatch positions if necessary.		
d. The company commander requests indirect fires on enemy elements.		
+5. The company sustains the attack by fire until all enemy elements are destroyed or suppressed.		
a. The company commander orders the platoons to focus fires on an enemy element, shift, start, or stop fires.		
b. The company adjust the rate of fire based on the tactical situation.		
c. The company redirects, adjusts, or concentrates fires on enemy elements displacing, moving to alternates positions, or moving in as reinforcements, concentrating on enemy flank shots.		

Figure 4. Example T&EO

By not providing the critical wartime operations in Chapter 2, aviation training is faced with two problems. First, there is no understanding of the application of aviation in either defense and offensive operations. Secondly, there is no operational framework for the employment of an aviation and no method for integration of aviation with other maneuver forces and therefore no commonality of training under CATS. For an infantry battalion, the critical wartime operations located in Chapter 2 of their MTP are offensive, defensive, retrograde, reconnaissance and security, and movement to contact. This allows the infantry battalion commander to put his units' operations into a battlefield framework. The company and platoon leadership understand what focus their units must take in order to ensure success in the battalion's operations. Aviation has no such training integration or focus. This problem impacts directly on the soldier. Too often an aviation unit commander trains this soldier and then is replaced by a new commander who decides to change the tasks and the training direction. The result is a no continuity or training standardization for the junior leadership.

To illustrate the point, listed in figure 5 are actual attack helicopter units METLs. None are found in any doctrinal publications for attack helicopter battalions. Interestingly, although each of the units listed have almost 70% of their personnel located in an assembly area almost 100% of the time, none list that task as a training task worthy of resource allocation. All the tasks are oriented only on the flying portion of the mission, or aviator individual tasks. If none of the listed tasks below are listed in any MTP, how are junior leaders expected to understand the need for specificity in training? Once army aviation decides on the main role of the attack helicopter, then a series of base tasks should be placed into a MTP and standardized for all attack units. The object of METL

development is to interrelate all tasks from higher to lower units. Figure 6 outlines an example of this process by using two battalion-level METL tasks. In this process, there are specific tasks associated from battalion to platoon.

AH-64 Unit #1 Conduct recon and security Opns Conduct movement to contact Conduct deliberate attack Conduct Hasty attack Conduct Deep Operations Conduct rear area operations Conduct exploitation Conduct JAAT Overwatch a ground force	**AH-64 Unit #2** Conduct deliberate attack Conduct hasty attack Execute JAAT Conduct hasty air combat opns Conduct downed aircrew recovery Conduct route reconnaissance Conduct zone reconnaissance Conduct area reconnaissance Conduct screen operations	**AH-64 Unit #3** Conduct shipboard operations Conduct recon and security Conduct deliberate/hasty attack Conduct night air assault security Conduct Covering force opns Conduct deep attack Conduct rear operations Conduct JAAT Operations
AH-64 Unit #4 Conduct hasty attack Conduct deliberate attack Conduct reconnaissance Conduct an aerial screen Conduct air assault security	**AH-64 Unit #5** Conduct deep attack Conduct an attack Conduct a counterattack Conduct a screen Conduct a guard	**AH-1F Unit #6** Conduct hasty attack Conduct a deliberate attack Conduct a screen Conduct air assault security Conduct a zone reconnaissance Conduct an area reconnaissance Conduct a route reconnaissance
	AH-64 Unit #7 Conduct hasty attacks Conduct armed reconnaissance Conduct air combat operations Conduct air assault security Deep Attack Security operations Conduct JAAT operations	

Figure 5. Unit METL's

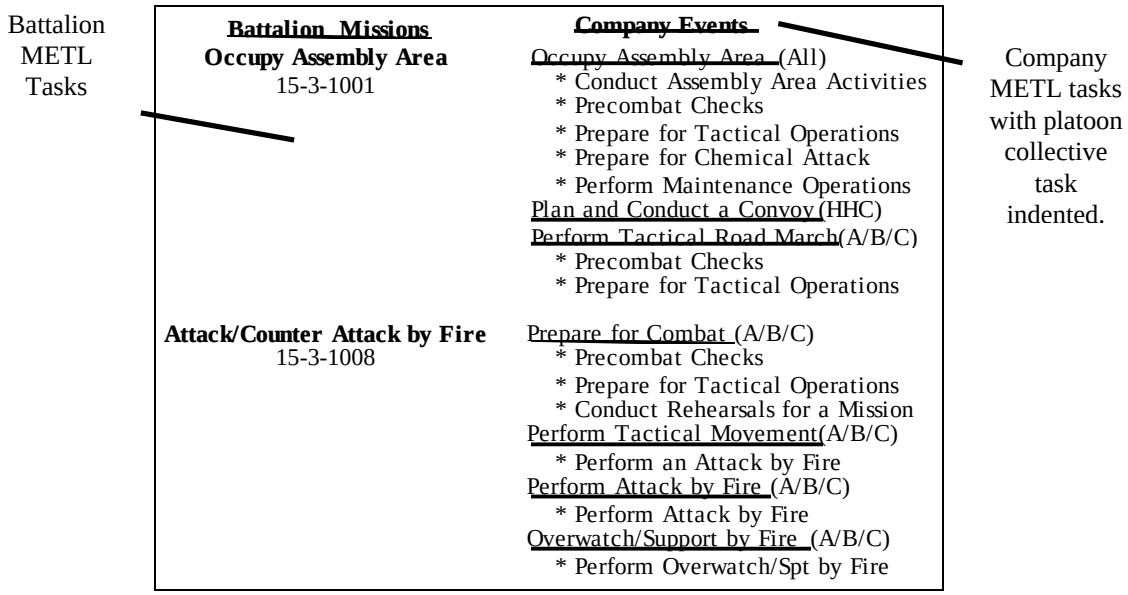

Figure 6. Example Unit METL

Notes

[1] Mazarella, Mark N., MAJ, "Adequacy of U.S. Army Attack Helicopter Doctrine to Support the Scope of Attack Helicopter Operations in a Multi-Polar World," Fort Leavenworth, KS. MMAS Thesis, U.S. Army Command and General Staff College, 1994. Hereafter referred to as "Mazarella, US Army Attack Helicopter Doctrine"

[2] A TTP manual is intended to provides the user with a technique or concept of employment. A TTP does not provide the fundamental principles which are either used or violated by the user.

[3] Mazarella, US Army Attack Helicopter Doctrine

[4] ARTEP 15-112-30-MTP - written for use by the 1-10th Aviation Regiment, 10th Mountain Division (L) in 1995. Hereafter referred to as "ARTEP 15-112-30-MTP"

[5] ARTEP 15-112-30-MTP.

[6] US Army, FM 25-100, *Mission Training Plan for the Assault Helicopter Battalion*, 1995 page 2-1. Although this is from the Assault Battalion's MTP, this statement is also in the Attack Helicopter Battalion's MTP.

Chapter 4

Focused Aviation Training Doctrine

Go, sir, gallop, and don't forget that the world was made in six days. You can ask me for anything you like, except time.

—Napoleon Bonaparte

General

This section outlines a training program and provides ideas on how to focus training for combat operations. It is oriented on wartime operations an attack helicopter battalion, company or platoon could reasonably be expected to conduct. The documents required to build the training program are shown in Figure 7.

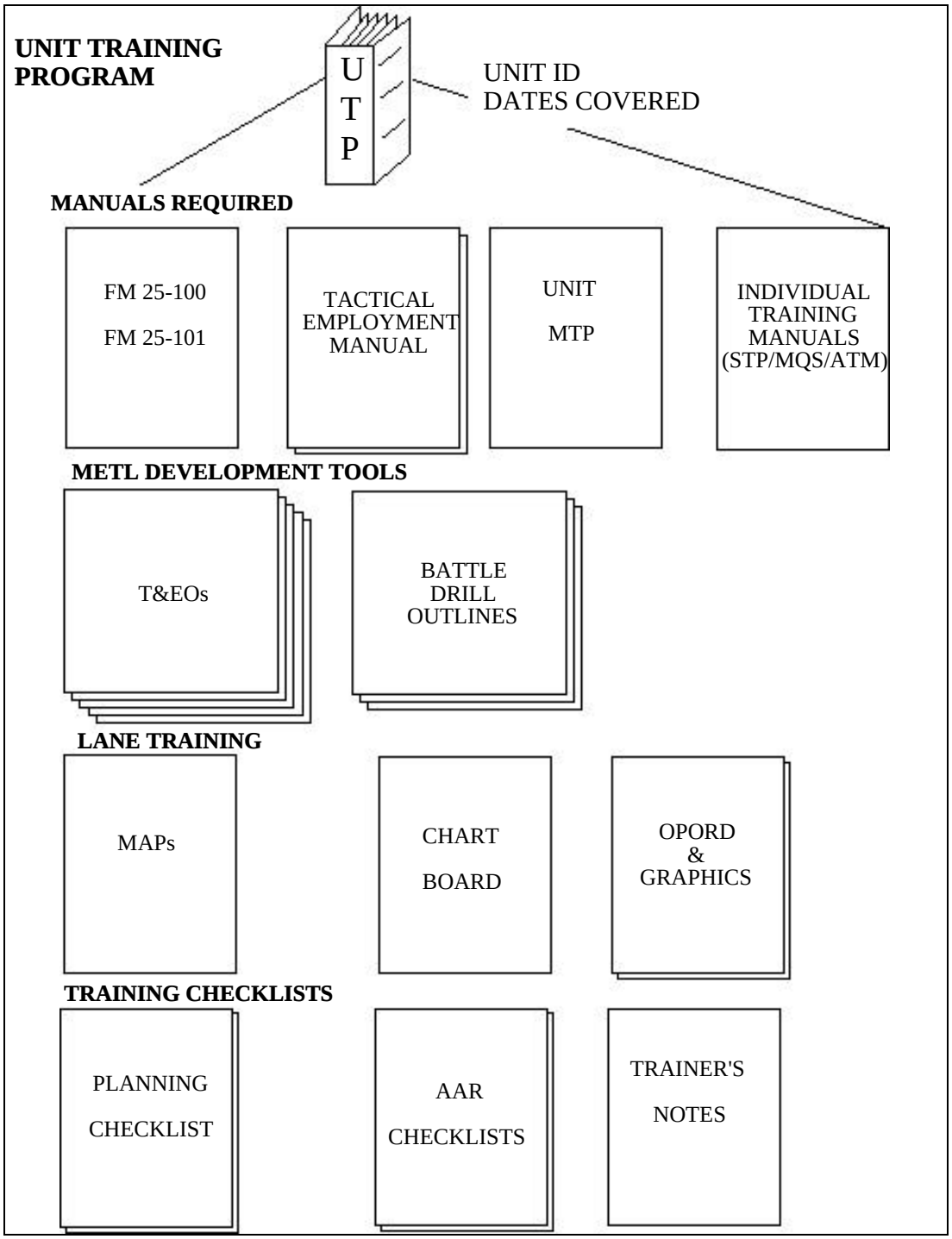

Figure 7. Training Documents

The first step in formulating a training program involves focusing on those METL tasks that require continuous sustainment. To determine the METL tasks, the commander follows the development process outlined in FM 25-101. A commander reviews the

wartime missions and other related requirements to find and list all specified and implied tasks. The commander then develops the unit's wartime mission. An example of the wartime mission could be: *D-Day, H-Hour, 1-10 Avn Reg deploys by air and sea, moves to and occupies designated assembly areas, and organizes for combat. Be prepared to conduct attack operations. On order conduct counterattack.*

The commander then selects only those collective tasks which are essential to accomplish the unit's wartime mission and resources them for training. These tasks are normally found in the unit MTP. In the case of the mission statement above, the battalion commander selects those collective tasks which support deployment, movement, assembly area activities, counterattack, and attack tasks. This is then called a "Battle Focused" METL.

From those tasks, the commander then develops supporting collective and individual (aviator, soldier, leader, staff) tasks. These are also located within the units' MTP but maybe at a subordinate level. If a task is not in the MTP but required to accomplish a wartime mission, the commander simply develops the task and receives approval in writing from the next higher headquarters.

Once collective and individual tasks have been selected, training objectives are identified to ensure the soldiers are afforded the maximum focus of training effort. This step includes forecasting training areas, flying hours, other supporting resources. This reflects the cost of conducting the selected training.

After developing the training objective(s) (the end state for training), the commander and staff then develop a long-range plan followed by the short-range plan. How far should into the future should this plan be focused? While it is simply to state that long-

range is one year and short-range is three to six months, training is more complicated than that. Training a unit can be thought of as taking a trip. The training's final product could equate to a destination. As the leaders think through their training, the training is broken into training quarters, months, weeks and even days. The tasks equate to the baggage for the trip. Without understanding where the unit is going and what is expected at the destination, it is impossible to select the proper tasks to pack. This is where aviation units waste the most expensive part of their resources—the flying hour. Once the training has arrived at this stage, they are ready to layout and conduct training. Operating currently without the right doctrine manuals, what operations should an attack helicopter unit focus its training?

Operations

An attack helicopter unit was designed and fielded to perform certain missions, understanding what those critical wartime operations are for the attack helicopter platoon, company, and battalion are then key to the development of a unit's training program. Unfortunately, there are no manuals in Army aviation which outline those requirements. What follows are this authors thoughts on employment of an attack helicopter unit in what is termed "critical wartime operations" by the US Army Infantry and Armor Training Center.

The critical wartime operations of the subordinate unit place the unit into a wartime battlefield framework. From those operations the collective tasks are then designed. Normally, an attack helicopter battalion will be working with either an infantry/armor brigade or division. If this is the case, the battalion commander and subordinate leaders

can expect a combined arms mission in the offense, defense, or maybe independent of the ground force while conducting a raid. If this is true, then the battalion can reasonability expect to operate within the operational framework of offense, defense, or raid operations. Then unit's collective tasks are then designed to support those operations.

In applying collective tasks for a platoon in a context within the combined arms operations, it is necessary to use a ground maneuver unit as an example of the task correlation. For the purpose of this illustration, an infantry battalion was used in Figure 8 in order to offer a possible set collective tasks which could be assigned to an attack helicopter platoon.

Infantry Battalion	***Attack Platoon Tasks***
Movement to Contact	Overwatch; Attack by Fire; Screen; Provide direct fire suppression
Attack	Counterattack; Attack by Fire; Screen
Defend	Screening force; Reserve; Counterattack
Air-assault	Overwatch; Screen; Provide suppressive fires; Maneuver as lead force

Figure 8. Infantry Battalion missions and platoon tasks

In applying the same methodology for a company except with an infantry brigade, the following list could represents possible company collective tasks:

Infantry Brigade	*Attack Company Tasks*
Movement to Contact fire	Overwatch avenues of approach; attack by fire; provide direct-suppression on prepared positions; reserve, or counterattack force.
Hasty Attack	Attack by fire; serve as reserve; conduct exploitation.
Deliberate Attack	Isolate the objective; attack by fire; provide direct fire; overwatch counterattack routes; serve as reserve; conduct exploitation.
Defend in Sector	Provide fires from a BP; cover obstacles with long-range fires; serve as reserve force.
Delay	Overwatch; counterattack by fire; conduct deception; reinforce; serve as reserve, or counterattack force.

Figure 9. Brigade missions and company tasks

The attack helicopter **platoon**, then, could be expected to conduct three critical wartime operations as part of an attack helicopter company team. Those are movement-to-contact, attack, and reconnaissance and security. For the attack helicopter **company** they could be movement-to-contact, attack, raid and reconnaissance and security. For the attack helicopter **battalion** they could be offense, movement-to-contact, and reconnaissance and security. The key components of the training program for each critical operation are platoon collective tasks, crew collective tasks, leader tasks, and individual tasks. As was shown in Figure 6, the collective tasks for each unit must link to the higher headquarters mission.

Platoon, company and battalion collective tasks are trained as outlined in FM 25-100, FM 25-101, and Chapters 4, 5, and 6 of the Attack Helicopter MTP-series if it existed. These tasks may be trained individually or combined with other collective tasks and battle drills to form more complex exercises, such as Situational Training Exercises (STX) and Field Training Exercises (FTX). Tasks are selected for training using the procedures outlined in FM 25-100 and Chapters 3 and 6 of the MTP.

Attack helicopter crew tasks are trained using the T&EOs and guidance in each aircraft's aircrew training manual (ATM). Like platoon-level tasks, crew collective tasks can be trained individually or combined with other task in more extensive training exercises. Comprising information from tactical and doctrinal manuals and approved lessons learned, the ATM provides the training link between platoon tasks outlined in the MTP and individual and leader tasks published in SMs and MQS manuals at the pilot level. Figure 10 illustrates the "crosswalk" relationship between crew collective tasks and individual tasks and platoon collective tasks.

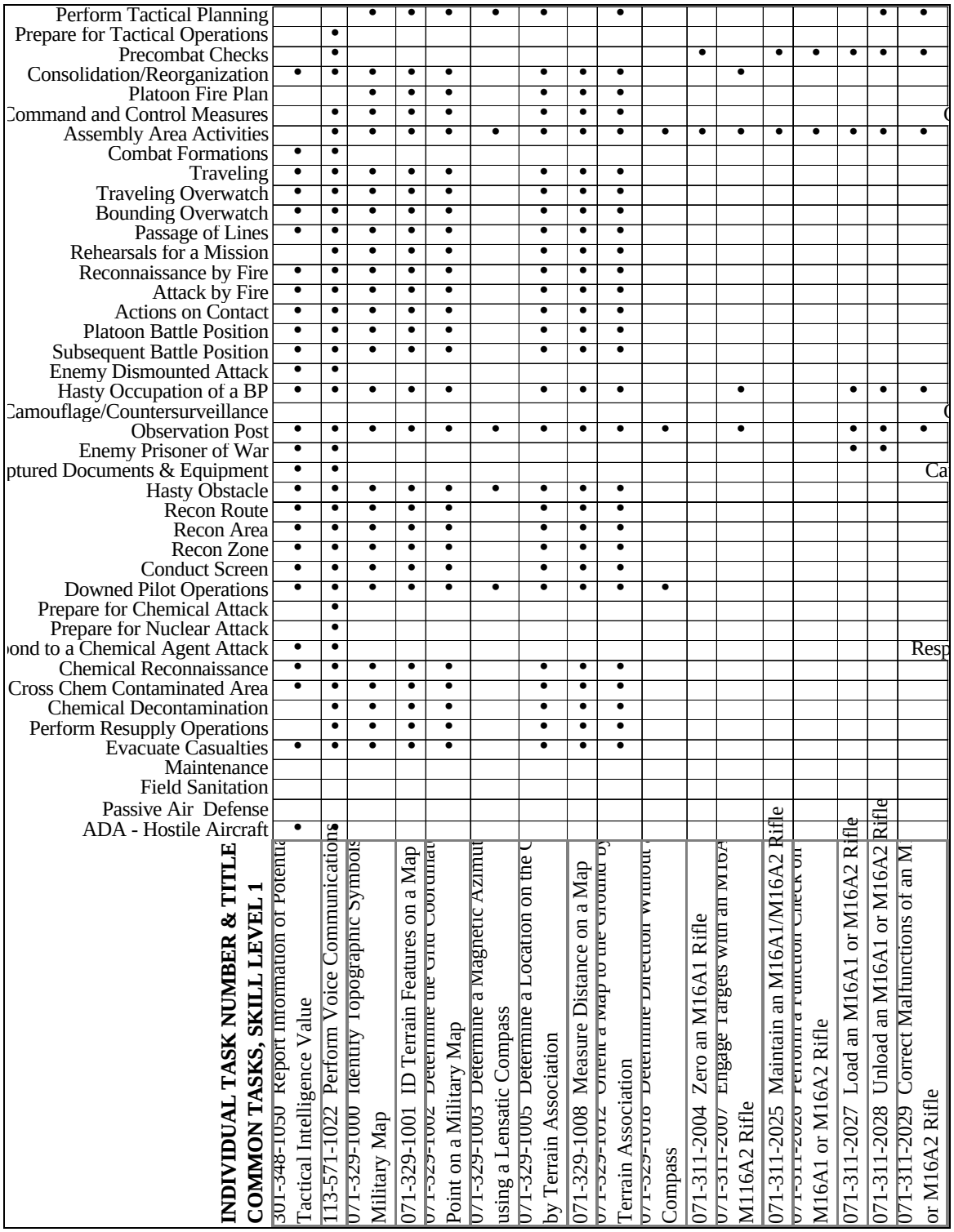

Figure 10. Individual-to-Collective Task Matrix

Leader tasks are trained based from individual Soldier Manuals, Military Qualification Skills and MTP manuals. Leader training activities include sand table exercises, map exercises (MAPEX), tactical exercises without troops (TEWT), command post exercises (CPX), command field exercises (CFX), Field Training Exercises (FTX), and Situational Training Exercises (STX).

Individual tasks are mastered using the appropriate STPs, SMs and ATMs. Leaders can use the crosswalk training tables in an appendix of the MTP to identify the key individual tasks that in turn constitute selected crew collective tasks than further support the collective tasks. Leaders then ensure that all soldiers master these tasks and sustain proficiency in them prior to conducting collective training.

The concept behind an MTP is to support training and as such is designed around the training principles outlined in FM 25-100 and FM 25-101. The principles outlined in that FM are:

- Train as a combined arms team.
- Train as you fight.
- Use appropriate doctrine
- Use performance-oriented training.
- Train to challenge.
- Train to sustain proficiency.
- Train using multiechelon techniques.
- Train to maintain.
- Make commanders and leaders the primary trainers.

These are the concepts around which a training program is built. Army units must use teamwork as a basis by which units are prepared to execute combined arms operations. Units can be expected to fight as they have been trained. Soldiers remember the last way they performed a task, right or wrong. They expect their leaders to know, not just understand, how best employ their units and be able to demonstrate what tasks are

important and outline the established training standards for those tasks. These standards are then in turn stringently enforced by the unit's leadership. But the leadership will only enforce what it believes the standards to be for any given task. Therefore, it is imperative that leaders and soldiers alike spent no time learning non-doctrinal procedures. It is for this reason that all units must train only on specifically required tasks which had corresponding standards outlined in doctrinal publications or have been approved by the unit's chain of command. This is why it is important that MTPs should conform with published doctrine and that doctrine be understood and enforced.

The best method of training soldiers on tasks that they will remember is to accomplish these tasks through hands-on, practiced, evaluated and critiqued training.

When designing a training plan, the tasks selected must be organized so as the soldiers time and the unit's resources are never wasted and all unit's leadership are involved. The training must be challenging and realistic while ensuring that the soldiers are afforded time to review previously trained tasks. This is again where the MTP, used as the training guide, is important in assisting the trainer in developing a plan which will ensure that the individuals and the unit not only achieve but sustain collective and individual task proficiency. In order to arrive at the goal, the unit's leadership must have a game plan or in military jargon, a training strategy.

Training Strategy

The unit's training program, the map of the unit's training journey, must focus on achieving the required standard of proficiency in the unit's critical wartime collective tasks. This program, or training strategy, provides a trainer with a method of thinking

through the requirement for completing and sustaining unit training levels. Figure 11 represents an approach to drafting out a strategy vision.

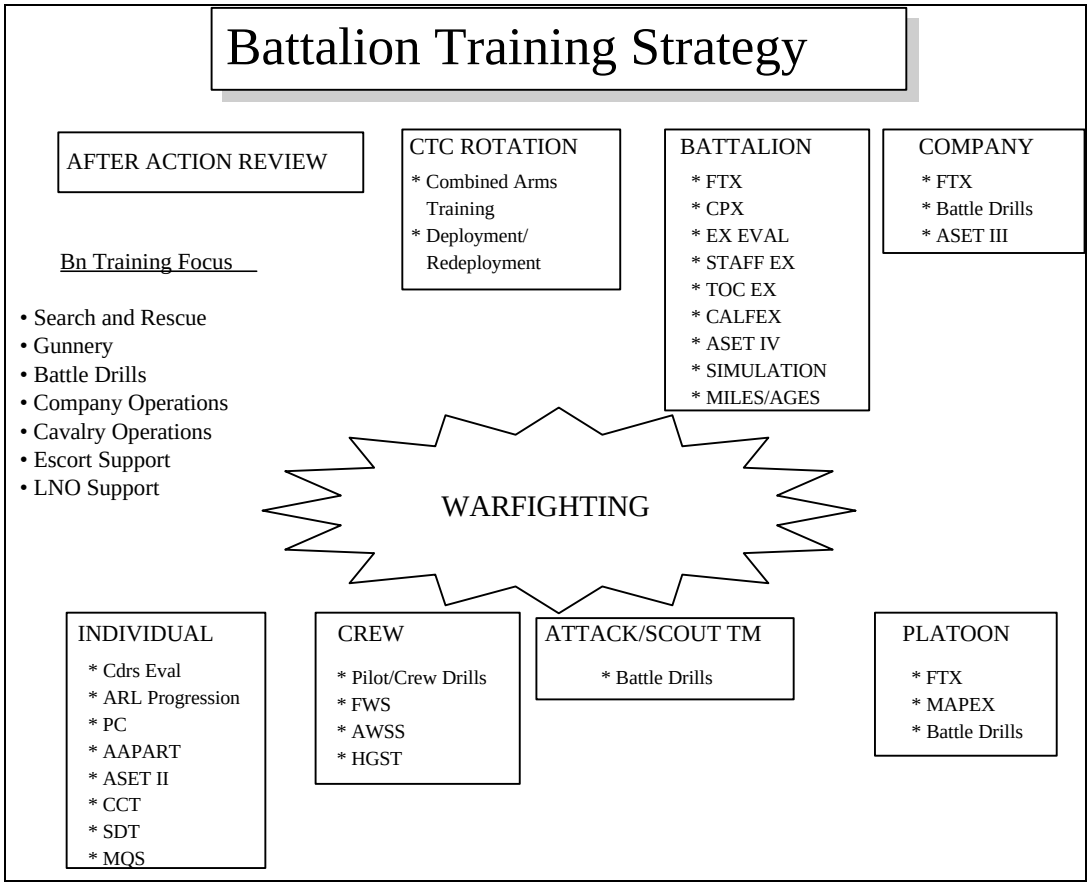

Figure 11. Battalion Training Strategy

A MTP contains a method of building a training strategy that achieves that proficiency as well as provides a road map for all the unit members to understand. A good training program lists all training events along with required resources. These are matched with the tasks the trainer has selected from the MTP which the trainer deems as required to train the unit's METL to standard.

The unit's training program should contain three elements in order for all the members of the unit to understand how training is organized. There are the warfighting

collective strategy (maneuver strategy), the weapons proficiency strategy (gunnery strategy), and the individual training strategy (soldier strategy). The unit collective training strategy provides a framework in which the trainer plans major unit training events. An example of these may include platoon field exercises, company field exercises or battalion field exercises. The weapons proficiency strategy is build around the requirements outlined in either the unit's weapons qualification plan or the Department of the Army Pamphlet 350-38 (commonly referred to as the STRAC manual) and other manuals which outline anything from how to run ranges to how to fire each weapon or weapon system. The training basis prior to starting any collective training is the individual soldiers training plan (soldier strategy). This plan must address specifically how each soldier will conduct training to maintain their skill and specifically what tasks are required. Listed with each of these plans are all the requirements to include training areas and other resources required for the training.

The key trainer, normally a commander, is responsible in identifying the required collective tasks from the unit's respective MTP which will ensure that the unit will attain METL proficiency. To assist the trainers, quantifiable goals should be established and a commander's intent for training disseminated among the unit's leadership. These goals can be built around four principle parts: Leading, Caring, Training, and Maintaining. Some ideas are illustrated in Figure 12.

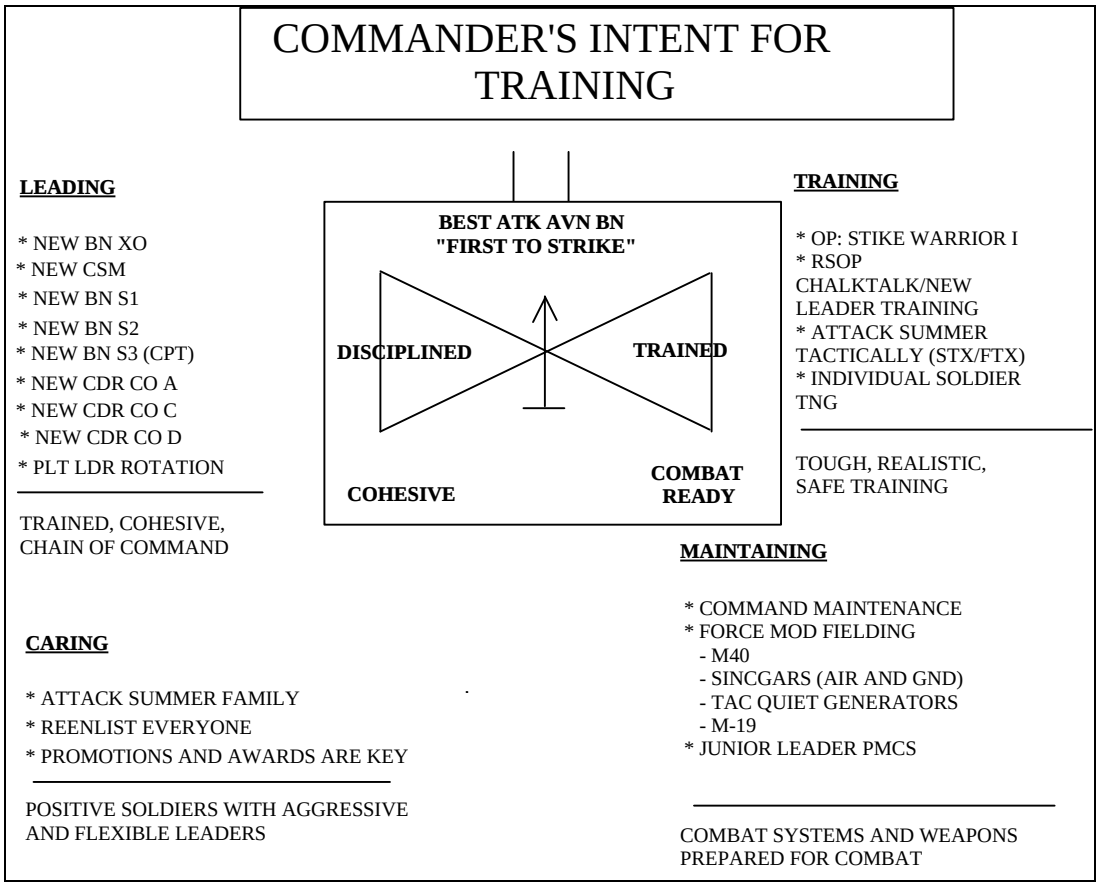

Figure 12. Commander's Intent for Training

From the list of collective tasks, the trainer integrates all METL-derived MTP training tasks. A part of this review is to identify where critical training gates are located. A training gate is an event that an individual or unit must accomplish prior to progressing to the next level of training.

Gates provide a ladder-achievement oriented training program. For example, if the battalion is planning to conduct a FTX on its collective mission of Movement to Contact, the platoon is expected to complete its level of training first followed by the company. The platoon training could be completed using a STX. This STX then could be identified as a training gate for the battalion's training exercise. By designating this STX as critical, the trainer can assess clearly identified and defined tasks from the doctrinal manuals to

ascertain whether the platoon is ready to become part of a more complicated training event. The requirement for critical training gates recognizes that the company's METL and the commander's assessment of his company's training status will determine the selection and timing of the collective training exercises in the platoon training strategy.

Training Methodology

The role of an MTP is to facilitate planning, preparation, and execution of training. Understanding how to train tactical units is the most critical step in establishing a complete training program. As such, it is important for leaders to fully understand the essential steps to quality training. Adapted from FM 25-100 and FM 25-101, Figure 13 outlines an eight-step methodology that provides a sequence units can use to plan and coordinate individual and collective training.

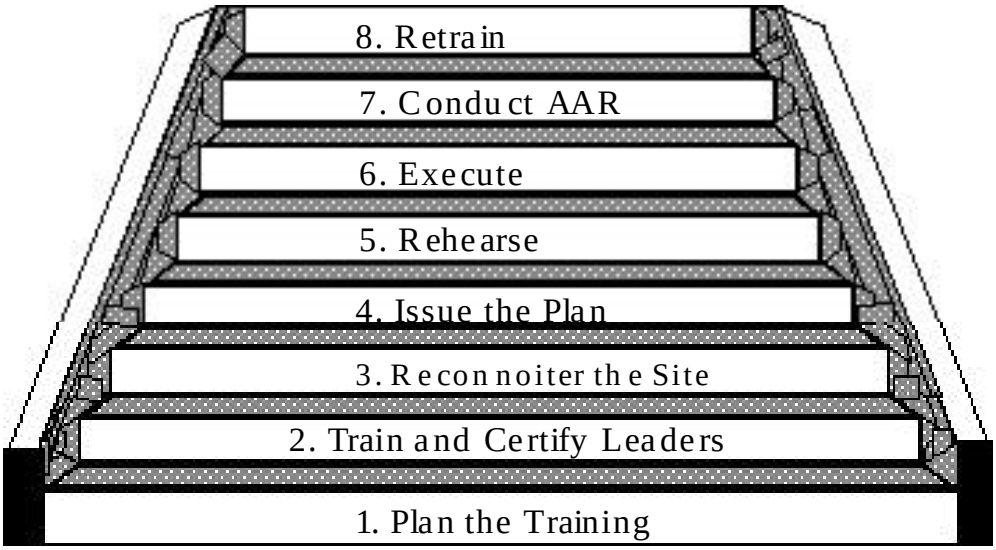

Figure 13. Training Methodology Steps

While each step may appear simple enough, there are several key issues that must be understood prior to using the Army's dwindling resources. Each leader must fully

understand those associated issues. The steps are listed in most of the infantry and armor doctrinal manuals but not in any aviation manual.

STEP 1: Plan the training

As in any operation, planning is the foundation for successful execution of the unit's training plan. This process involves leaders at all levels of the unit organization. Within a brigade, it is the battalion commander who is the primary trainer of all the platoons and the brigade commander who is the primary trainer of companies. Both are responsible for developing a comprehensive, long-term training strategy that encompasses a variety of training events, such as FTXs and STXs. Based on the unit's METL, the commander makes an initial assessment of the entire battalion, including companies and platoons, to identify systemic weaknesses. A training focus can then be developed and specify the individual and collective tasks on which to train and evaluate.

The company commander will use the battalion commander's plan to define their responsibilities and to assist the battalion staff in the planning and execution of training for their unit. In preparation for training, commanders execute their own training strategy. At company-level, this training usually focuses on individual leader training as well as collective tasks and battle drills, primarily through the use of STXs.

Platoon leaders focus on individual training and on collective training oriented primarily at the crew- and team-level. The platoon should be able to perform all of its collective tasks and battle drills according to standards and guidelines as outlined in the MTP, Field Manuals, and unit SOPs. To accomplish this, platoons plan and execute limited STXs before taking part in company training. These exercises can increase the confidence level of individual crew members and enlisted soldiers and provide valuable

operational experience. The platoon leader can use sand table exercises and Operations Order (OPORD) drills to ensure all aircraft commanders have a basic understanding of the tasks and drills they are expected to execute. At this level, it is the instructor pilot's function to ensure that individual tasks within the aircraft are accomplished to standard. It is the platoon sergeant's job to ensure that the platoon movement and assembly area occupation plans are in order at the individual soldier level. It is this individual who normally is charged with the movement of the unit's equipment to the assembly area. The noncommissioned officer is responsible for all individual task training except the flight crews' training, which is the instructor pilots' responsibility.

There is never enough time to train every task. In developing training plans, leaders must prioritize the tasks that require training, focusing on their units' biggest operational challenges and on their most difficult sustainment skills. Before training begins, commanders should conduct training meetings with all leaders in their units to analyze training requirements and prioritize tasks. This kind of session can also help to identify weak areas that require the attention of the trainers and leaders.

Once the unit leaders have identified the tasks to be trained, they must integrate them into a unit training schedule.

The platoon leader may submit a list of selected tasks and related training events to the company commander. The commander in turn develops his own list, but he must review the platoon leader's recommendations. Once the commander has approved the list of tasks and related training events, he includes them on the company training schedule for review by the battalion operations officer and final approval by the battalion commander.

Along with their recommendations for training events, platoon leaders must also submit the list of resources they will need, providing the unit with sufficient time for acquisition and coordination. Company commanders must coordinate resource requirements with the battalion.

STEP 2: Train and certify leaders

This is the most important step of the training methodology and covers everyone involved in unit training. The proficiency and preparedness of the trainer will directly affect the quality of training and the proficiency the unit gains during training. Prior to execution of training, senior leaders must certify all subordinate trainers and leaders to ensure their technical and tactical proficiency in relation to the unit they will be training. This can be done using a series of officer and noncommissioned officer professional development (OPD/NCOPD) classes, followed by certification exercises. These can take the form of written exams and/or sand table evaluations. How the senior leader chooses to perform the assessment of the trainers is not the issue. The important point is that the senior leader has assessed and certified the trainer prior to conduct the training.

Commanders must ensure subordinate leaders (officer and noncommissioned officer) are able to perform leader tasks in support of the unit's collective tasks.

STEP 3: Reconnoiter the site

After trainers and evaluators are certified, the commander must conduct a site reconnaissance of the area where the training will occur. It is at this point that the planners begin to develop graphic control measures for the exercise and identify how the training area will be used.

STEP 4: Issue the plan

After planning and coordination are completed and the training event begins, the subordinate leader receives an operations order and begins the troop-leading procedures. While the leader formulates the plan, the rest of the platoon conducts the various activities of troop leading procedures, including crew training in preparation for the exercise. The commander assess the subordinate leader's understanding of the order by requiring a back-brief. This ensures that the leader is ready to issue their order to their unit. It will also test their ability to understand oral orders and build their confidence prior to stepping in front of their soldiers to issue the order.

STEP 5: Rehearse

Another critical step in the training process which should never be underestimated. Trainers and commanders must plan for subordinate unit rehearsals and ensure they are conducted as part of the platoon's troop-leading procedures. A well-planned, efficiently run rehearsal can reinforce earlier training and increase proficiency in those training tasks for the event. The rehearsal will also reveal possible weaknesses in the plan which ensuring that all the player actions are synchronized with everyone else involved. Lastly, it will also bring into the open any missed and completed coordination requirements between involved units. A well-conducted rehearsal will ensure that all individuals will fully understand the concept of the operation, how other parts of the plan are integrated into the plan and may also possibly required participation from each of the participants.

STEP 6: Execute

Execution of a training exercise should be attempted only when the training unit has a clear understanding of how to execute the mission. The trainer makes this determination at the conclusion of the rehearsals. At that point, the leader either allows the unit to execute the training or continues with more rehearsals, focusing on leader training. During the execution phase, the trainer conducts a detailed evaluation for use during the After Action Review (AAR), which is conducted immediately following the exercise.

STEP 7: Conduct an After Action Review

At the conclusion of the exercise, the unit receives a complete AAR from the trainer. The AAR is a professional discussion that requires the active two-way participation of those being trained. This structured review process allows training participants to discover for themselves what happened, why it happened, and how the unit can improve its performance. Evaluations are conducted using the GO/NO-GO criteria described in Chapter 5 of the MTP. Trainers provide the participants with a rating for each task trained during the exercise. This provides the unit leadership with a source of data from which they can develop or focus future training events.

STEP 8: Retrain

Based on the evaluation results, the unit must undergo retraining on each task for which it receives a NO-GO rating. Trainers and leaders develop a training program to meet these specific requirements. The unit can then be reevaluated, either at the STX/FTX site or at a later date.

Evaluation

As outlined in step 6 through 8 above, training evaluations play a critical part of the units training plan. Evaluations are a means by which the evaluated unit and the observing training learn exactly where they stand based on a definable standard. The are two types of evaluation which may be used, internal or external. Internal evaluations are conducted at all levels and must be inherent in all training. External evaluations are conducted by a headquarters above the level of the unit being evaluated.

Chapter 6 of a MTP addresses to procedure for setup an external evaluation. For many this is a lost art. In reality, it is a simple process. The documents required to establish an evaluation, be it external or internal, are shown in Figure 14.

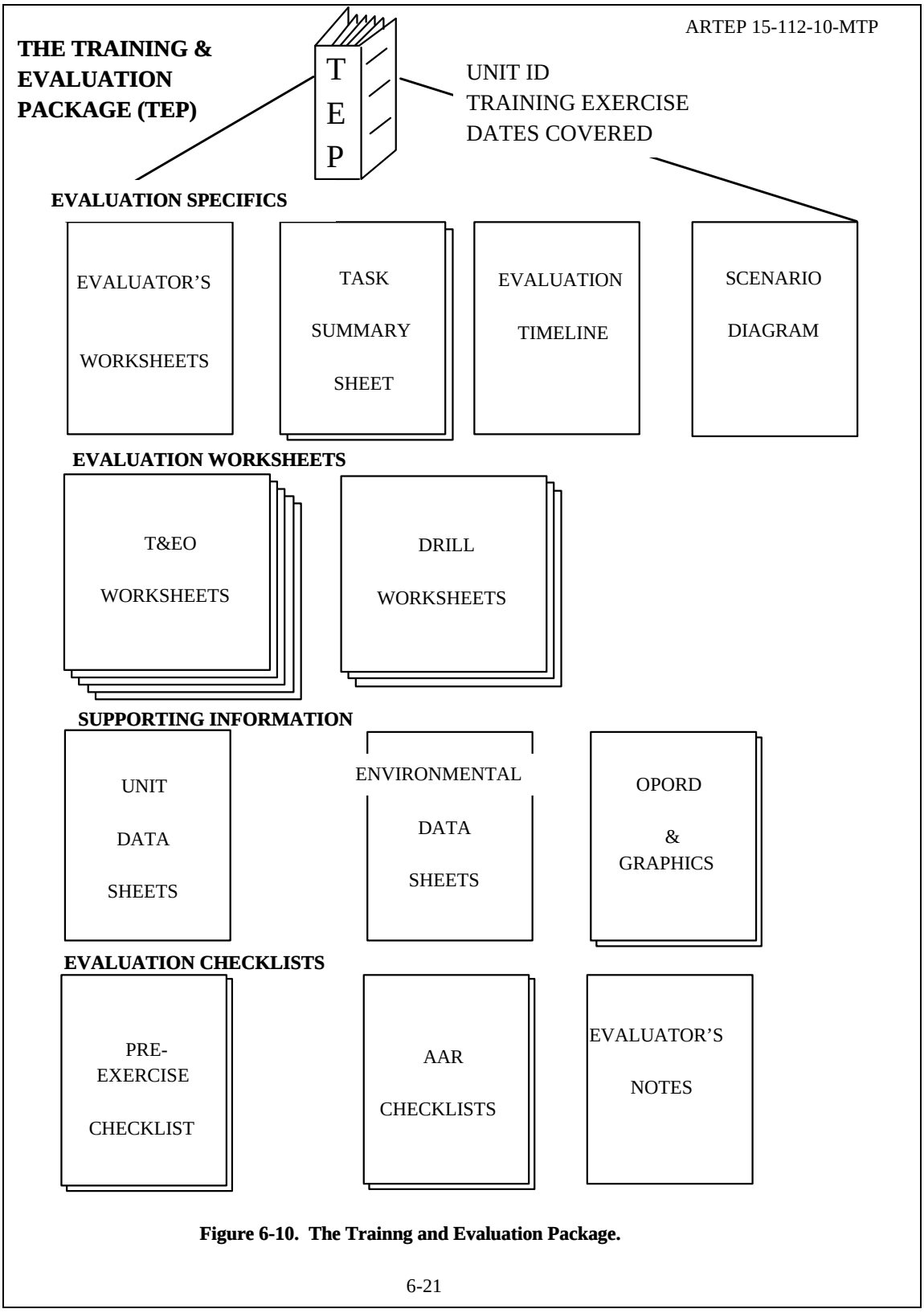

Figure 6-10. The Trainng and Evaluation Package.

6-21

Figure 14. Evaluation Documents

First, receive the METL from the unit to be evaluated, then list the required T&EO tasks which support the tasks. Next, receive guidance from the commander as to what special area he or she wants to place more emphasis and then develop a plan to assess the training tasks. The key is to know what is to be assessed and how that information will be transferred back to the unit's leadership in order to assist in developing future training plans. This is where the T&EOs, normally found in Chapter 5 of an MTP, provide the criteria for conducting the evaluation. The task statement places the task into focus by describing how well the tasks must be performed in order to receive a GO rating for the task. This is the purpose of the MTP, it provides simultaneous training focuses and evaluation guidelines.

Training to standard is more than a catch phrase. Good evaluations, the type that does not waste resources and ensures each soldier understands what went right or wrong, does not occur by accident. Good evaluations happen because the unit's leadership spent many hours planning and preparing for the event. For aviation units', this can be a frustrating process because there is not clear employment doctrine and no useable MTP.

The basis of structuring training is to provide direction and purpose. No not wants to deploy soldiers to training along with their equipment for any period of time without knowing what is to be accomplished. In order to establish professional training, all personnel, including junior enlisted, must understand was is expected of them. To insure that this occurs is the responsibility of the commander, the officers, and the non-commissioned officers within the unit. One technique which greatly assists in this process is lanes training. This is the only product that can tie training and evaluation into one very clear training roadmap and is the final product in the training process. While the

training process is cyclic in nature, once the trainer understands the process, the entire training plan can then be conducted together on what is called lane training.

Lane Training

Training today's attack helicopter units demand a structured training process that maximizes availability of training time by orienting on specific tasks derived from a unit's METL. Lanes training provides that focus. By putting together a lanes training program, the unit commander and staff think through every task and resource required to support a particular METL task. Figure 15 illustrates an example of the lanes concept. The focus of the chart is on those METL tasks that the battalion commander decided to focus time and resources. The tasks support four training objectives; occupation of the assembly area, passage of lines, movement to contact, and hasty attack. The lane is designed to train both the battalion's staff, the brigade forward area refuel and rearm team, the battalion's headquarters and headquarters and maintenance companies, and each attack helicopter company and their platoons. The emphasis of the training is on the attack helicopter platoon which cycles through the lane one at a time. The focus is to ensure that each platoon leader is able to execute their tasks, both individually and collectively. Figure 16 shows how all these tasks come together on one training event. Designing this concept ensures that the subordinate training are aware of their training responsibilities and trains the battalion's staff on their collective skills. The lane also incorporates the battalion commander and command-sergeant major in the training process. Given the right doctrinal manuals, it is possible to design a lane for each battalion critical wartime mission.

Lanes training provides the leader with a game-plan. It is the one place where the entire combat operation can be envisioned and then trained in steps based on unit proficiency. Once the unit has achieved the level of training required, the unit is ready for more advanced training or the next battalion lane training program.

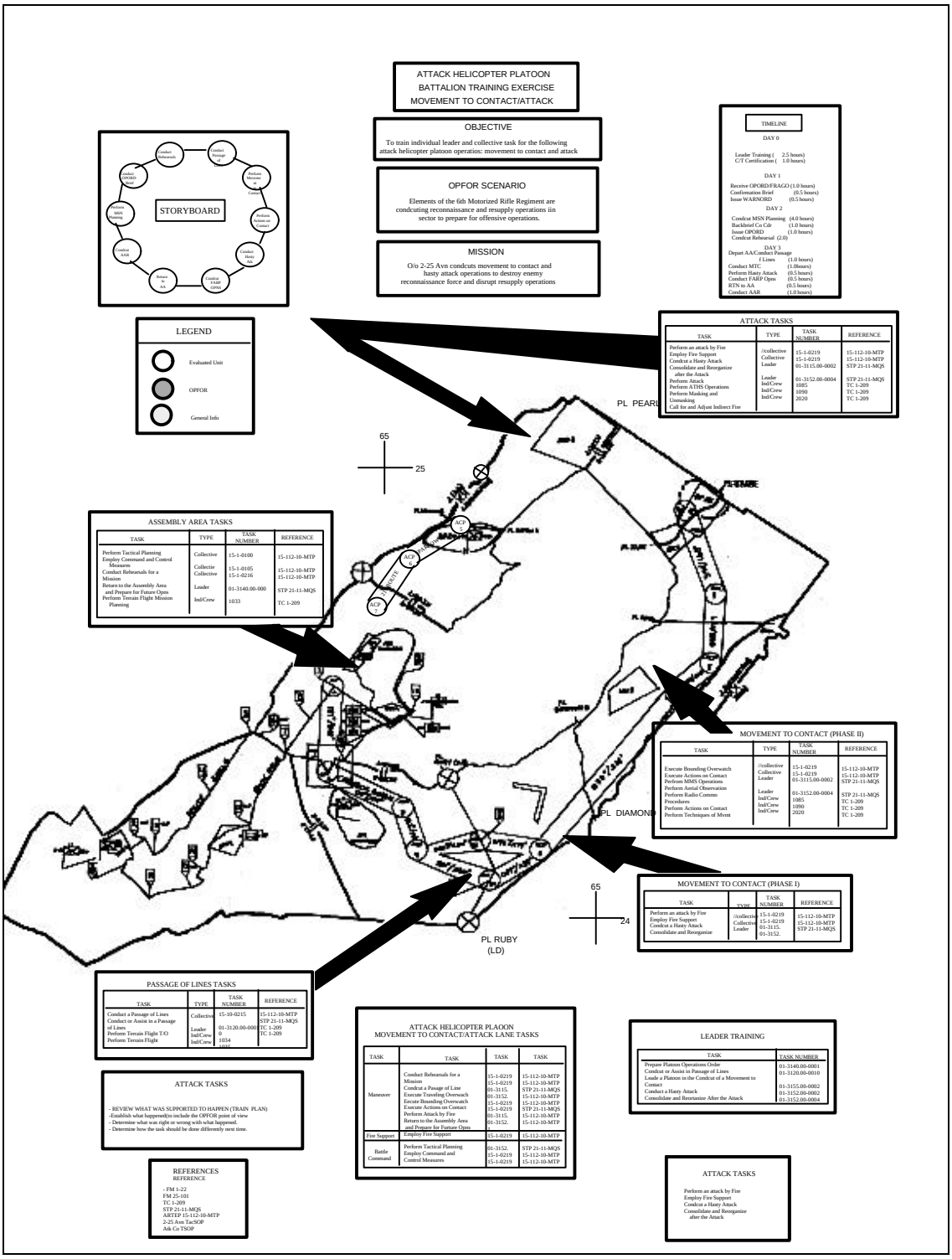

Figure 15. Occupation of an Assembly Area, Movement to Contact, and Attack Tasks

Chapter 5

Conclusions

Time is everything. Five minutes makes the difference between victory and defeat.

—Admiral Horatio Nelson

Warfighting is what armed military organization are about. They exist to conduct operations successfully. In order to attain this proficiency, doctrinal manuals must provide the framework by which leaders can conduct focused training. Leaders must also completely understand the training process.

Today in aviation units, training is measured by hours flown and the unit's flying hours program. General Vono recognized that the US Army required a new innovative training doctrine which would assist leaders in ensuring that units trained to standard. He approved the acceptance of the Army's plan to introduce the capstone training manuals. This acceptance of a new training approach was also the first day in a count-down toward full combat readiness. Because of the lack of a training doctrine in the Army Aviation, most units do not adhere to the capstone doctrine when conducting training.

Doctrine should be a clear set of guidelines used in preparation for wartime operations. But, doctrine has seldom reflected current attack helicopter employment methods. The central problem is when doctrine lacks clarity, and therefore credibility, leaders at every level fall back on prior experience and their personal knowledge of how

the attack helicopter should be employed. The danger in this is the armed helicopter will never achieve their full combat potential because they are still viewed in the Vietnam lens. As John Shy wrote,

> While keeping the focus on doctrine and its role in…battle, we can also be ready to admit the importance in some cases of a wider circle of mental factors, unofficial, often vague, sometimes not wholly conscious…. Doctrine, whether explicit or implicit, is never absent; defined simply, it is the general consensus among military leaders on how to wage war.[1]

This paper points to an obvious recommendation; tactical units which have attack helicopter units organic to its organization must strive to conduct realistic field training in preparation for combat operations. There must also be continual training evaluations of the commanders and their staffs. These training and evaluations should be oriented on operations in their most likely deployment scenarios. Orientation toward tactical training can not be overemphasized, especially because such emphasis will, hopefully, overcome the resistance of peacetime routine, priorities, and traditions. Documenting how to train units will ensure that the leadership is prepared to fight these unit. As long as there is not an adequate doctrine, the leaders will comfortably allow training conducted at the aircrew level. This will ensure that Army aviation is not prepared to fight as a maneuver member and that training will continue to waste flying hours.

John Shy stated this problem best when he wrote

> …the prewar experience of senior commanders and staff officers are dictated…by peacetime needs, not by wartime probabilities. Headquarters in the US Army habitually expend their time and energies on routine administration. Of course, headquarters work hard, but the result too often seems to be that the troops…are [more] readied for war than the men who lead them. The implied lesson is that senior commanders and their staffs [must] free themselves from the routine busywork of peacetime military life and to plan and carry out frequent, more realistic training exercises for

themselves…that will hone skills that otherwise must be bought with blood and, possibly, defeat.[2]

Notes

[1] Charles E. Heller and William A. Stofft, *America's First Battles, 1776-1965*: (1986), p. 332.

[2] Ibid., 331.

Glossary

Abbreviations

AAR	Assembly Area
BOS	Battlefield Operating System
CFX	Command field exercise
CPX	Command post exercise
CTC	Combat Training Center
FM	Field Manual
FTX	Field Training Exercise
LTX	Lane Training Exercise
METL	Mission Essential Task List
MILES	Multiple Integrated Laser Engagement System
MAPEX	Map Exercise
MTOE	Modified Table of Organization and Equipment
MTP	Mission Training Plan
OC	Observer-Controller
OPORD	Operations Order
SATS	Standard Army Training System
SM	Soldier's Manual
SOP	Standing Operating Procedures
STP	Soldier Training Publication
STX	Situational Training Exercise
T&EO	Training and Evaluation Outline
TEWT	Tactical Exercise Without Troops
TLP	Troop Leading Procedures
TM	Technical Manual

Terms

After-action report. A report, provided to unit leaders and commanders, which indicates exercise results and the overall training status by unit element. It is used by commanders to develop training assessments.

After-action review. (AAR) A professional discussion of an event, focused on performance standards, that enables soldiers to discover for themselves what happened, why it happened, and how to sustain strengths and improve on weaknesses. It is a tool leaders, trainers, and unit can use to get maximum benefit from every mission or task.

Assessment. The lane training process phase following execution and consisting of after-action reviews (AARs) and follow-up actions. Although frequently considered to be a post-exercise phase, assessment consists primarily of AARs which are conducted during or immediately after a lane training exercises lane execution.

Briefback. An event that occurs when subordinates repeat what the leader wants them to do, repeat why the leader wants them to do it, and tell the leader how they are going to accomplish the mission.

Battle drill. A critical collective task at team or platoon level executed without the application of a deliberate decision-making process. It is initiated on cue, is a standard throughout the Army, and requires minimal leader orders. See "Drill."

Battle focus. A concept used to derive and prioritize peacetime training requirements form wartime missions.

Battle task. A task which must be accomplished by a subordinate organization if the next higher headquarters is to accomplish a mission-essential task. Battle tasks are selected by the senior commander from the subordinate organization's mission-essential task list.

Certification. Written verification that soldiers can perform a task to the standard.

Command field exercise (CFX). A field training exercise with reduced troop and vehicle density, but with full command and control and CSS units.

Command post exercise (CPX). A medium-cost, medium-overhead exercise in which the forces are simulated that may be conducted from garrison locations or between participating headquarters.

Critical task. A task selected for training.

Drill. A disciplined, repetitious exercise to teach and perfect a skill or procedure; e.g., fire, man overboard, abandon ship. A standardized, instantaneous, and instinctive action or procedure which is a trained response to a stimulus; e.g., enemy action, leader's order. See "Battle drill."

Execution. The lane training process phase following planning and consisting of actions involving preparation, presentation, and performance of collective tasks to desired standards.

A Field training exercise (FTX). A high-cost, high-overhead exercise conducted under simulated combat conditions in the field. It exercises command and control of all echelons in battle functions against actual or simulated opposing forces.

Lane. A standardized and structured training exercise or simulation used to train on one or more collective tasks. Also, a designed area, terrain, or facility used to replicate a unit's wartime mission or environment during a land training exercise's land execution.

Lane Training. A process for training company-sized and smaller units on collective tasks (and prerequisite soldier and leader individual tasks and battle drills) supporting a unit's mission-essential task list. The process consists of planning, execution, and assessment phases. The execution phase is a battle-focused lane training exercise. Lane training culminates in a lane training (LTX) conducted under conditions replicating the unit's operational mission and environment. Although an LTX is usually conducted as a live training simulation of one or more collective tasks, it can be also conducted as a constructive or virtual simulation. Like all training, the goal of lane training is to ensure soldiers, leaders, and units become tactically proficient and technically competent.

Lane Training Exercise (LTX). The execution phase of the lane training process. It is an exercise used to train company-size or smaller units on one or more collective tasks (and prerequisite soldier and leader individual tasks and battle drills) supporting a unit's mission essential task list; however, it usually focuses on one primary task. An LTX consists of assembly area, rehearsal, lane execution, after-action review, and retraining activities which culminate the lane training process. An LTX is a situational training exercise conducted using lane training principles and techniques.

Live simulation. A representation of military operations using military personnel and equipment to simulate experiences achieved during actual combat conditions.

Map exercise (MAPEX). A low-cost, low-overhead training exercise that portrays military situations on maps and overlays that may be supplemented with terrain models and sand tables. It enables commanders to train their staffs in performing essential integrating and control functions under simulated wartime conditions.

Mission. A series of related tasks that comprise the major capabilities and requirements imposed on a unit by its parent organization. The primary task assigned to an individual, unit, or force. It usually contains the elements of who, what, when, where, and the reasons therefore, but seldom specifies how.

Mission-essential task list (METL). A compilation of collective mission-essential tasks which must be successfully performed if an organization is to accomplish its wartime mission.

Mission-essential task or METL task. A collective task in which an organization must be proficient to accomplish an appropriate portion of its wartime mission.

Mission Training Plan (MTP). A descriptive training document which provides units a clear description of "what" and "how" to train to achieve wartime mission proficiency. MTPs elaborate on wartime missions in terms of comprehensive training and evaluation outlines, and provide exercise concepts an related training management aids to assist field commanders in the planning and execution of effective unit training.

Operations-to-Collective Task Matrix. Located in a unit's ARTEP MTP is used to determine collective tasks trained in support of the critical wartime missions. Additional tasks, derived from the battalion's war plans and not listed in the MTP,

still require a written Task and Evaluation Outline (T&EO) and linkage to the appropriate collective task.

Operating Tempo (OPTEMPO). The annual operating miles or hours for the major equipment system in a battalion-level or equivalent organization. OPTEMPO is used by commanders to forecast and allocate funds for fuel and repair parts for training events and programs.

Planning. The lane training process phase consisting of actions involving unit training assessment, analysis, design, development, scheduling, resource acquisition, support coordination, pre-training, and preparation for training.

Principles. The (1), basic truths, laws, or assumptions; (2), rules or standards of behavior; (3), fixed or predetermined policies or modes of action. Professions are occupations and vocations requiring training and education in a specialized field—training and education in the doctrine of that profession.

Procedure. (DOD) A procedure begins with a specific, documentable event that causes an activity to occur. The activity must produce a product that normally affects another external organization. Frequently, that product will be the event that causes another procedure to occur. It is important to recognize that a procedure determines "what" an organization must do at critical periods but does not direct "how" it will be done. (JP 1-02)

Rehearsal. An event in which one or more members of a unit practice, recite, recount, repeat, or drill a set of tasks or procedures to prepare for a formal performance. It is a training technique used to ensure team members understand what they and other members of the team must accomplish to perform a task successfully.

Rock Drill. A walk-through rehearsal conducted over limited terrain (i.e., an extended sand table).

Sand table. A rehearsal using a model of the terrain or facility in which training or an actual operation will take place.

Situational training exercise (STX). A short, scenario-driven, mission-oriented, limited exercise designed to train one collective task, or a group of related tasks or drills, through practice. An STX which uses lane training principles and techniques to support the lane training process is called a lane training exercise.

Standard. A statement which establishes a criteria for how well a task or learning objective must be performed. The standard specifies how well, completely, or accurately a process must be performed or a product must be produced. The task standard reflects task performance requirements on the job. The learning objective standard reflects the standard that must be achieved in the formal learning environment.

Tactics. (DOD) 1. The employment of units in combat. 2. The ordered arrangement and maneuver of units in relation to each other and/or to the enemy in order to use their full potentialities. (JP 1-02)

Joint tactics, techniques, and procedures. (FM 100-23). Actions and methods that implement joint doctrine and describe how forces are employed in joint operations, joint TTP are promulgated by the JCS. (JP 3-07.3). Doctrine for joint operations and training.

Task. A clearly defined and measurable activity accomplished by individuals and organizations. A tasks is the lowest behavioral level in a job or unit that is performed for its own sake. It must be specific; usually has a definite beginning and ending; may support or be supported by other tasks; has only one action and is described using only one verb; generally is performed in a relatively short time (however, there may be no time limit or there may be a specific time limit); and it must be observable and measurable. The task title must contain an action verb and object; it may contain a qualifier. See "Training Objective."

Task condition. A description of the field conditions under which the task will be performed. The condition expands on the information in the task title by identifying when, where, and why the soldier performs the task and what materials, personnel, and equipment the soldier must have to perform the task.

Task standards. See "Task" and "Standard."

Task steps. The required unit or individual actions that must be performed to accomplish the critical task. Each step must be specific and detailed and contain only one action or unit of work. Note: A collective task step can be a supporting individual or collective task.

Task summary sheet. A page that summarizes the results for each task in the lane. It is a list for one unit of collective task titles, training and evaluation outline numbers, tasks steps (optional), and evaluations (as "GO" or "NO GO"). It may be displayed as a matrix listing lane tasks and task steps vertically (in rows), listing days horizontally (in columns), and with blank blocks to record "GO" or NO GO" task performance proficiency rating for leader proficiency verification (V), crawl (CR), walk (W), run phase (R), and completed to standard (C). It may include space for signature of the senior observer-controller and the unit leader.

Techniques. FM 100-23. The general and detailed methods used by troops and/or commanders to perform assigned missions and functions, specifically, the methods of using equipment and personnel. For example, a tactic of covering an obstacle with direct and indirect fires may be executed by emplacing machine guns on the flanks to fire down the length of the obstacle and mortars firing on the obstacle initially then beyond it to cutoff withdrawal of opposing force.

Training. The instruction of personnel to individually and collectively increase their capacity to perform specific military functions and tasks.

Training and evaluation outline (T&EO). A summary document, prepared for each training activity, that provides information on collective training objectives, related individual training objectives, resource requirements, and applicable training procedures. They form the basis for training, internal evaluations, and formal external evaluations.

Training assessment. A detailed evaluation of the unit's METL training proficiency which focuses on training deficiencies. It compares individual (soldier and leader) and collective task proficiency with Army standards.

Training exercise. A method of training which involves the use of a maneuver, operation, or series of drills. Exercises are used in units to train teams or units to accomplish their combined arms and services missions on the battlefield.

Training meeting. A periodic meeting conducted by platoon, company, and battalion key leaders to review past training, plan and prepare future training, and exchange timely training information between participants.

Training objective. A statement that describes the desired outcome of a training activity in the unit. A training objective consists of the following three parts:

Task—A clearly defined and measurable activity accomplished by individuals or organizations. See "Task."

Condition—The circumstances and environment in which a task is to be performed. See "Task."

Standard—The minimum acceptable proficiency required in the performance of a particular training task. See "Standard."

Training Strategy. A general description of the methods and resources required to implement a training concept. It lays out the "who, what, where, when, why, and at what cost" for training.

Troop leading procedures (TLP). Procedures used by leaders to prepare a unit to execute a mission. The procedures are as follows: receive mission; issue warning order; make a tentative plan; start movement; reconnoiter; complete plan; issue plan; supervise.

Validation. An evaluation of the training product and materials. It is the process used to determine if training accomplishes its intended purpose. Validate products and materials to:

Verify their training effectiveness in achieving the training objectives.

Identify training product deficiencies.

Improve efficiency and effectiveness of training objectives, sequence, products, materials, and execution.

Virtual simulation. A synthetic representation of warfighting environments patterned after simulated organization and operations of actual military units. Differences in the representation of the simulated battlefield (i.e., whether real world, computer generated, or interactive players in simulators) are transparent to the participants who interact with their particular representation of the warfighting environment.

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