

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 5 June 1998	3. REPORT TYPE AND DATES COVERED Master's Thesis, 15 August 1997 - 5 June 1998	
4. TITLE AND SUBTITLE Leveraging Lesson Learning ^{&} in Tactical Units LEVERAGING LESSON LEARNING IN TACTICAL UNITS			5. FUNDING NUMBERS	
6. AUTHOR(S) MAJ Fred W. Johnson, U.S. Army				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) US Army Command and General Staff College 1 Reynolds Avenue Fort Leavenworth, KS 66027-1352			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE A	
13. ABSTRACT (Maximum 200 words) This study examines how leaders of tactical units can use the Army's Lesson-Learned System (ALLS) to their best advantage. The ALLS was established to identify, collect, analyze, and then disseminate lessons from contingency operations and training exercises throughout the force. This system is central to learning in units and the Army. While the guidance for these procedures is very clear for the overarching Army program, very little information is provided to leaders of tactical units on how they can best support the program and leverage lesson learning in their organizations. Analysis revealed that lesson learning as it is defined in AR 11-33, The Army Lesson Learned System occurs on an ad hoc basis in tactical units. There are several reasons for this shortfall. Nevertheless, the Army's lesson-learned program, as it pertains to tactical units, needs to be reevaluated. It is recommended that specific guidance on how to establish learning programs be provided to leaders of tactical units in both AR 11-33 and in training doctrine. In the absence of doctrine, leaders must take proactive steps to establish learning programs in their units.				
14. SUBJECT TERMS Lesson Learning, Training, Leadership, Organizational Culture.			15. NUMBER OF PAGES 95	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT Unlimited	

19980731 060

LEVERAGING LESSON LEARNING
IN TACTICAL UNITS

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE

by

FRED W. JOHNSON MAJ, USA
B.A., Wofford College, Spartanburg, South Carolina 1985

Fort Leavenworth, Kansas
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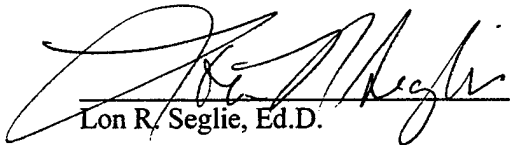
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THESIS APPROVAL PAGE

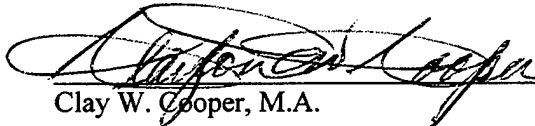
Name of Candidate: MAJ Fred W. Johnson, JR

Thesis Title: Leveraging Lesson Learning in Tactical Units

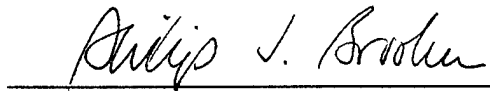
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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the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

ABSTRACT

LEVERAGING LESSON LEARNING IN TACTICAL UNITS by MAJ Fred W.
Johnson, USA, 95 pages.

This study examines how leaders of tactical units can use the Army's Lesson-Learned System (ALLS) to their best advantage. The ALLS was established to identify, collect, analyze, and then disseminate lessons from contingency operations and training exercises throughout the force. This system is central to learning in units and the Army. While the guidance for these procedures is very clear for the overarching Army program, very little information is provided to leaders of tactical units on how they can best support the program and leverage lesson learning in their organizations.

Analysis revealed that lesson learning as it is defined in AR 11-33, *The Army Lesson Learned System* occurs on an ad hoc basis in tactical units. There are several reasons for this shortfall. Nevertheless, the Army's lesson-learned program, as it pertains to tactical units, needs to be reevaluated. It is recommended that specific guidance on how to establish learning programs be provided to leaders of tactical units in both AR 11-33 and in training doctrine. In the absence of doctrine, leaders must take proactive steps to establish learning programs in their units.

ACKNOWLEDGEMENTS

I would like to first thank my wife Laura and daughter Madelyn for their support during the nine months it took to complete this thesis. Laura provided me the technical and practical advice on the use of the English language that I desperately needed throughout the project. Madelyn woke me up in the morning and after a bottle and a nursery rhyme I had no choice but to start writing. Both gave me the reason to get away from the computer terminal and enjoy life.

I wish to also acknowledge the efforts of my thesis committee. My committee, Dr. Lon Seglie, LTC Marvin Decker, and Mr. Clay Cooper guided me through this project with great skill and patience. I thank them sincerely for their assistance.

Additionally, I would like to thank Major Mark Martins. We covered many miles this year -- literally and figuratively. His counsel contributed greatly to the completion of this study. His friendship made for an outstanding year.

I would also like to thank the soldiers and leaders of Task Force Eagle that served in Bosnia from December of 1995 to November of 1996 and especially Colonel Greg Fontenot and the members of the "Ready First Combat Team." They, along with my fellow workers at CALL and JRTC, were the inspiration for this project.

Finally, I owe much to Colonel Dave Fastabend, Team Chief of Bosnia-Herzgovina CAAT One -- I would not be where I am today if it were not for him.

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LIST OF ABBREVIATIONS

AAR	After Action Review
AEF	Army Expeditionary Force
AGFHQ	Army Ground Forces Headquarters
ALLS	Army Lessons Learned System
AR	Army Regulation
CAAT	Combined Arms Assessment Team
CALL	Center for Army Lessons Learned
CTC	Combat Training Center
FM	Field Manual
G3/S3	Operations Officer
JRTC	Joint Readiness Training Center
MACOM	Major Army Command
NTC	National Training Center
O/C	Observer/Controller
SME	Subject Matter Expert
TTP	Tactics, Techniques, and Procedures
TC	Training Circular
TRADOC	Training and Doctrine Command
WALLP	Wartime Army Lessons Learned Program

CHAPTER 1

INTRODUCTION

Vignette One: Learning in Bosnia-Herzegovina (1995-96)

In December of 1995, the majority of Task Force Eagle prepared to cross the Sava River in support of Operation Joint Endeavor. On 30 December, prior to the crossing of the Task Force, a small convoy comprised of Military Police and Psychological Operation's soldiers deployed into Bosnia. Their mission was twofold: Mark a route and position signs alerting the local populace that Task Force Eagle was entering their country to implement the requirements of the Dayton Peace Accord. That afternoon the convoy passed through a Bosnian Serb checkpoint and turned onto a snow covered road. Shortly afterward, the lead vehicle struck a mine and a soldier was seriously injured.

While recovering from his injuries, the wounded soldier was interviewed by a member of a Center for Army Lessons Learned (CALL) Combined Arms Assessment Team (CAAT) to determine what went wrong during the mission. Though many things were mentioned, there was a recurring theme: Do not travel on dirt roads that are covered with snow and that have not been previously traveled or cleared of mines.

The CALL representative reported his findings to the CAAT team chief, a lieutenant colonel War College Fellow who headed CALL's mission in Bosnia. The team chief published a report and disseminated the findings throughout the task force. Shortly after the incident, Major General Nash, the commander of Task Force Eagle, ordered that "use of other than approved roads in or around the zone of separation must be approved at the battalion commander level."¹

In the weeks that followed, a number of lesser mine incidents occurred throughout the Task Force Eagle area of responsibility. As a result, Major General Nash directed that a "mine awareness" after-action review (AAR) be conducted at the task force headquarters in Tuzla, Bosnia. Each of the brigades, to include the multi-national brigades, were required to conduct

AARs down to platoon level to determine lessons from the mine incidents. The brigade commanders then briefed the findings in the AAR at Tuzla. Collectively, the leadership of the task force determined several factors that contributed to the mine incidents. Steps were immediately instituted to protect the soldiers and lessen the mine threat. In an area filled with literally millions of mines and unexploded ordnance, the number of mine incidents decreased dramatically and arguably lives were saved.

Vignette Two: Learning at Home Station

Thousands of miles away, in a training area of an Army installation, an infantry rifle platoon conducts a security patrol during a training exercise. The lead squad of the platoon identifies an enemy tank at a combat outpost. It is during hours of limited visibility and there is zero illumination. The platoon has been tasked to destroy enemy armor that may disrupt the battalion's movement. Three soldiers move to employ their AT-4s in volley fire. Once in position, the soldiers aim their weapons but discover they cannot acquire the target because of the limited visibility conditions. Following the operation, the platoon conducts an AAR led by an observer/controller who accompanied the unit during the exercise. At the conclusion of the AAR, the platoon collectively determines that it is necessary to employ illumination in concert with AT-4s for the anti-armor fires to be effective at night. The platoon sergeant vows that the technique will be incorporated into the unit's standard operating procedures.

In the next operation the platoon is defending as a part of a company mission. The company commander arrays his force into anti-armor hunter-killer teams. The mission of the teams was to establish anti-armor ambushes at night to destroy the enemy's regimental reconnaissance assets. The platoon that fought the combat outpost in the previous operation carries hand-held illumination, employs the illumination with the AT-4 fires and destroys several BMPs.

Vignette Three: A Failure to Learn

The next month another platoon from a different brigade in the same division is fighting the fictitious Peoples Revolutionary Armed Forces of Atlantica at the Joint Readiness Training Center (JRTC) at Fort Polk, Louisiana. During a night operation the platoon has a chance contact with a T-72 and gets decimated by the tank's co-axle machine gun because the soldiers cannot acquire the target and engage it with their AT-4s. Fortunately, it was only training. But it could have been in the desert of Southwest Asia where the cost could have been far greater.

Statement of the Problem

An Army's ability to learn tactical lessons in training and in war is tightly linked to success in combat. Without an effective process for identifying and distributing tactical lessons to soldiers and units, the Army's ability to adapt to changing tactical environments and threats is significantly decreased. The more efficient the lessons-learning process, the more likely units will incorporate the lessons as tactics, techniques, or procedures (TTP) in operations. This study will examine the effectiveness of the Army's current lesson-learning process as it pertains to tactical units.

The above vignettes demonstrate an aspect of the Army's lesson-learning process as it is applied at the tactical level. The last example represents the failure of the lesson-learning process to work effectively. It was a failure because the lesson was not truly learned. At least, it was not learned to its fullest degree. How could it be those units within the same division could make the same tactical error within the span of a month? One unit fixed the problem. The other unit never knew the problem existed.

Nevertheless, lesson learning happens everyday throughout the Army, whether in the Posavina Corridor of Bosnia-Herzegovina, at the Joint Readiness Training Center, or in the back forty of Fort Campbell, Kentucky. In all of these places and everywhere else that soldiers toil, sweat, and sometimes bleed, tactical lessons are being identified that could save lives, win battles,

or make the soldier's life a bit easier. Unfortunately, in those same places, lessons are not being learned, and the cost could potentially be devastating to the Army's readiness and its ability to win in combat. Therefore, it is necessary to determine if leaders of tactical units are using a lesson-learned process to its best advantage. If the Army's process, in its current state, is not effective, then it must be determined how to make the system better?

This problem is not new for the U.S. Army. Dennis Vetock observed in *Lessons Learned: A History of U.S. Army Lesson Learning*, "When Americans first filtered European ways of warfare through their own military experiences, they practiced lesson learning that continued throughout the early era. Their approach to learning from experience was informal, primarily oral, and highly individualized. No articulated procedures or organizations existed to institutionalize useable combat experience. This casual approach to lesson learning lasted into the 20th century and graduation from the American school into the global school of war."²

Formalized lesson learning emanated in World War One when General Pershing dedicated a special section in his headquarters whose duties entailed "the incorporation of changes suggested by actual experience into new Army Expeditionary Force field manuals."³ In every war since, organizations were established to identify and disseminate relevant tactical lessons, only to be disbanded after the conclusion of the conflict.

This was the case until 1985 when the CALL was established to collect lessons from training that was being conducted at the National Training Center (NTC) in Fort Irwin, California. Since its inception CALL has not only performed lesson learning missions at the Combat Training Centers (CTC), it has also participated every major U.S. contingency mission from Urgent Fury to current operations in Bosnia.

The CALL methodology represents an external form of lesson learning. In other words, observers or subject matter experts (SMEs), not permanently assigned to a unit, identify and

collect lessons. These lessons are then analyzed and disseminated to the unit conducting the operation or training exercise and eventually to the rest of the Army.

An internal form of lesson learning, which has evolved over the time is the AAR. An AAR may be formal or informal, but its basic premise is that "soldiers, leaders, and units, discover for themselves what happened during the training and why."

The role of the O/C in both home-station training exercises and training conducted at the CTCs represent both forms of lesson learning. Externally, the O/Cs derive tactical lessons through observing. Often, the O/C identifies the lesson and communicates the lesson in his or her teaching role directly to the unit or individual. However, the O/Cs greatest contribution to the learning of tactical lessons is through their role as facilitators during the AAR process and as coaches.

With the establishment of CALL, the institutionalization of the AAR process, and the use of O/Cs, the Army has made an incredible leap forward in lesson learning from its ad hoc past. However, several major links for a more effective process are missing.

CALL represents the Army's major source for the collection and dissemination of tactical lessons. CALL is equipped with state-of-the-art technology to facilitate this process throughout the spectrum of conflict and during training. CALL has an excellent methodology for lesson-learned collection planning and execution. However, CALL has limited resources in personnel to deploy to major contingency operations and training exercises.

CALL representatives cannot be everywhere, all the time. As a result, it is likely that only the surface is being scratched for all the lessons that are being identified. This is not to say that the lessons are being lost. Someone is benefiting from the lesson, but not everyone. The lessons might be identified, but they are not being disseminated. It is unknown whether these lessons could play a major role in influencing future operations, giving the U.S. an added advantage in combat.

The responsibility for collecting the Army's lessons should not and cannot rest completely on the shoulders of CALL. Army Regulation (AR) 11-33, *Army Lessons Learned Program: System Development and Application*, and AR 11-13, *TRADOC Remedial Action Program*, recognize this problem and offer a solution. AR 11-33 is the same document that established CALL as the focal point for the Army Lessons Learned Program.⁴ AR 11-33 clearly establishes the requirement for major Army commands (MACOM) to provide AARs to the Commander, Combined Arms Center and CALL. There is some question whether this is happening, and it does not have to be the case.

Lesson learning is a commander's responsibility. However, most commanders, particularly at the division level and below, do not have systems within their staffs to facilitate lesson learning. In accordance with Army training doctrine, units conduct AARs after exercises (and arguably after the conduct of contingency operations, engagements, and battles). Clearly, there are lessons being identified by the units during the AAR process. However, often there is not a depository for the lessons at division level and below. The unit that identified the lesson might learn it, but the information is not cross-fertilized across the division or the Army for that matter.

In some ways, this deficiency contradicts the dictum of "train how you fight." In every major U.S. conflict from World War One through Vietnam an agency was established as a conduit for lesson learning. Most of the time personnel from outside the unit performed the duties of lesson collectors, much like CALL does now. However, lessons were also collected in the form of battle reports (an older form of the AAR) and consolidated at division units and above. These lessons were then disseminated throughout the unit and often the entire Army.

Nonetheless, a trend in the US Army's history is that these agencies are disbanded at the conclusion of the conflict, only to be stood up again during the next war. It stands to reason that a permanent responsibility within at least the division be fixed and in place before the next war.

Once a repository is established there must be a system for the lessons to be distributed to all units within the division. Often this is done through "Commander's Notes." For example, the division commander may periodically write down his thoughts on issues that are important to him and then disseminate them to subordinate units. There is no requirement for him to do this, but it makes good sense. Officer and NCO professional development programs (OPD/NCOPD) are another tool to proliferate lessons. Nevertheless, the ALLS does not address the issue of how to structure a lesson-learning program at the unit level. More often than not it is based on the commander's priorities. Unfortunately, with an ever-increasing operational tempo, lesson learning takes a back seat to other requirements.

Though fixing responsibility of lesson learning within units and establishing a system to disseminate lessons is solid step forward, it does not completely solve the problem. Still, only each of the individual divisions that conduct their internal programs stands to gain from their lesson learning. The lessons must be disseminated throughout the entire Army for the process to be truly effective.

For this system to work requires that units perform quality AARs. As mentioned previously, the AAR is an internal form of lesson learning. The AAR is a type of guided discovery learning, and many sources indicate that guided (or tutored) discovery is the most effective learning method and has been shown to be more effective than through an instructor (external).⁵ However, many AARs are not conducted to the standard outlined in the Army's training doctrine. Often, AARs are not conducted at all.

If this is, in fact, the case then the Army as a learning organization is in serious trouble. The very heart of the Army's ability to grow, particularly at the tactical level, is deeply rooted in the AAR process. It is through AARs that lessons are internalized because it is the soldiers within the units that discover them. However, if the lesson is not collected and disseminated, it is often lost or just locally used by the identifying unit.

There is some question whether the business of lesson learning is useful at all. It has been argued that “all that what soldiers really need to know is written in doctrine” and that these lessons identified in formal and informal AARs are really dangerous because they have not been analyzed. They have not been tested in time and placed in our doctrine. They might have worked during one set of conditions, but would fail in another. Is this not the case with the Army’s doctrine, in general? But more importantly, if the Army must wait for lessons to be written in doctrine for them to be viable, then the Army stands the chance of losing the lessons altogether. The next conflict will not wait for Army’s doctrine to be written, staffed, and published. There has to be something that fills the void between the revisions of doctrine.

Primary and Secondary Questions

The purpose of this study is to examine the question: How can tactical units use the Army Lessons-Learned Program to their best advantage? To answer this question, the following secondary questions must be answered:

1. Why is lesson learning important?
2. How has the Army’s approach to lesson learning evolved and what are the most important lessons from the Army’s history of lesson learning?
3. What constitutes an effective lesson-learning program?
4. Currently, what Army programs exist to facilitate lesson learning and how do tactical units support the programs?
5. Based on the answers to questions two and three, what are the shortfalls of the Army’s lesson-learning programs as they currently exist?
6. How can tactical units better support the Army’s lesson-learning programs?

Assumptions

There are several assumptions that must be considered when answering the primary and secondary questions. The first is that CALL and the AAR process are just two of the formally

established means used to identify tactical lessons. O/Cs represent a combination of these techniques.

“Internal” and “external” are acceptable terms for the types of lesson learning being examined. Though not commonly used, they provide delineation between the lessons that are derived from within units through the AAR process and or self-discovery and those that are identified by a source outside the unit (O/C or CALL representative).

It must be assumed that in the near future units down to the battalion-level will have internet capability. This is an important assumption given that the internet, through the CALL homepage and other sources, is and will continue to be a means to quickly access lessons learned.

Because there is not a requirement in FM 101-5 for lessons learned cell in the G3/S3 staff, it is unlikely that one exists in most divisions and subordinate units. If they do exist, then they are anomalies within the Army.

Definitions

The term lesson learned, as defined in AR 11-33, *Army Lessons Learned Program*, in itself, represents a challenge to this study. AR 11-33 identifies two types of lessons learned: combat relevant lesson learned and lesson learned. According to the AR, a combat relevant lessons learned is defined as “Conclusions derived from analysis of observations obtained from military operations and training exercises that are useful to commanders in preparing their units for combat by identifying successful doctrine, tactics, techniques, and procedures or problems thereto. These combat relevant lessons learned also assist proponent school commandants and the integrating center commanders in the validating or changing current doctrine, training, organization, material, and leadership development.”⁶ The AR defines a lesson learned as “Validated knowledge and experience derived from observations and historical study of military training, exercises, and combat operations.”⁷ The AR does not define the term lesson.

AR 11-13, *TRADOC Remedial Action Program*, defines a lesson as being learned “when behavior is changed sufficiently to achieve the desired outcome.” The regulation further defines a lesson as “a behavior resulting in a desired outcome, i.e. actions that result in mission accomplishment, the repetition of which would produce similar success; includes tactics, techniques, and procedures (TTP), as well as the integration of new or improved material impacting on mission execution.”⁸

AR 11-13 best defines both a lesson and a lesson learned. This study deals primarily with lessons, particularly tactical lessons. A tactical lesson refers to new knowledge gained through experience relating to the tactical level of war. Within the framework of AR 11-13, it is behavior resulting in a desired outcome at the tactical level of war. Throughout this study I will attempt to distinguish between a lesson and a lesson learned. As an aspect of this study, I hope to further clarify the ambiguity of these definitions, resulting in a meaning that is more acceptable.

The AAR is another term that is often misused and for the purpose of this study requires further elaboration. FM 25-100, *Training the Force*, defines an AAR as “A structured review process that allows training participants to discover for themselves what happened, why it happened, and how it can be done better. The AAR is a professional discussion that requires the active participation of those being trained.”⁹

It is important to note that FM 25-100 goes on to say an AAR is not a critique.¹⁰ However, there is an important clarification that must be made in regard to the above definition. The AAR process is not strictly confined to the training environment. It cannot be if the wartime lesson learning system is to work. AARs must occur both in training and throughout the spectrum of conflict.

The purpose of this study, in part, is to determine the optimal lesson-learning program for a division. As a result, the term “tactical unit” applies to those units at the division level and below.

Limitations

It is impossible to ascertain the quality of AARs conducted by every unit in the Army. It is also uncertain whether all units conduct AARs, though it is required in our training doctrine. There is not a research tool available to objectively measure the quality of all AARs that are conducted on a daily basis within the Army. For this same reason, it would be nearly impossible to determine if the units conduct AARs at all. A survey could be used but it is my assessment that the results would likely be skewed. There would be few units that would admit that they do not conduct AARs. If the units did say that they conducted AARs, there would be no way of determining if they were, in fact, done to standard.

Delimitations

This study will be restricted to analyzing only CALL and the AAR process as vehicles for lesson learning. There are other means by which tactical lessons are identified and disseminated. The most prominent are lessons that are published in professional magazines such as *Infantry* or *Armor* magazine. This study readily recognizes the great work done through these mediums, but they will not be investigated in this research.

An aspect of this study involves discovering the degree of compliance of MACOMs in submitting AARs to HQDA and CALL upon conclusion of major training exercises. This requirement is clearly outlined in AR 11-13. Rather than questioning the division G3s, the level of compliance will be determined by interviewing members of the CALL staff who should receive the reports from the units. This is the most objective means in determining the level of compliance.

Significance of the Study

The following quote from a US Army War Department pamphlet dated July of 1945 best demonstrates the significance of this study. The pamphlet states, "The old saying 'live and learn

must be reversed in war for there 'we learn and live'; otherwise we die. It is with this type of learning that the Army is so vitally concerned."

This study will provide information on the lesson-learning system that is currently used in the Army. For the most part, the ALLS represents a solid foundation to allow soldiers and leaders to get the information they need to ensure that mistakes are not repeated and enhance the readiness of Army units. This information, alone, is important to the Army because many soldiers do not know that the program exists.

Though the ALLS conceptually provides a solid framework to facilitate lesson learning in Army units, there are deficiencies in the application of many of the program's initiatives. This study will highlight the shortfalls and offer solutions.

There is no reference or FM in the Army that consolidates information on how units can use the lessons learned system to increase their combat readiness. This study will provide the necessary information that could serve as a starting point for development of such a manual.

¹Greg Fontenot, "1 BCT, 1st AD (Task Force Eagle) Mine Analysis and Review" (an AAR presented to Major General Nash in Tuzla, Bosnia-Herzegovina on 14 July 1996), Appendix A.

² Dennis Vetock, *Lessons Learned: A History of US Army Lesson Learning* (Carlisle Barracks, PA: US Army Military History Institute, US Army War College, 1988), 7.

³*Ibid.*, 39.

⁴US Army, US Army Regulation 11-33, *Army Lessons Learned Program: System Development and Application* (Washington, DC: Department of the Army, 1989), 3.

⁵US Army, FM 25-101, *Training the Force: Battle Focused Training* (Washington, DC: Department of the Army, 1988), G-1.

⁶AR 11-33, 10.

⁷*Ibid.*

⁸US Army, TRADOC Regulation 11-13, *TRADOC Remedial Action Program* (Fort Monroe, VA: US Army Training and Doctrine Command, 1996), 17.

⁹US Army, FM 25-100, *Training the Force* (Washington, DC: Department of the Army, 1988), 5-1.

¹⁰FM 25-101, G-1.

CHAPTER 2

LITERATURE REVIEW

The importance of lesson learning and indirectly the value of this study is highlighted in two books: *Hope is Not a Method* by General Gordon Sullivan (Retired) and *The Fifth Discipline* by Peter Senge. The significance of learning is also emphasized in the Army's emerging leadership doctrine, FM 22-100, *Army Leadership* (Draft). Each identifies the importance of learning as a characteristic of successful organizations. Specifically, the books stress that successful organizations are *learning organizations*. The most important component of a learning organization is the leader who directs and promotes team learning in their subordinate organizations.

In FM 22-100's opening discussion on learning, General Sullivan is quoted, "As we, the leaders deal with tomorrow, our task is not to make perfect plans. Our task is to create organizations that are sufficiently flexible and versatile that they can take our imperfect plans and make them work in execution. That is the essential character of the learning organization."¹

The FM goes on to assert that leaders must be learning-oriented and they must inculcate this philosophy in their subordinates. To accomplish this the leaders must "create and foster an environment where the members of the organization keep track of lessons drawn from experience in 'what's worked'. They must make sure that these successful lessons 'lists' are shared with everyone."² The manual further expresses the importance of learning by stressing that leaders must develop techniques that will facilitate the transfer of experience from one organization to another.³ These points get at the very heart of the purpose of this study.

In *Hope is Not a Method*, General Sullivan dedicates an entire chapter to "Growing a Learning Organization." General Sullivan suggests that the hardest part of growing a learning organization is nurturing a culture that values learning.⁴ He believes that one of the best ways to accomplish this is through embedding the AAR process within the organization.

To elaborate on this idea, General Sullivan uses many of the concepts found in Peter Senge's *The Fifth Discipline*. In fact, in defining a learning organization General Sullivan quotes Senge, "A learning organization is one that is continually expanding its capacity to create its future. For such an organization, it is not enough merely to survive. 'Survival learning' or what is more often termed 'adaptive learning' is important – indeed it is necessary. But for a learning organization, 'adaptive learning' must be joined with 'generative learning,' learning that enhances our capacity to create."⁵

Using Senge's model, General Sullivan discusses how generative learning essentially means "amassing a body of experience, interpreting that experience, and changing behavior as a result."⁶ He goes on to say that the basis for this kind of learning is through a "structured, open process of sharing information." In the Army, this process is the AAR.

In *The Fifth Discipline*, Peter Senge provides a corporate view of how to build a learning organization. Ironically, of all the material found during the research of this study, Senge's book offers the most substantial information on the leader's role in lesson learning. Senge suggests that in building learning organizations, leaders must be "designers, stewards, and teachers."⁷ He continues by saying, "When all is said and done, learning organizations will remain a 'good idea,' an intriguing but distant vision of the future until people take a stand for building such an organization. Taking this stand is the first act, the start of inspiring (literally to 'breathe life into') the vision of a learning organization."⁸

Both General Sullivan and Senge's books are important to this study because they fill the void of available Army produced material on how to apply lesson learning concepts in units. The importance of learning is clearly established in FM 22-100. It is of such significance to the Army that "learning" is a "developmental task" on the newly implemented *Junior Officer Developmental Support Form*. However, our leadership doctrine, both present and emerging, does not address how leaders go about establishing lesson-learning systems in their units.

The notion of a learning culture is addressed in FM 22-100, as well as General Sullivan and Senge's books. *Enhancing Organizational Performance*, a study conducted by the National Research Council, was used to explore culture as it can be applied to unit learning. This book was important to this study because it provided the mechanisms to determine and evaluate how leaders may create and sustain a learning culture in their units

The idea for this study was conceived after reading Dennis Vetock's *Lessons Learned: A History of U.S. Army Lesson Learning*. Vetock's work begins with the early approaches to lesson learning starting in 1755 and ending in 1985 with the establishment of the CALL. The true value of the work lies in Vetock's analysis of "lessons in lesson learning". There is, in fact, much to be learned from the historical perspective of how an Army learns tactical lessons during war.

Army Regulation 11-33, *Army Lessons Learned Program*, establishes CALL as the "focal point for the Army Lessons Learned System (ALLS)."⁹ The purpose of ALLS and CALL is to establish "a system for the collection, analysis, dissemination, and implementation of combat, training, and material testing experiences with associated combat relevant lessons learned into Department of the Army doctrine, organization, research, development, acquisition, training, planning and other appropriate activities."¹⁰ An aspect of this study is to evaluate how well this system is working in the Army and if it is being used to its best advantage by leaders of tactical units.

There are two primary means that CALL uses to gather lessons from the Army. The first is through active collection of the relevant lessons. Active collection is when CALL supports a training or contingency operation by sending a collection officer or Subject Matter Expert (SME) to collect lessons. CALL may also organize and deploy a Combined Arms Assessment Team (CAAT) to the training event or contingency operation to collect lessons. For combat or contingency operations, the collection effort falls under the Wartime Army Lessons Learned Program (WALP).¹¹

The second means used by CALL is passive in nature where Major Army Commands (MACOMs) and the Combat Training Centers (CTC) submit after action reports to CALL. CALL then analyzes and archives the lessons and then disseminates them to the Army as appropriate. AR 11-33 requires that MACOM Commanding Generals “provide after action reports or other appropriate observations to the Commander, Combined Arms Center” at Fort Leavenworth.¹² CALL will then receive the observations, provide analysis to develop lessons learned and issues, recommend implementation of lessons learned and then disseminate the lessons.¹³

Support for the passive collection requires that unit's submit quality AARs to CALL. The Army's capstone training doctrine FM 25-100, *Training the Force*, and FM 25-101, *Battle Focused Training* provide the necessary guidelines for units to conduct thorough AARs. FM 25-100 defines an AAR as “a structured review process that allows training participants to discover for themselves what happened, why it happened, and how it can be done better. The AAR is a professional discussion that requires the active participation of those being trained. An AAR is not a critique.”¹⁴

FM 25-101 provides a more detailed explanation of how to conduct an AAR. It identifies that AARs may be formal or informal and that both types of AARs generally follow the same sequence of planning, preparing, and conducting the AAR.¹⁵ A key component of the AAR is the O/C. The O/C must be able to perform the tasks to be trained, experienced in the duties they are to evaluate, and knowledgeable in current doctrine.¹⁶ There must also be a plan to train the O/Cs. The O/C must be didactic in his or her approach to the AAR, understanding, again, that the AAR is discovery learning, not a critique.

A complimentary source of information for the AAR process is TC 25-20, *A Leader's Guide to After Action Reviews*. TC 25-20 expands on the concepts outlined in FM 25-100 and FM 25-101. More importantly, TC 25-20 highlights that “the AAR is one of the most effective

techniques to use in a combat environment. An effective AAR takes little time, and leaders can conduct them almost anywhere consistent with unit security requirements. Conducting AARs helps overcome the steep learning curve that exists in a unit exposed to combat and helps the unit ensure that it does not repeat mistakes. It also helps them sustain strengths. By integrating training into combat operations and using tools such as the AARs, leaders can dramatically increase their unit's chances for success on the battlefield."¹⁷

The importance of quality AARs is clearly linked to the ALLS and the ability of soldiers, leaders, and units to learn from mistakes and increase combat readiness. A study conducted by Major Justin Gubler *Unit Simulations Training System After Action Reviews: A Novel Approach to Achieve Combat Effectiveness* will be used to provide insight to the quality of AARs being conducted in the Army.

An excellent example of the AAR system working to a unit's best advantage occurred ironically not at a training event, but during an actual operation. During the early phases of Operation JOINT ENDEAVOR, Task Force Eagle experienced several mine incidents where soldiers were wounded. In response to those incidents, Major General Nash, commander of Task Force Eagle, required that units conduct internal "mine awareness AARs." The 1st Brigade Combat Team, commanded by Colonel Greg Fontenot adhered to the directive, conducted AARs down to platoon level and wrote the *1st Brigade Combat Team's Mine Analysis and Review*. This document provides a very honest appraisal of why the mine incidents happened and how they could be prevented in the future.

As previously stated, the AAR is an internal form of lesson learning where soldiers and leaders, with the assistance of the O/C as the facilitator, discover lessons for themselves. AARs that are submitted to CALL, as per the requirements outlined in AR 11-33, are a passive means for CALL to collect, analyze, and disseminate lessons to the Army. CALL also uses active

measures to collect lessons through the employment of subject matter experts, CALL collection officers, and Combined Arms Assessment Teams.

Several publications are key to understanding how CALL collects and disseminates lessons to the Army. The first is CALL Newsletter 97-13, *A Guide to the Services and the Gateway of the Center for Army Lessons Learned*, which outlines the aspects of the CALL process. The CALL process includes collection planning and Combined Arms Assessment Team employment for both training and during contingency operations. Additionally, the newsletter provides information on the organization of CALL and CALL's "Gateway" and internet homepage. The *Bosnia CAAT-I Collection Plan* and the *Actual Operations Collection Standing Operating Procedures* supplement the information provided in CALL Newsletter 97-13 and the May 1996 *Initial Impressions Report* provides examples of the end-product of a successfully executed collection plan.

A review of some of the most recent CALL publications is important in understanding the types of products CALL produces and the impact (or potential impact) of those publications. Often, the publications are written in a vacuum of doctrine. That is to say that the subjects addressed in the publications are new to the Army and doctrine has yet to be written on the topic or aspects of the doctrine need to be updated and or refined. Occasionally, current doctrine has been determined by an author to be completely inadequate. It is in these areas where CALL treads in dangerous waters because CALL does not write doctrine. Instead, CALL works in the realm of the TTP. The TTP is that tactic, technique, or procedure, not yet established in our doctrine, but that has been proven to work in the field. It is in this same area that CALL has its greatest impact on the Army.

To fully explore the areas where CALL "fills the gap of doctrine" the following newsletters will be examined:

1. Newsletter 96-5: *Drawing a Line in the Mud: Establishing and Controlling a Zone of Separation*. This newsletter was written from observations made during the initial phase of Operation Joint Endeavor. It represents a topic where very little or no information had been previously written. As indicated by its sub-title, the newsletter provides tactics, techniques, and procedures on how to establish a zone of separation.

2. Newsletter 97-12: *TTP for Sustainment Training While Employing*. This newsletter expands on information provided, in part, in FM 25-101 *Battle Focused Training*. From observations made in Bosnia, the authors determined that the Army's capstone training manual did not sufficiently address the challenges of training while conducting a contingency operation.

3. Newsletter 97-8: *Search and Attack*. This newsletter was written based on observations from JRTC. It represents a publication that expands on doctrine that is somewhat outdated. FM 7-10 *The Infantry Rifle Company*, which provides company level doctrine on the Search and Attack, has not been revised since 1990.

4. Newsletter 96-3: *Own the Night*. This was a revolutionary publication written and submitted to CALL by the 2d Brigade of the 82st Airborne Division. It was revolutionary in the fact that addresses TTP for employing the Army's "own the night" technologies in squad and platoon battle drills. This concept had never been fully addressed before in a written publication.

5. Newsletter 97-1: *Tactics, Techniques, and Procedures from Operation Joint Endeavor*. This newsletter is important because it contains a compilation of all the *Latest Lessons Learned* bulletins published by CALL for Task Force Eagle during the first nine months of the operation. The *Latest Lessons Learned* bulletins are an excellent example of the in-theater lessons learning program that was established by Major General Nash, commander of Task Force Eagle.

6. Newsletter 95-12: *Military Decision Making*. This newsletter is an example of

providing TTP for doctrine that was deemed, by the author, to be inadequate. This newsletter was written several years prior to the publication of the most recent FM 101-5, *Staff Organization and Operations*. The old version of FM 101-5, which was written in 1984 and was not updated until 1997, did not address how to conduct the military decision-making process in a time constrained environment. The newsletter provides TTP for abbreviating the process. This newsletter also represents an example of the lesson learning process coming full circle because the information provided in the publication was incorporated in the new version of FM 101-5.

The timeliness of this study, as well as its importance to the Army, was demonstrated in the July and August 1997 issue of the *Military Review*, which was subtitled "Significant Lessons Learned." Though most of the publication contained lessons and observations from recent contingency operations, two articles explored the significance of lesson learning.

In his article, "People of Whom We Know Nothing: When Doctrine Isn't Enough," Lieutenant Colonel Douglas Scalard recognizes that sometimes doctrine is not available or has not matured adequately to provide the necessary guidance to leaders. Using emerging peace operations doctrine as his example, Lieutenant Colonel Scalard's report is significant in several respects.

He states that "doctrine is by no means immutable -- it must adapt with times to accommodate political, cultural, and technological change."¹⁸ He further suggests that to supplement formal doctrinal education, the Army uses CALL to assist in overcoming the ambiguity of doctrine. However, Lieutenant Colonel Scalard warns "that sometimes CALL's feedback may be too immediate, too close to the on-going operation."¹⁹ To elaborate his point, LTC Scalard uses a report published by CALL on Operation ABLE SENTRY where a collection officer suggested that in peace operations the US Military Code of Conduct was inconsistent with peacekeeping training. In his view, to avoid taking away the wrong lessons "we must understand

their context in terms of time, place, participants and situational dynamics. It is only by understanding the lessons' context that we can derive the full benefit of CALL."²⁰

The second article, "The Center for Army Lessons Learned: Winning in the Information Age", was written by Lieutenant General L. D. Holder, the former commander of the Combined Arms Center at Fort Leavenworth, and Colonel Ed Fitzgerald, Director of CALL. The significance of this article is that it fully develops the role of CALL, CALL's capabilities, and its impact on lesson learning.

¹U.S Army, FM 23-100, *Army Leadership* (Initial Draft) (Fort Leavenworth, KS: Center for Army Leadership, 1997), 10-37.

²Ibid., 10-37.

³Ibid.

⁴Gordon R. Sullivan, and Michael V. Harper, *Hope Is Not A Method* (New York: Times Business, 1996), 192.

⁵Ibid., 193.

⁶Ibid., 194.

⁷Peter Senge, *The Fifth Discipline* (New York: Doubleday Publishing Group, Inc., 1990), 340.

⁸Ibid., 340.

⁹U.S Army, US Army Regulation 11-33, *Army Lessons Learned Program: System Development and Application* (Washington, DC: Department of the Army, 1989), 3.

¹⁰Ibid., 3.

¹¹Ibid., 7.

¹²Ibid., 3.

¹³Ibid.

¹⁴U.S Army, FM 25-100, *Training the Force* (Washington, DC: Department of the Army, 1988) 5-2.

¹⁵U.S Army, FM 25-101, *Training the Force: Battle Focused Training* (Washington, DC: Department of the Army 1988) , G-2.

¹⁶*Ibid.*, G-3.

¹⁷U.S Army, TC 25-20, *A Leader's Guide to After Action Reviews* (Washington, DC: Department of the Army, 1993), 5-3.

¹⁸Douglas Scalard, "People of Whom We Know Nothing: When Doctrine Isn't Enough," *Military Review* (July-August 1997, No 4): 5.

¹⁹*Ibid.*, 6.

²⁰*Ibid.*, 7.

CHAPTER 3

RESEARCH METHODOLOGY

This research was conducted in three distinct phases. Each phase was represented by a category that contained one or several of the secondary research questions. The corresponding questions were answered in sequence. Findings from each phase and the subsequent analysis led to certain conclusions. These conclusions were the basis of the answer to the primary research question: How can tactical units use the Army Lessons-Learned Program to their best advantage?

Two major techniques were used in all phases to gather evidence. The first technique consisted of document collection and review. The second technique was personal and telephonic interviews, which provided information to fill a gap or clarify collected information.

The first phase of the research fell under the category of: The Army Lessons-Learned Program: What is it and why is it important? This phase addressed the following secondary questions:

1. Why is lesson learning important?
2. How has the Army's approach to lesson learning evolved and what are the most important lessons from the Army's history of lesson learning?
3. What constitutes an effective lesson learning program?
4. Currently, what Army programs exist to facilitate lesson learning and how do tactical units support the programs?
5. How does CALL support the programs?

This phase of the research provided the necessary background information for the study. Without this information, the study could not progress in a methodical and efficient manner. This phase of the research was also important because it defined the current state of lesson learning as it pertains to tactical units.

Document collection and review was the primary technique used during this phase. The Army Lessons Learned Program is established in Army Regulation 11-33, *Army Lessons-Learned Program: System Development and Application*. This regulation, along with Army Regulation 11-13, *TRADOC Remedial Action Program*, defines the Army's comprehensive system for the collection, analysis, and dissemination of lessons learned. An important aspect of the Army's Lesson Learned Program is the AAR process, which is defined in FM 25-100, *Training the Force* and FM 25-101, *Battle Focused Training*.

The importance of the program, and lesson learning in general, was found in the Army's emerging leadership doctrine, current training doctrine, books on learning organizations and in a review of the history of Army lesson learning. This aspect of the first phase was important because it established the Army's vision for lesson learning.

The second phase of the research, under the category of: The Shortfalls of the Army's Lesson-Learned Program, required a subjective evaluation based on the findings from the first phase. The intent was to determine the weaknesses of the Army's current lesson-learned program, based on the characteristics of effective lesson-learned programs and the lessons from the Army's history of lesson learning. Both document collection and review and interviews were used during this phase.

The third phase of the research fell under the category of: A Model for Lesson Learning in Tactical Units. The intent was to provide an example of a lesson learning program that could be used in tactical units. This phase of the research used document collection and review and interviews. To some extent a case study, which is discussed later, was also used as a research technique. Again, a subjective evaluation was required to determine such an example. However, the criteria for choosing the example were predicated on the findings from the first two phases of the research and the experience of the researcher. The example had to meet the parameters for

effective lesson-learning programs established in the first phase, and it had to address, in some way, the shortfalls identified in the second phase.

The 1st Armored Division's lesson-learned program implemented during Operation JOINT ENDEAVOR in Bosnia was used as the example. There are several reasons why the 1st Armored Division's program was chosen.

The first reason is that the researcher was deployed to Bosnia for six months and observed the 1st AD's lesson-learned program, first hand. Although the researcher's participation in the operation did not meet all the requirements for a case study, there were aspects of the participation that lent itself to the use of the case study as a research design. The researcher played an interactive role in the implementation of the task force's lesson-learned program. The researcher's experience was relatively recent (two years) and the details from the experience were still vivid. The researcher could use that experience to objectively evaluate the lesson-learned program. Nonetheless, complete objectivity could not be obtained since the researcher did not have this particular research concept in mind during the deployment. However, strict adherence to the parameters established in phases one and two of the research reduced the degree of subjectivity significantly.

The second reason the 1st Armored Division was chosen was because several members of the task force who participated in Operation JOINT ENDEAVOR were assigned to Fort Leavenworth at the time of the research and could be interviewed in person. This expedited the interview process and the research.

The validity of this study was based primarily on the subjective evaluation of the researcher. However, to reduce the subjectivity, the initial phases of the research were designed to identify certain criteria that established the characteristics of an effective lesson-learned program. The problem with this approach was that the available literature on the topic was focused on the Army's lesson-learned program, rather than a program oriented on units at the

division-level and below. Clearly, this is part of the overall problem. It also highlights the significance of the study because information is not available to leaders in tactical units on how to establish lesson-learned programs within their organizations. If the information was available, there would have been no reason to conduct the research. Nonetheless, the researcher had to take the broad concepts for establishing an Army-wide program and reduce those concepts down to a much lower level.

To accomplish this, the researcher had to weigh heavily on his experience. This experience included two years as an observer/controller at the Joint Readiness Training Center and two years as a collection officer at CALL. There was also the potential for bias based on the researcher's experience with the 1st Armored Division in Bosnia. Again, this bias was tempered by using established criterion in determining the effectiveness of the 1st Armored Division's lesson-learned program as it was implemented during Operation JOINT ENDEAVOR.

CHAPTER 4

ANALYSIS

One of the first required readings at the United States Army Command and General Staff College is an essay by British Historian Michael Howard. Lately, a number of authors exploring the concept of lesson learning have quoted parts of the essay. Of particular note, former Army Chief of Staff General Gordon R. Sullivan begins his chapter "Growing the Learning Organization" in his book *Hope is Not a Method* with the following words from Michael Howard: "I am tempted to say that whatever doctrine the armed forces are working on now, they have got it wrong. I am also tempted to declare that it does not matter. What does matter is their ability to get it right quickly, when the moment arrives."¹

In his article "People of Whom we Know Nothing: When Doctrine Isn't Enough", Lieutenant Colonel Douglas Scallard also quotes Howard: "When everybody starts wrong, the advantage goes to the side which can most quickly adjust itself to the new and unfamiliar environment and learn from its mistakes."² Lieutenant Colonel Scallard argues in his article that the study of history has "guided and informed the actions of great captains."³ Clearly, history plays an important role in the development of leaders and in the learning of lessons. One could not argue otherwise. Nonetheless, history alone cannot solve the problems confronted by soldiers, no matter where the situations occur -- be it Bosnia, Korea, or the JRTC. To wait for lessons to be written in history is to wait too long. There must be something more to Michael Howard's assertion.

This chapter will examine the issue of how Army tactical units can come closer to "getting it right," more quickly. First, the meanings of the terms lessons, learning, and lessons learned, as the soldier should understand, them is closely scrutinized. Second, the importance of lesson learning is established. This will be brief because the evidence is clearly stated in the Army's emerging leadership doctrine. Third, the history of US Army lesson learning is

considered to determine some constants that were characteristic in effective lesson-learning programs of the past. In addition to the study of history of lesson learning, other literature on the subject is investigated to further develop those characteristics. In the examination of the current literature, the notion of organizational culture is considered as it relates to developing learning cultures in tactical units. This part of the chapter concludes by outlining the Army's Lesson Learned Program in its current state. Next, the shortfalls of the program, based on the lessons from the past, are identified. Finally, the lesson-learned program implemented by Task Force Eagle in Bosnia is considered as a model program for a tactical unit.

Of Lessons and Learning

The first part of this section deals with terminology. Particularly, the purpose is to better define the terms lesson and lesson learned and make them useful for leaders as they create effective lesson-learned programs. Army Regulation 11-33, which governs the Army's Lesson Learned Program does provide definitions but the meanings are ambiguous. For example, consider the following definitions from AR 11-33:

Combat Relevant Lessons Learned: Conclusions derived from analysis of observations obtained from military operations and training exercises that are useful to commanders in preparing their units for combat by identifying successful doctrine, tactics, techniques, and procedures or problems thereto. These combat relevant lessons learned also assist proponent school commandants and the integrating center commanders in the validating or changing current doctrine, training, organization, material, and leadership development.⁴

Lesson Learned: Validated knowledge and experience derived from observations and historical study of military training, exercises, and combat operations.⁵

TRADOC Regulation 11-13 establishes the Army's Remedial Action Program, which supports the Army's Lesson Learned Program. AR 11-13 provides a somewhat different definition of lesson learned:

Lesson Learned: When behavior is changed sufficiently to achieve the desired outcome.⁶

Lesson: A behavior resulting in a desired outcome, i.e., actions that result in mission accomplishment, the repetition of which would produce similar success; includes tactics,

techniques, and procedures (TTP), as well as the integration of new or improved material impacting on mission execution.⁷

In the above definitions, the term TTP is used. Neither AR 11-33 nor AR 11-13 defines TTP. However FM 101-5-1, *Operational Terms and Graphics* does provide the following definition(s):

Tactic: The art and science of employing available means to win battles and engagements.⁸

Technique: The methods used by troops and or commanders to perform assigned missions and assigned functions, specifically the method of employing equipment and personnel.⁹

Procedure: The standard detailed courses of action that describe how to perform a task.¹⁰

Finally, the definition of doctrine must be considered because doctrine plays a very important role in how military organizations learn. Again, the definition comes from FM 101-5-1.

Doctrine: Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative, but requires judgement in application.¹¹

With these key words defined, it is now important to look deeply into the meanings of the terms. It is clear that there is an inconsistency between the definition of lesson learned as it is defined in Army Regulation AR 11-33 and TRADOC Regulation 11-13. Therefore, it is necessary to bridge the gap of ambiguity and determine exactly what is meant by these terms. More importantly, the link between the meanings of the terms and the development of effective lesson-learned programs must be clearly established.

On any given day, in every type unit, whether it's in the field or garrison, one will hear, time and again, "that is a lesson learned." As has been shown, the meanings of the words are really unclear. Precision of terms and clarity of definition is central to understanding tasks to be accomplished and purposes to be obtained. An entire field manual (FM 101-5-1, *Operational Terms and Graphics*) is dedicated toward that end. Where "hose, sweep, and mop up" have been

banished from the Army's professional lexicon, the term lesson learned is still used inappropriately. It is like when a poorly informed machine gunner (or platoon leader for that matter) says he will both "lift and shift" fire. This analogy fits well into better understanding lessons and learning but needs further explanation.

Any good M60 gunner knows that there is a difference between "lift fire" and "shift fire." Both cannot be done at the same time. There is an important difference, especially if supporting fires are lifted before the assault begins. Not knowing the meaning of lesson learned may not seem as dangerous; however, there could be some adverse repercussions.

Using common dictionary definitions, a lesson is an observation or experience resulting in new knowledge and learning is to gain knowledge through experience.¹² The two terms seem redundant. However, as military professionals, the term, as a whole, has come to have a distinct meaning. Generally, when a soldier, NCO, or officer claim to have learned a lesson it pertains to having discovered something new that he or she previously did not know. Continuing with the machine gunner analogy, upon being told to "shift fire" the M60 gunner "lifts fire" instead. His squad leader vehemently explains the mistake to the gunner. The soldier then slaps his kevlar and exclaims, "that is a lesson learned." Was it or was it not -- a lesson learned?

The meaning of "lift" and "shift" are defined both in FM 101-5-1 and in other doctrinal references. As a professional, the machine gunner should know the meanings and implications of the terms. After being told the difference between the terms by the squad leader, the soldier might be better versed in his duties as a machine gunner. However, in the traditional sense of the word, the knowledge was not really new; therefore, it was not a lesson. Nevertheless, based on the definitions provided in AR 11-33 and TRADOC Regulation 11-13 something very useful occurred.

What actually happened was that the soldier "relearned" a lesson, or perhaps it could be called a "teaching point." If after being told the difference between "lift" and "shift" by the squad

leader, and the soldier's behavior changes (he shifts fire when he is told to shift to fire, etc.) then a desired outcome has been achieved. If this is a systemic problem throughout the unit, it should be identified in AARs and then addressed in unit standard operating procedures. At the least, the commander should gather his unit leadership and identify if there is a training deficiency in the unit that must be corrected. Clearly, this is an important type of learning within a unit. However, lessons can also be things that affect a greater audience much more and lead to real changes within doctrine.

What if the machine gunner discovered a technique to employ the weapon that was not written in doctrine? For example, in the early 1990s, the AN/PAQ 4A Aiming Light was fielded for use originally for the M16 rifle. It was later discovered that the AN/PAQ 4A could be mounted on the M60 machine gun, increasing the accuracy of the weapon (albeit for only 150 meters). This was not the intended purpose of the equipment and there were some drawbacks (the range of the weapon was not maximized) but something "new" had, in fact, been discovered. Arguably, the discovery had bearing on the increased ranges of subsequent models of aiming lights (AN/PAQ 4B/C) and the development of better mounting apparatuses suitable for the machine gun. It is this type of newly obtained knowledge that should constitute a "lesson." The knowledge was really new because the Army, as an institution, did not previously know it (it was not written in doctrine) and it proved useful in its wider application.

But, when are these lessons "learned?" Was it enough that the soldier or even the other machine gunners in the company acquired the knowledge that the AN/PAQ 4A could be mounted on the M60 and thereby increase the accuracy of the weapon? Dennis Vetock points out in *Lessons Learned: A History of US Army Lesson Learning*:

Learning means that knowledge has been acquired. Useable experiences teach, but armies must learn these lessons by institutionalizing them. The military meaning of "lesson learned" should indicate something both taught and learned. A *lesson* is not necessarily a *lesson learned*, although both concepts are often used synonymously. . . . Lesson learning involves two basic elements, like the term itself. The lesson element

represents a slice of experience somehow determined as useful. The learning element constitutes application to make that identified experience useful. If large patrols, instead of small ones, identified during jungle operations as more effective, that is a lesson, which becomes learned when incorporated into operational procedures and manuals. Once identified or derived, a lesson must await application before becoming learned. What experience may teach, the soldier, unit and army must still learn. An effective lesson-learning system should manage both elements.¹³

Vetock makes some other important observations that influence the understanding of the terms. Based on his analysis of lesson learning in the Korean and Vietnam Wars, there is a fundamental circuit that is necessary for lesson-learned programs to be effective. The lessons that are identified through experience must undergo evaluation by an analyst. They must then be returned to the units and the Army in the form of new doctrine and or as new techniques. Vetock further explains, "When the circuit is completed, lessons have been learned and usable experience has been institutionalized to some degree. Lessons may not remain valid for long, perhaps not to the next war, but they most likely will improve performance in any ongoing one."¹⁴

Vetock's study of lesson learning was focused at the Army level. Nonetheless, his analysis can also be applied to smaller organizations. However, there are two key points that affect lesson learning in tactical units. The first pertains to the analysis of the lesson. The question must be asked: At what level must the analysis occur for the proposed lesson to be examined to the degree necessary for it to be returned to units as a lesson learned? The second relates to the issue of doctrine and technique.

Again, Vetock partially offers a recommendation. He states:

Once reported into a lesson-learning system, observations undergo evaluation by higher headquarters and other agencies. They approve the official lessons, which may only constitute potentially useful applications for commanders and be disseminated as informational lessons literature. More authoritative applications include modifications of established tactics and techniques, sometimes limited to a particular command or theater and sometimes extended out throughout an army by modification of doctrine or structure.¹⁵

The points made by Vetock and the definitions contained in AR 11-13 provide some clarity to the meanings of lessons, learning, and lessons learned. However, the question of "so

what?” remains. Defining these terms is more than mere wordsmithing. Understanding the terms has a direct influence on how organizations should go about identifying lessons and determining whether they are important enough to be learned. As will be explained later in the study, a unit’s lesson-learned program is an integral part of its leader-development program. Part of leader development is professional growth through the personal study of doctrine. Leaders must know the Army’s training and warfighting doctrine. Therefore, before a leader claims to have learned a lesson, he or she should know whether the discovery is really something new or whether what he or she has just uncovered is already in the Army’s doctrine. Consequently, if the leader is unsure, he or she must go to the doctrine and find the truth. If it is not in the doctrine, then it may be a lesson, but as Vetock points out, determining useful lessons requires analysis.

Discovery of the wrong lesson can be as bad as not identifying a lesson at all. Major General William Nash, commander of Task Force Eagle during the first year of Operation JOINT ENDEAVOR, stated that “lesson learning is a very dangerous business.”¹⁶ Distinguishing a good” lesson from a “bad” one requires experience, a good grasp of doctrine, and most importantly, common sense.

Much Ado About Learning

Recently, there has been much discussion in both the military and in civilian business about learning organizations. Several books have been published on the subject to include *Hope is not a Method* by General Gordon R. Sullivan. Many major corporations have visited the CALL to receive briefings on how the Army learns lessons. However, the most prominent example of the importance of learning, as it pertains to leaders of tactical units, comes from the Army’s emerging leadership doctrine FM 22-100, *Army Leadership* (Initial Draft).

FM 22-100 identifies learning as a “Senior Leader Action.” The following is the field manual’s section titled “Learning,” which is presented in its entirety.

Learning is understanding experience as well as well as learning from the experience of others. Learning is a continuous process and the opportunities to learn present themselves before, during and after events occur. Moreover, there are three learning concepts or disciplines: self-mastery (self-development), team learning (experiential), and formal (institutional). The important point to remember is that for learning to be effective, the senior leader must understand that learning is a continual process and occurs from the cradle to grave. This being said, the question is how can senior leaders encourage a learning philosophy within their organizations? What are some of the "eaches" that senior leaders can do to foster this learning philosophy.

Senior leaders must be extremely learning-oriented. They must first acknowledge that they do not know everything and there is room for more to be learned. They, in turn, communicate this philosophy to their subordinate leaders. They create and foster an environment where members of the organization keep track of lessons drawn from experience in "what's worked." They make sure these successful "lists" are shared with everyone. They also articulate principles or rules that will transfer experience from one organization or activity to another. They include members of the staff in brainstorming. They encourage openness to new ideas and do not assume that they have the answer within their own minds or within the organization.

Learn to handle change. Change is an endemic feature of modern organizations. The senior leader recognizes this reality and makes provisions to ensure he maintains the capability to cope.

Learn doctrine. Knowledge and understanding of doctrine are essential for effective operations on the battlefield. Doctrine provides the framework and principles to cope with the unexpected. Moreover, it provides a common language and perspective so that leaders can communicate effectively with one another

Study current events. Senior leaders depend on current events as one base for future action. They read widely and take time to understand the implications of current events information.¹⁷

In addition to the emphasis placed on learning in FM 22-100, initiatives are occurring in OPMS XXI that affect how leaders approach learning, particularly with changes to the Officer Evaluation Report (OER). On the front side of the new OER, there is an evaluation block that is designated "*Learning*." Coupled with the addition to the new OER, junior officers in the rank of Lieutenant and WO 1 are required to complete the Junior Officer Developmental Support Form (JODSF), which incorporates learning as a developmental task.

The purpose of the JODSF is to drive development and integrate it with performance. The form is used to build a developmental plan based on tasks that target major performance objectives listed on the OER Support Form. The requirement is to record at least one developmental task in each doctrinal leadership action listed on the form. The leadership actions

include "Influencing," "Operating," and "Improving." The leadership action "Improving" includes the three sub-actions of developing, building, and learning. The characteristics of the learning sub-action are to "actively seek self-improvement and foster a learning environment in the unit."

The JODSF process begins when the junior officer arrives at his unit where the rater provides the officer with the rater and senior rater support forms and a copy of the JODSF (DA Form 67-9-1a). The lieutenant or WO drafts initial major performance objectives and becomes familiar with the doctrinal leadership attributes/skills/actions. The rater then conducts an initial face-to-face discussion with the rated officer to discuss duties and objectives. This is accomplished no later than 30 days after the beginning of the rating period. One of the outcomes of the discussion will be the identification of the initial developmental tasks. For example, the actions the officer will take to "foster a learning environment in his unit" will be described. The JODSF does not go into action until the senior rater initials the form. Thereafter, the officer is counseled quarterly by the rater to adjust and or update the performance objectives and developmental tasks. At the end of the rating period, the rated officer uses the JODSF as critical input to his "significant contributions" on his OER Support Form.

What the Army has done, with both the new OER and JODSF, is mandate that officers take deliberate actions to ensure that their units become learning organizations. There are many ways to accomplish the task but a clear example is for leaders to implement lesson-learned programs within their units. However, there is one problem. Other than what is provided in FM 22-100, the Army does not have a guide or manual that explains the characteristics of such a program to the leader. This is analogous to telling a rifle squad leader that his unit must be able to react to enemy contact and then not give him the performance measures to successfully execute the task. This analogy may be unfair, because the good squad leader given the task to react to contact would most likely go and figure out how to do it. It is in the "culture" of the NCO to

“make things happen.” This ethos did not develop overnight, but it is difficult to imagine an Army where such a culture never evolved. In many respects, the same can be said of the learning culture.

The Learning Culture

A recurring theme in some of the literature on learning is the notion that leaders must develop learning cultures. In *Hope is not a Method*, General Sullivan states “The most difficult challenge is developing a culture that values this kind of learning.”¹⁸ By analyzing the characteristics of organizational cultures, important points can be made that may assist leaders in laying the groundwork for identifying the characteristics or performance measures for effective lesson-learning programs.

It is difficult to define culture as it applies to organizations such as platoons, companies, and battalions. This is because one does not normally associate the idea of culture to small groups, but rather whole societies. But culture, as it will be defined, can have a very powerful impact on organizations like Army tactical units. In fact, if carefully lead and nurtured, the unit’s culture can become a driving force in its performance and its ability to learn lessons.

Using a study conducted in 1993 by Harrison Trice and Janice Beyer, the authors of *Organizational Responses to Organizational Change* identify “substance” and “forms” as two aspects of culture: “The substance of cultures consists of shared, emotionally charged belief systems that they call ideologies. By ideologies they mean ‘shared, interrelated sets of beliefs, about how things work; values that indicated what’s worth having or doing; and norms that tell people how they should behave.’ They define cultural forms as the observable entities, including actions, through which members of a culture express, affirm, and communicate the substance of their culture to one another.”¹⁹

The authors of *Organizational Responses to Organizational Change* also identify six mechanisms that are used to create cultures within organizations. These mechanisms include:

1. A unique and clearly articulated ideology.
2. The recruitment of like-minded employees.
3. The use of symbols to reinforce cultural attributes.
4. Repetitive socializing and training of employees in the key cultural values.
5. The appraisal and rewarding of behavior consistent with the desired culture.
6. The design of an organizational structure that reinforces the key cultural values among all members of the organization.²⁰

Each of these mechanisms is very important in creating and sustaining a learning culture. With the exception of recruiting like-minded employees, leaders in tactical units can significantly influence all of the mechanisms. In fact, the leader is the central figure in developing culture in an organization.

Using the mechanisms and aspects of culture as a framework, the leader may create and then sustain a learning culture.

A Unique and Clearly Articulated Ideology

One need to go further than the initial draft of the new FM 22-100 to develop a sound ideology for learning. The section of learning in the manual provides all the information required. Nevertheless, it is clear that the leader must promote learning in his unit. The leader must create the environment that encourages soldiers to look deeply into problems and determine solutions to those problems. To accomplish this, the leader must have a "thick skin" and be an active listener. As General Sullivan points out, "Disagreement is not disrespect."²¹ As will be shown later, this is an important component of effective AARs. During the AAR process, the leader must be able to be told that a certain action he or she made may not have been appropriate. Of course, he or she must also be told why it was not appropriate and then be given recommendations on what could be done better next time to correct the deficiency. However, the "thick skin" of the leader cannot be donned only during AARs and then discarded when in

garrison. Most importantly, the leader must articulate what it means to be a learning organization. This includes defining the terms lesson and lesson-learned and the process in which they are derived.

The Use of Symbols to Reinforce Cultural Attributes

In many respects, the Army has established a learning ideology by identify learning as a leader action in FM 22-100. To inculcate this in a unit, the leader must reinforce the importance of learning as much as possible. The symbols may be verbal. For instance, during a training event a soldier discovers something he thinks is new and the leader may say, "that could be a lesson." When the term lesson is properly defined, this statement by the leader can come to connate praise for positive behavior. The process could then continue by making the soldier look into the doctrine to actually see if it is a lesson and so on. The words lesson, lesson-learned, learning, and AAR become the symbols of a learning organization.

Repetitive Socializing and Training of Employees in Key Cultural Values

A good lesson-learned program is one way to accomplish this. Additionally, leaders and soldiers must be trained on how to perform proper AARs. Probably the best way to socialize soldiers and leaders into the learning culture is to institutionalize a variation of the AAR into every activity that a unit conducts. A "quick AAR" can be conducted after motor stables, road marches, physical training, and even command and staff meetings. Another technique is to assemble your leaders everyday before the close of business and ask the simple question: What have we learned today?

The Appraisal and Rewarding of Behavior Consistent With the Desired Outcome

For officers, the new OER establishes a way of rewarding leaders for promoting learning in their units. For soldiers and NCOs, it may be somewhat more difficult, other than saying

“good job.” However, one way of rewarding those individuals is to get their ideas published. This is not as difficult as it may seem and as will be shown later, publishing lessons (and new tactics, techniques, and procedures) is essential to the total Army Lesson Learned Program. Being published in a CALL newsletter should have some bearing on qualifying for an “Excellence” in the competence block of the NCO Evaluation Report. Regardless of the professional benefit, seeing one’s name in print is often reward enough.

The Design of an Organizational Structure that Reinforces the Key Cultural Values Among All Members of the Organization

The purpose of this study is to define that organizational structure in an effective lesson-learned program. A well-structured program will reinforce and bring together all the mechanisms inherent to a learning culture. At the conclusion of this study, the organizational structure is clearly demonstrated.

While it is only recently that the terms learning culture and learning organization have become popular, that is not to say that the Army has not valued learning as an important factor. It can be argued that one of the reasons for the U.S. Army’s success in the past has been its ability to adapt to change and learn from its mistakes. However, the evolution of the Army as a learning organization has happened over time in various stages throughout its history.

Historical Lessons in Lesson Learning

All the historical facts in this section were derived from Dennis Vetock’s book *Lessons Learned: A History of US Army Lesson Learning*. Vetock clearly establishes that lesson learning in the US Army is evolutionary. It started in the Revolutionary War and continues today in all the places that soldiers are currently deployed. Each war and inter-war period saw advancement in the Army’s approach to lesson learning. However, the true roots of lesson learning, as we know it today, started in World War One when the lesson learned system became institutionalized.

World War One

General John J. Pershing instituted the first organizational lesson-learning procedures in his American Expeditionary Force (AEF) headquarters in France.²² Soon after Pershing arrived to France, he informed the War Department: "Experience in the theater of war will gradually develop new conditions and methods, and these will frequently change as the war continues. Then again, it is realized that many theories and principles have been published which later experiences show to be erroneous. These errors can only be definitely disclosed by the troops associated with actual fighting and hardly by the forces being trained in the United States."²³

To facilitate the collection, analysis, and dissemination of the information gained from the soldiers in combat, General Pershing reorganized his staff to include the Assistant Chief of Staff, G-5 (Training). Though the G5 is currently associated with civil-military operations, in 1918 the G5 was responsible for all training to include the development of doctrine and what was called "experience processing."²⁴ The lesson-learning system (though not called that at the time) developed by Colonel Harold B. Friske, the G5 for the AEF, consisted of G5 inspectors and lessons literature.²⁵

G5 inspectors were usually assigned to each division and accompanied the unit in combat operations to observe how units within the division applied their training in combat. The observations from the inspectors were recorded, published and then distributed throughout the force in what came to known as *Notes on Recent Operations* or simply as *Notes*.²⁶ Another media used by the AEF was *Combat Instructions*, which was directed at brigade and division commanders. Both these publications were oriented more on ensuring compliance with approved doctrinal procedures rather than identifying new techniques for the application of the doctrine. In total, more than 100,000 copies of both *Notes* and *Combat Instructions* were distributed during the war.

Based on the discussion of lesson learning as it was defined at the beginning of this chapter, the process that occurred in the AEF during World War One does not fit neatly into that model. The focus of the program was not so much on identifying new techniques; instead, it was oriented on ensuring that division and brigade commanders conformed to established doctrinal procedures. Clearly, the program had some advantages and General Pershing credited the work of the G5 inspector's as positively influencing the success of AEF units during combat operations.²⁷ Regardless, the program instituted by Pershing contains some very important lessons for leaders in tactical units today as they wrestle with developing their own programs. These lessons include:

1. General Pershing, the senior leader, was committed to the program. He was very much involved in creating a culture of learning within his organization. Above all else, this was the primary reason the program was successful.

2. Designating the G5 staff as the proponent for training and lesson learning was also key to the success of the program. Their mission was focused and they were resourced to accomplish the task. The fact that a staff agency was designated as the proponent for collecting lessons may be the most important lesson of all. As Vetock stated in his chapter on "Lessons Learned About Lesson Learning," "General Staff responsibility and prime control emerged as prerequisites for the systematic and total exploitation of usable combat experiences. The workhorse operator should collect and evaluate the experiences reported to it and also apply the lessons. Applications mean the dissemination of Army-wide lesson sharing literature and, more importantly, direct incorporation of lessons into doctrine, training, and organization."²⁸

3. A means for disseminating the lessons was established through the publication and distribution of *Notes* and *Combat Instructions*.

World War II

Though the formalized system of the G5 disappeared in the inter-war years, lesson learning, in general, was not forgotten. This was particularly true during the extensive maneuvers that were conducted from 1939-1941. General George Marshall, Chief of Staff of the Army at the time, often used the term lessons learned and worked diligently to incorporate a learning system into the maneuvers.²⁹ As Vetock stated:

Once the extensive peacetime maneuvers got underway, battle reporting was brought of the mothballed regulations and put to work. The after-action reports, required by commanders after completing operations against the enemy, became enlarged in scope to include the peacetime maneuvers and other training exercises, or 'when directed by higher authority.' This allowed the reports to be used before the urgency of war and the fog of battle complicated their preparation. Not only did the commanders become familiar with reporting their experiences, but their reported maneuver experiences enabled peacetime lessons to be drawn for inclusion in the new field manuals that Marshal directed the Army to produce.³⁰

Once the US went to war, both in the Pacific and in Europe, lesson learning again became centralized and the headquarters element of Army Ground Forces (AGFHQ) became the focal point for the management of lessons gained from combat experiences.³¹ As the head of AGF, LTG Lesley J. McNair, who had served on the AEF G-5 staff during World War One, borrowed from the lessons of that war and insisted that "trusted observers" be dispatched to obtain information on combat operations.³²

The system in which the observers were employed was described in the following manner: "A rotating group of observers who wander into the battle areas, peering inquisitively at everything, occasionally getting shot at, taking copious notes and, now and then, being coolly received by the fighting men they come in contact with, some of whom have antipathy toward itinerant representatives of high headquarters. These observers have brought back a good many scraps of information which have helped in keeping the training programs in this country up to date."³³

Most of the lessons that the observers brought back had already been analyzed and incorporated by the units in the field. Neither the observers nor the AGFHQ analyzed the lessons. Rather, the information was sent back to the schoolhouses and training centers in the US for analysis, evaluation, and the eventual dissemination. The center for the distribution was the Operations Division (ODP) of the War Department General Staff.³⁴

Though the information obtained by the observers was used extensively by the ODP, the source for most of the lessons came in the form of battle reports generated from the commanders in the field.³⁵ Army regulations required that commanders submit the battle reports after engagements with the enemy. Many divisions took the battle reporting to a higher level. One such example was the 9th Infantry Division, which included in its battle report a five-page annex entitled "Lessons Learned."³⁶

After the Combat Analysis Section of the OPD analyzed the battle reports and observations from the field observers, the information was distributed throughout the Army in the form of two different newsletters. The first was *The Operations Division Information Bulletin* (OPDIB), which was directed at higher commanders and general staffs. The other was focused on the individual combat soldier and was entitled *Combat Lessons*. The OPDIB was sent overseas within 48 hours of the final copy being written and the *Combat Lessons* was distributed every month.³⁷

Initially, there was no established format for the battle reports. However, over time most divisions took the lead of the 9th Infantry and started including a "Lessons" annex to the reports. As a result, a 1944 issue of the OPDIB urged: "All commanders take steps to insure that unit operations reports and historical records include the factual reporting of significant detail on weapons, material, improvised methods and equipment, minor tactics, and lessons learned in combat."³⁸

As Vetock points out, this contributed significantly to the evolution of lesson learning: "Not only lessons themselves but also lesson terminology became prevalent by the spring of 1944. Before then, observer and battle reports usually were called simply 'reports' or 'observations.' They then changed into 'experiences of combat,' 'lessons from combat,' 'combat lessons,' and 'lessons learned' -- all used interchangeably. This terminology change coincided, significantly, with the early dissemination of the OPD's lesson literature. It also presaged the cross-channel invasion."³⁹

Leaders in tactical units today can take away the following lessons from the US World War II experience in lesson learning:

1. The value of developing peacetime lesson learning programs is significant. The peacetime program not only allows units to gain valuable lessons from exercises, but the process that supports war time lesson learning is established. Soldiers and leaders get used to being required to submit reports and AARs. It becomes a part of their daily business.

2. Commanders must mandate the submission of reports and AARs, in both peacetime training and during war. For the higher level commanders this must occur in the form of Army Regulations. For leaders of tactical units, the requirement must be clearly stated in unit standard operating procedures.

3. The use of "outside observers" can assist units in identifying lessons. Additionally, a centralized agency that collects, analyzes, and disseminates the lessons is key to supporting the Army-wide program. Not only is such an agency staffed and resourced to perform the mission, it has the time to do so.

4. SLA Marshall introduced the concept of the after-action interview, which he used extensively in both the Pacific and European theaters. The interview is a technique that could be useful to both outside observers and unit commanders in identifying lessons.

5. Finally, the publications that are disseminated must be oriented on the intended audience. The *Combat Lessons* newsletter was focused on the individual soldier and the OPDIB was for higher level commanders and the general staff.

The Korean War

Prior to the Korean War, a major reorganization occurred when the Army Ground Forces (AGF) became the Army Field Forces (AFF) and was allowed to concentrate more on training.⁴⁰ The headquarters moved from Washington, D.C. to Fort Monroe, Virginia and became the Office of the Chief, Army Field Forces (OCAFF).⁴¹ This move was important for several reasons. First, it represented a clear move toward the centralization of training and doctrine development. As the US became involved in the Korean War, the OCAFF established a "special section for collecting, screening, and evaluating all available reports bearing on the tactics, techniques, and doctrine."⁴² As a result, a link between the identification of lessons and their implementation into doctrine could have been established. Unfortunately, as we shall see, it was not. Additionally, a recurring theme from the previous war experience was that the Army lesson-learned program was established well after the US entered the conflict and then it was disbanded upon cessation of hostilities. In large measure, this was true again in the Korean War with some exception.

As in World War II, the preponderance of lessons came from the battle reporting system. In 1949, an entire regulation was written establishing the requirements for battle reporting. However, those requirements were primarily for the purpose of maintaining historical records.⁴³ This changed shortly after the US entered the war with a major revision to the regulation that did away with the historical nature of the reports.⁴⁴ Instead, the Command Report sought to: "To serve a medium through which the commander of a unit or headquarters may record, review, and evaluate the overall activities of his command. In it he may recommend changes in doctrine, organization, training, tactics, techniques, administrative and equipment believed justified as a result of experience."⁴⁵

In 1951, this evolution continued with the publication of *Special Regulation 525-85-5: Processing of Combat Information*. With this regulation, a central Army lesson-learning system became institutionalized.⁴⁶ Unfortunately, the implementation of the regulation came late in the war when most of the heavy fighting had already occurred.⁴⁷ Additionally, the regulation did not completely link the identification of lessons with the revision of doctrine. Though the OCAFF was set up to accomplish this task, its potential as a central agency for incorporating lessons into doctrine was never maximized. Instead, the proliferation of lessons and their implementation into doctrine remained uncoordinated.

The reason for this was that many senior commanders did not feel that the doctrine was the problem. Rather, it was the technique or the application of the doctrine that was the fault. As General John Hodge, Chief of Army Field Forces, stated:

Although we should use caution in revising our training based on the impact of Korea, there are nevertheless many fundamental lessons we have learned in Korea, or more often *relearned*, that will apply regardless of the type of terrain or operation. Therefore, we can profit greatly from analyzing our deficiencies in Korean combat and placing appropriate stress on those subjects in training. Many of these deficiencies are not peculiar to Korea – they can be found in the historical studies from World War I and World War II. We are still making mistakes that are 35 years old.⁴⁸

Vetock states that “whether the Army learned or relearned lessons in Korea is still debatable.”⁴⁹ However, there are three lessons that clearly came out of Korea.

1. The first is that the lessons-learned system must be established in Army Regulations.
2. The second is that the compliance with the Regulations must be enforced after the war is over. The lessons learned system must transcend war and continue during peacetime. As was the case during the previous wars, the Army’s lessons learned program was discontinued at the conclusion of the Korean War.
3. Finally, the notion of “relearning” lessons that General Hodge talked about is an important one. In some respects, it has to do with the joke that prevails about the American soldier and doctrine. It goes something like this: “Why is the US so hard to fight?” asks an

officer from a foreign army. The US officer answers, "I do not know, why is the US Army so hard to fight?" The foreign officer replies, "Because no matter how hard our Army studies US doctrine it does not matter - - Americans do not know their own doctrine and therefore they do not fight by it." The joke is not really funny. Not because it lacks humor, but because it is true. As was mentioned earlier in this chapter, doctrine plays a very important role in learning. Doctrine is the soldier's textbook. It is authoritative, but it is not prescriptive. In other words one needs to know it before he or she decides whether the time and situation merits the use of it. If not, then the military mistakes of a millenium could be repeated. Doctrine is also instructive. If it is apparent that a systemic disregard of doctrine has resulted in tactical failures, then that fact must be passed on to other units. Maybe not in the form of lessons learned, but instead as lessons relearned.

The Vietnam War

In describing the US Army's experience in Vietnam, Vetock stated, "US Army self-examination in the Vietnam conflict surpassed all previous efforts to collect, evaluate, and apply operational experiences. The unprecedented flood of useable lessons stemmed partly from the duration of the conflict (it was America's longest war) but chiefly from the comprehensive reporting-processing system that created and managed the outpouring of experience."⁵⁰ That "reporting-processing system" was created with the revision of a new regulation in 1966 that superceded the previous two directives.⁵¹ The Operational Report-Lessons Learned (ORLL) replaced the Command Report as "the medium for transmitting combat experiences and lessons."⁵² As indicated by its name, the report focused primarily on lessons learned. Initially, the report was not required below the division commander level, but the regulation was later amended requiring that battalion commanders submit ORLLs.⁵³

Vetock points out that ORLLs worked in two inter-related circuits. The first was the outer circuit that carried lessons from the theater to the headquarters of the Department of the

Army in Washington, D.C. The second was the inner or local circuit that transferred lessons in-country for local application.⁵⁴ Like the systems from previous wars, the inner circuit fed the outer circuit. However, a major difference was that the lessons did not have to wait to be scrutinized by analyst back in the continental US. Rather, the lessons identified in the local circuit were passed immediately between units in the field. Vetock offers a case study of how the local circuit was used in Vietnam by the 173rd Airborne Brigade (Separate). Since the purpose of this study is, in large measure, focused on lesson-learned programs in tactical units, a close examination of the lessons from the 173rd Airborne Brigade is useful.

The 173rd arrived in Vietnam in May of 1965. Shortly after it began conducting combat operations, the commander, Brigadier General Ellis W. Williamson, began disseminating *Commander's Combat Notes*, which were disseminated throughout the brigade every few days and contained his observations from recent operations. Additionally, Brigadier General Williamson conducted oral critiques with his commanders and staff and the results of those meetings were also published in the bulletin. From 1965 to 1967, the brigade adhered to the policies of the ORLL and provided a series of enlightening reports of lessons learned from their combat experiences.

However, in 1967 there was a recognizable shift in the quality and length of the reports. By 1969 the size of the reports tripled to about 150 pages. On the other hand, the quality of what was reported had decreased significantly. Though the listing of lessons had remained at about ten pages, the remaining pages contained detailed data of the brigade's activities. Vetock provides an example of such a report submitted in May-July of 1967.

After headlining a confirmed body count of 206 enemy killed and another 469 possibilities, the report listed 150 categories of captured enemy material that filled six full pages. It itemized, understandably, each weapon model and round of ammunition captured, but also tallied bunkers, tunnels, foxholes, lean-to's, classrooms, and 1,395 meters of trench. A miscellaneous section in the list - - the largest section - - boasted 3 cigarette lighters, 1 bar of soap, 2 wallets, 40 bottles, 1 suspender, and 11 French toothpaste.⁵⁵

As Vetock points out, the reason for this change could arguably be the nature of the top-level management aspects of the war and the focus on "body count" and number crunching. Regardless, the spirit of the ORLL eventually became corrupted, though for a time, the efforts of the 173rd served as an example for lesson learning at the tactical level.

An important concept in the Vietnam approach to lesson learning was the link between techniques and doctrine. Lessons bulletins were clear to point out that the US doctrine was sound; however, certain techniques may be used as applicable. US Army, Vietnam (USARV) lessons literature did not want readers to confuse the lessons and techniques outlined in the publications as being doctrine. Rather, the lessons were "samplings of ideas generated by combat commanders in their search for new methods of defeating the enemy in the unique environment of Vietnam."⁵⁶

In summing up the inner circuit processing of lessons in Vietnam Vetock states, "processing of experience dealt with improvisations and the local adaptation of field techniques, not with the formal adjustment of doctrine. 'If it worked, use it' best describes the pragmatic field philosophy." Ultimately, Vetock questions whether any lessons were truly learned in Vietnam, because of this ad hoc approach. Referring back to the definition of lesson learned as discussed earlier, Vetock's point may be a good one. He argues that the lessons must be institutionalized for them to be learned. If it is up to individual units and or soldiers to determine what is worth learning, then the institution as a whole does not benefit from the experiences. Vetock makes the point by quoting an unknown critic on the Army learned in Vietnam, "the Army did not acquire eight years of combat experience in Vietnam. It only acquired one year of experience repeated eight times."⁵⁷ Nonetheless, some very good lessons came out of Vietnam that pertain to lesson learning in tactical units.

1. The example of the 173rd Airborne Brigade's lesson learning experience is a valuable one for several reasons -- both good and bad. Again, the impact of a commander's interest and

support of the unit's lesson learned program is central to its success. Brigadier General Williamson set the tone for creating a learning organization with his *Commander's Combat Notes* and by conducting critiques with his commanders and staffs. For the purposes of this study, the word "critique" can be replaced with after-action review. The reason for the downturn of the brigade's quality of reporting is difficult to label. It could have coincided with the departure of Brigadier General Williamson or the unit could have just got caught up with the "number crunching" mentality that became prevalent during that era. Regardless, the point is that the lesson-learned reports should be defined in their quality, not the quantity of items listed. It is probably safe to say that if after several years of combat, units continue to list pages and pages of lessons learned one of several things is more than likely occurring: (1) The enemy is continually developing new tactics and techniques that merit the adoption of revised tactics or techniques for the friendly units. (2) The lessons are really lessons relearned. If this is the case, it begs the question: Why are they being relearned? (3) The system rewards quantity over quality, giving way to "more is better." (4) Or, the reports have become a "fingerdrill" and no real analysis is occurring at the unit.

2. The inner and outer concept of lesson learning works in tactical units. In a battalion, the inner circuit is the squad, platoons, and companies. The outer circuit is the battalion staff agency (S3) that collects and disseminates the lessons both horizontally to other companies and vertically to higher headquarters. The cycle of learning begins at the individual soldier level and works up through the unit to the battalion staff. Once the commander and staff analyze the lessons, the lessons then can be disseminated.

3. There is a continuing debate on the danger of using lessons or tactics, techniques, and procedures gained from experience, but not written in doctrine. This was the reason for the disclaimers in Vietnam lessons literature. CALL has a similar disclaimer. This is good business,

but the link between doctrine and lessons learned must be clearly established. This will be discussed in greater detail in the next section of this chapter.

The Creation of the Center for Army Lessons Learned

Vetock's study of the history of US Army lesson learning concludes with the establishment of CALL in 1985. His book was written in 1988 while CALL was still in its infancy. However, Vetock's appraisal of CALL's potential influence on lesson learning offers some interesting insights.

As proposed, CALL seems seriously limited in its lesson-learning capabilities, so limited that its name could be a misnomer. As operated now and as envisioned later, CALL is actually a center for listing lessons, not learning lessons. Unlike the Combat Developments Command (CDC) during the Vietnam War, CALL is merely a field office and not a major command. CALL cannot directly adapt or otherwise develop doctrine and modify organization. Instead, it can only disseminate lessons in the form of information that has potential application for commanders, who may or may not choose to apply it. CALL can inform and otherwise spread good ideas - - tips - - on useful techniques and procedures to the Army at large - - and this is good, but limited. TRADOC is the logical executive agent of lesson learning, the major command that can incorporate lessons into the Army's doctrine and training, and pass along weighty suggestions to weapons developers and other agencies. CALL collects experience and evaluates it, but cannot make the Army learn it. While the lines of authority between CALL and TRADOC are unmistakable, the lines of application for lessons - - to make them "learned" - - are not fully developed.⁵⁸

The purpose of the next section is to analyze accuracy of Vetock's prophecy.

The Current State of Lesson Learning

The Army Lessons Learned Program

To fully understand the current state of lesson learning, it is important to recognize the intended purpose of ALLS as it is established in Army Regulation 11-33, *The Army Lessons Learned Program: System Development and Application*. Additionally, since the purpose of this study is to determine how leaders of tactical units can leverage the system to their advantage, the responsibilities of those units must be identified.

AR 11-33 outlines the following objectives of the ALLS:

1. Provide a mechanism for the routine review of observations from various sources and the incorporation of validated lessons learned into appropriate facets of Army operations.
2. Identify lessons learned and, where necessary, recommend changes to doctrine, training, organization, material, and leadership (DTOML) or other aspects of Army operations.
3. Assign responsibilities for collection, analysis, and implementation of lessons learned from all sources.
4. Provide information which will assist commands to prepare their units for the environment and threat associated with their assigned combat missions.
5. Provide information to assist units in tailoring their training for anticipated conditions of combat.
6. Develop procedures to implement lessons learned and monitor the implementation process.
7. Provide information to proponent doctrine authors, trainers, and combat developers that can assist with their requirement to obtain field validation of the US Army Training and Doctrine Command (TRADOC) products (DTOML).
8. Provide wide distribution of lessons learned.⁵⁹

Several organizations support the program. This study focuses on two: CALL and the major Army commands (MACOMs). AR 11-33 outlines the duties and responsibilities of these organizations. The AR makes the following very clear:

1. The Center for Army Lessons Learned (CALL) is the Army's focal point for the Army Lessons Learned System. Other agencies may collect, analyze, and collate information internal to their organizations. However, agencies will forward appropriate data to the CALL for further analysis and incorporation into the Army's library.⁶⁰
2. Major Army Commands (MACOMs) and other designated collection agencies will forward after action reports (AARs) to the CALL within 120 days of the end of the exercise or event.⁶¹
3. Whenever possible, observations will include the doctrine and tactics employed, organization designs, material adaptations, and innovations. Reports will address as appropriate, the status of training, manning, logistics, morale, and discipline of the combatants, event, or players.⁶²
4. CALL will identify those lessons learned having significant impact on/or requiring major changes to current doctrine, training, organizations, material, and leadership.⁶³

5. Application of lessons learned is a Total Army responsibility.⁶⁴
6. Commanders are responsible for applying lessons learned.⁶⁵
7. Proponent agencies will change doctrine, training, organization, material, and leadership based on appropriate lessons learned.⁶⁶
8. CALL will disseminate lessons learned products; for example, newsletters, bulletins, videotapes, or special reports, through command channels.⁶⁷
9. Commanders will use Army Lessons Learned products to enhance and support training to adapt their units for specific operation plan (OPLAN) requirements.⁶⁸
10. Commanders may adapt approved tactics, techniques and procedures, or training consistent with mission, enemy, terrain, troops, and time available (METT-T).⁶⁹
11. Commanders will document and submit through command channels to CALL any deficiencies in doctrine, training, organization, material, and leadership identified in the course of training or operations. Commanders should also forward any tactics, techniques, or procedures, which they have developed to more effectively execute current doctrine or to overcome encountered deficiencies.⁷⁰

In the review of the lessons of history, Dennis Vetock identified that effective lesson learned programs require both an inner and outer circuit. The Army's lesson-learned program has established these two circuits. CALL represents the outer circuit and the MACOMs and their subordinate units represent the inner circuit. However, as Vetock continually stressed, these two circuits must be tightly linked to ensure the success of the program.

Currently, there is a failing in the circuit and it seems to be at the local level -- with the MACOMs. Though CALL does receive articles and observations from selected individuals, there is not a concerted effort at the division level and below to collate useable lessons in the form of after-action reports and then submit them to CALL.

One of the reasons for this failure may be that AR 11-33 is not a very well known regulation. It was written in 1989 when there was a lot of emphasis on the Army's learning-program, but it has not been updated since. AR 11-33 does not address the technological advances the Army has made with computers and the fact that most battalions now have an

Internet capability. The technological advancements have significantly increased CALL's and the Army's ability to both receive and disseminate lessons and observations.

Another reason for this failure is that, until very recently, there does not seem to be a command emphasis on complying with the regulation. Vetock identified that for the learning circuit to work, there must be a mandate that directs leaders to support the system. AR 11-33 is such a mandate. Nevertheless, subordinate commanders must be held accountable in complying with the mandate.

There are several other reasons why the inner and outer circuits are not lashed up. Each will be addressed later in the study.

The Center for Army Lessons Learned and the Army-wide Circuit

The Army-wide or outer circuit falls under the responsibility of CALL. For the most part, CALL has been very successful in collecting and disseminating lessons through both active and passive means. CALL actively collects lessons by deploying CAATs to observe and document lessons from training exercises and real-world contingency operations. CALL passively collects lessons through the submission of articles and or observations from individual officers, soldiers, and civilians in the field. CALL also collects information, both actively and passively, from the Combat Training Centers. In all cases the material is then published in the form of newsletters or bulletins, or placed in the CALL database, all of which are accessible on their website on the Internet.

CALL is organized into three divisions: Lessons Learned Division, Information Systems Division, and the Research Division. Each of the divisions works closely with one another to accomplish the overall mission of CALL.

The Lessons Learned Division consists of two branches: Actual Operations and the Combat Training Center (CTC) Branch. The mission of the Lessons Learned Division is "to process and analyze observations and information from a variety of sources and to produce literature in a variety of media which contain lessons learned and tactics, techniques, and procedures (TTP)."⁷¹ The Lessons Learned Division uses both passive and active means to collect lessons. CALL receives articles and observations from the field including lessons from the CTCs. For active collection, CALL will form a CAAT or send a collection officer to gather information.

The Actual Operations Branch is responsible for most of the active collection within CALL. The mission of the Actual Operations Branch is "On order, deploy worldwide to collect lessons learned and TTP from both contingency operations and training exercises. As necessary, CALL organizes, trains, and deploys, and supports CAATs to gather information for the total Army."⁷²

To support the mission the Actual Operations Branch consists of a branch chief, usually a Major, four collection/operations officers (Captain or Major), an E7 Operations NCO, and three civilian analysts.

1. The branch chief is responsible for the overall operation of the branch. He or she monitors the assigned projects of the collection officers and orchestrates the initial collection planning effort.

2. The collection officers have several duties. Primarily they are collectors and writers. In garrison, they actively research issues and write articles and newsletters. During a collection mission, they may act as operations officers and supervise the collection efforts of designated subject matter experts or they may serve as subject matter experts and actively collect information. Often they perform both tasks.

3. The Operations NCO performs administrative duties in both garrison and during deployments. He or she usually has expertise in automation technologies.

4. The civilian analyst's primary duties include analyzing data collected from operations for doctrinal consistency and clarity. The analysts also write newsletters and articles based on information collected during operations.

To accomplish this mission, CALL uses a detailed collection process. The base document for the process is the Contingency Collection Plan.⁷³ The Contingency Collection Plan is a compilation of Commander's Critical Information Requirements (CCIR) collated from TRADOC schools (i.e. Infantry, Armor, Intelligence School). The Contingency Collection Plan contains those issues or problem areas the Commandants of the schools deem to be most important to their specific branch. For example, a CCIR from the Infantry School is "How do units develop fire plans for both the offense and defense?"⁷⁴ An operations officer at CALL maintains the Contingency Collection Plan and updates it as the Commandants identify new issues.

The initial phase of the collection process begins when CALL is tasked to conduct a collection mission. When the tasking is received, the CALL Director, Lessons Learned Chief, Deputy Chief, and the Actual Operations Chief conduct a mission analysis to determine the following:

1. Collection requirements based on the Contingency Collection Plan, and the mission of the unit being supported (i.e. Combat, Stability and Support Operations).

2. Composition of the CAAT will collect observations against the mission collection plan. The CAAT includes subject matter experts from TRADOC schools and other organizations that provide expertise to facilitate the collection effort (i.e. Safety, Army Material Command, Special Operations Command).

3. The CAAT Team Chief who will supervise the collection mission. For the initial Bosnia collection mission, the Team Chief was a Lieutenant Colonel War College Fellow.

The next step of the process is to develop the mission collection plan. This is usually done prior to the deployment of the CAAT at a workshop at Fort Leavenworth with all the CAAT members present. The collection plan includes the following:

1. Parent Issues. A parent issue is the overarching topic that will be addressed. For the initial Bosnia collection mission, one of the parent issues was "Protect the Force". The parent issue focuses the development of issues.

2. Issues. Issues fall under each of the respective parent issues. The issue must span multiple events. For example, under the parent issue of "Protect the Force", issues included: Safety, Fratricide, Casualty Care and Combat Health Support, and Soldier Considerations.

3. Sub-Issues. A sub-issue is synonymous with a function from TRADOC Pamphlet 11-9, *Blueprint of the Battlefield*. For the issue of fratricide, a sub-issue from the *Blueprint of the Battlefield* was "Select Targets to Attack".

4. Questions. For collection purposes, a question "equates to an observation requirement." The question(s) must relate to the sub-issue and contribute to answering the problem statement. The problem statement for the sub-issue "Select Targets to Attack" may either be implied or stated to be: "How do units select targets to attack without committing fratricide?" A question to assist in answering the problem statement was: "What TTPs exist to ensure proper identification of friendly forces during hours of limited visibility?" This sub-issue and question relates directly back to the example CCIR from the Contingency Collection Plan of: How do units develop fire plans for both the offense and defense?

5. Observables. Observables are those locations, events, or reports that may be reviewed to allow the collector to make an observation that will assist in answering the question. For the above question, an observable was the Brigade Tactical Operations Center.

6. Deliverables. Deliverables are the products that will result from answering the question. A deliverable may simply be the technique used by the unit or an article based on the observations of the collector.

7. Method. The method is the means the collector will use to answer the question. Methods may include interviews or simply observing the unit performing the mission.

8. Doctrine. This is the list of doctrinal references that are used to answer the questions.⁷⁵

The collection plan is a working document that may be revised and updated during the collection mission. Collectors may also make “unsolicited” observations that are not in the collection plan. For example, the initial Bosnia collection plan did not contain any questions on how to separate former warring factions or how to conduct a Joint Military Commission. However, when the CAAT linked up with the 1st AD (Task Force Eagle) in Germany prior to the deployment into Bosnia, it was determined that these two issues were important. Subsequently, information was collected that resulted in the publication of two newsletters on the subjects.

After the mission analysis and collection plan is complete and the CAAT has been formed, the next phase of the collection process is the deployment of the CAAT and the CAAT’s link up with the host unit. This is an important phase because often the unit is deep into either the planning or execution of the operation and the arrival of “outsiders” can be perceived as a distraction to mission accomplishment. The professionalism of the team members is key to overcoming this obstacle. It must be stated up front that the CAAT is there to help the unit. Once this relationship has been established, there are some minimal support requirements that the team requires: (1) Access to staff/command updates, planning sessions and briefings; (2) A work space with access to communication links that support E-mail; and (3) Mess, transportation, and billeting support.⁷⁶

The next phase is the actual collection operation. During this phase, the collection officers/SMEs work directly with the unit to gather information and observations. The observations do not go directly from the SME to CALL and then the Army. Rather, the flow of observations is from the SME to the commander of the unit in which the observation was made. From there the Team Chief reviews the observation and then it is sent to the analyst at CALL via File Transfer Protocol on the internet. The analyst screens the observation for content and clarity and then returns it to the Team Chief. The Team Chief then gives it to the senior commander of the unit (commanding general, brigade commander, etc.) for his final approval. The observation is then sent to the analyst and is archived until the CAAT returns to write the final report. It is important to note that only approved observations are sent to the total Army.⁷⁷

The final phase of the collection process is the redeployment of the CAAT and the writing and publication of the *Initial Impressions Report* (IIR) and other articles or newsletters that resulted from observations made by the SMEs. The IIR usually takes about a week to write and another month to publish.

The CTC Branch of the Lessons Learned Division, like the Actual Operations Branch, does both passive and active collection, but their primary mission is "to capture lessons learned and TTP derived from the CTCs for dissemination to the Total Army, as a part of the overall lessons learned process."⁷⁸ The CTC Branch has three officers and three civilian analysts that are aligned with one of the CTCs (JRTC, NTC, CMTC) that reside at CALL in Fort Leavenworth. An officer and civilian analysts are also stationed at each of the respective CTCs. A Major is the Branch Chief and a GS civilian is the Deputy Chief.

The CTC Branch receives lessons and TTPs from the CTCs in the form of trends, AARs, and articles. The information is then published in several different types of products which in *CTC Bulletins* and *Trend Conpendiums*.

In addition to publishing bulletins and newsletters, the CTC Branch assists units by providing "Heads Up" packages. The Heads Up "is a training support package containing the most recent trend and lessons-learned information, relevant CALL newsletters and CTC-produced "how-to" tapes. This information is designed to help units assess themselves in light of identified CTC shortcomings, while providing some solutions to those shortcomings."⁷⁹ The Heads Up is sent to units well before their scheduled CTC rotation in order to allow time to incorporate the lessons during pre-rotation training.

The CTC Branch also supports "Focused Rotations. This program, with the assistance of the CALL representative at the CTC, allows SMEs to augment the O/C teams and collect observations on specific issues.

The combined efforts of the Lessons Learned Branches result in the publication of various products. These products include:

1. *CTC Quarterly Bulletin*. This publication is a collection of articles, usually written by O/Cs, on lessons and TTPs that have been proven to work at the CTCs.

2. *CTC Trends Bulletin(s)*. There are three different "Trends Bulletins" that are published. Essentially, they are a compilation of trends and associated TTPs that have been identified by O/Cs.

3. *News From the Front*. This is a bi-monthly product that contains articles and information on exercises, real world events, and subjects that inform and educate soldiers and leaders.

4. *Topic Newsletters*. These newsletters highlight a specific issue or subject. For example, *CALL Newsletter No. 95-7, Tactical Operations Center (TOC)*, identifies problem areas and offers solution and TTP on how to conduct TOC operations.

5. *Special Editions*. These are newsletters that pertain to a specific operation (i.e Bosnia) or exercise (i.e. Advanced Warfighting Experiment). Special Editions are normally available

prior to deployment and are targeted for units preparing to deploy or already deployed to a theater of operations.

6. Handbooks. These are "how-to" manuals (i.e. Rehearsals).

7. *Training Quarterly*. This is accessed from the CALL Homepage and it is the Army's first on-line publication. It is focused on TTP for brigades and below.

8. *Initial Impression Reports*. This is a product developed immediately after a real world deployment (i.e. Bosnia, Haiti). It is a compendium of the observations from the collection plan with an executive summary of the issues.

9. CTC Orders. Upon request, CALL provides sample CTC orders to facilitate training the staff planning process.⁸⁰

The other two Divisions within CALL, Informations Systems Division and the Research Division, are focused primarily on archiving and disseminating the information gathered by CALL. While personnel in the Actual Operations and CTC branches collect lessons and write articles and newsletters, the Information Systems Division, through CALL's "Gateway" gets that information out to the Total Army electronically via the internet. The "Gateway" is CALL's homepage and has literally hundreds of newsletters and articles that contain lessons and TTP. Any soldier with internet capability can access most of the CALL publications. Some databases on the Gateway require a user identification number.⁸¹

The Research Division supports CALL by using state-of-the-art technology and international archival standards to make the collected information easily accessible and user-friendly to users of CALL databases. Classified and unclassified documents are available on two separate computers and users must demonstrate the appropriate security clearance to gain access to the systems.⁸²

Additionally, CALL, working with civilian contractors, has developed the CALL Collection and Observations Management System (CALLCOMS). This system may replace the

Joint Universal Lessons Learned System (JULLS) as the military's database for lessons learned. This is significant for several reasons. First, CALLCOMS is more user friendly than JULLS and the information is more easily accessible. Second, the system is set up to support CALL's collection methodology. Users can develop their own collection plans. Finally, the system can be used at the unit level (anyone with a computer with the software loaded on it). This way battalions can manage their own lessons learned program and send the information directly to CALL.

The observations that are placed on the CALL database are often raw data. This is to say that the information has received only limited analysis. The information is often the author's opinion based on his or her knowledge of doctrine. Sometimes there is a good deal of analysis that takes place before an observation is placed on the database, but the fact remains that the information is just that -- an observation. It is not doctrine. An observation may include TTP used by the observed unit. It will be shown that there is a difference between TTP and doctrine and it is in this illusive gray area that CALL treads very dangerous waters.

CALL and the Slippery Difference Between Doctrine and TTP

CALL acknowledges up front that they do not write nor publish doctrine. They deal in the illusive realm of the TTP. This disclaimer is important. Doctrine, like history, requires significant analysis and interpretation before it is written and accepted, which takes time. Doctrine is evolutionary. However, when it is written and published it should represent the Army's best guess of how our leaders and soldiers should approach warfighting. Though Michael Howard assertion that "we never get it right in peacetime" may have some validity, the Army ought to be pretty darn close when doctrine is published.

The value of doctrine cannot be argued. Major Paul Herbert, in his study *Deciding What Has To Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations* said:

Doctrine is an approved, shared idea about the conduct of warfare that undergirds an army's planning, organization, training, leadership style, tactics, and equipment. These activities in preparation for future war lie at the heart of the military profession in modern societies. When well conceived and clearly articulated, doctrine can instill confidence throughout an army. An army's doctrine, therefore, can have the most profound effect on its performance in war.⁸³

However, in defining doctrine, FM 101-5-1 states, that "it is authoritative, but requires judgement in application." Clearly, doctrine is a guide, but one better have a good reason why it was not applied in training or combat. TTP, on the other hand, is different. The definition is not as clear and its application not as precise. If a leader applies a TTP he or she has learned rather than doctrine, they accept some risk -- unless, of course, they are successful.

Regardless, knowing the Army's doctrine is important aspect of learning. One "must know what he or she does not know" when evaluating lessons. Doctrine is that base of knowledge that allows soldiers and leaders to make such judgements. Again, TTP is different -- it is "something short of doctrine." While knowing doctrine may help a soldier in developing a TTP, he or she does not have to know doctrine for a TTP to be identified or valid. If it worked in a given situation, despite what doctrine may dictate, then it is a TTP worthy of notice.

An example of this occurred in the hedgerow fighting of World War Two. The bocage country in France represented a formidable defensive obstacle to US forces. Dennis Vetock points out: "American combat troops entered bocage country without any specific training or doctrine for the unique style of hedgerow combat. They had no special equipment or techniques to call upon, either. It fell to trial and error."⁸⁴

The solution to the problem came from a tanker sergeant who developed a blade attachment that was placed on the front of the tank. The attachment, called the "rhinoceros," had a significant influence in allowing US forces to "bust out of the bocage." As Vetock points out, "the rhinoceros allowed the tank to penetrate deep into the tangled roots, keeping the hull of the tank down and allowing a quick breakthrough that caught the defenders by surprise."⁸⁵

The “rhinoceros” was pure TTP. It is difficult to imagine someone telling that sergeant that it could not be used because it was not written in doctrine. However, there is some danger in TTPs that are identified “in-stride.” In his article, “People of Whom we Know Nothing: When Doctrine Isn’t Enough” Lieutenant Colonel Douglas Scalard provides such an example using a publication distributed by CALL.

Lieutenant Colonel Scalard cited an Initial Impressions Report (IIR) published by CALL on lessons learned from Macedonia. One observation in the report suggested that US *Military Code of Conduct* and peace operations doctrine was inconsistent with peacekeeping training. The author of the IIR recommended that the US adopt the Nordic model of peacekeeping, because US soldiers were too aggressive. It was advocated that US soldiers train using vignettes which teach them “that adherence to the Code of Conduct may be detrimental to mission accomplishment (because) an American sergeant does not understand his authority to lay down his arms and surrender his patrol.”⁸⁶

In his analysis, Lieutenant Colonel Scalard notes, “Sometimes, however, CALLs feedback may too immediate, too close to the ongoing operation. This is an extreme example of the misuse of lessons learned and admittedly an exception to the volumes of excellent work CALL produces. But the exceptions prove the rule that we must be wary of the ‘lessons’ we learn. We must understand their context in terms of time, place, participants, and situational dynamics. It is only by understanding the lessons’ context that we can derive the full benefit of CALL.”⁸⁷ Lieutenant Colonel Scalard is exactly right. However, during training in Macedonia when a Nordic instructor told his class “You’ve got to be shot [as opposed to shot at] first before you can return fire,” a soldier replied, “Ain’t going to be that way.”⁸⁸ This is precisely why CALL publishes TTP rather than doctrine. US soldiers have to be given more credit for their ability to distinguish right from wrong.

The TTP that CALL publishes is a bridge between the revisions of doctrinal material. For example, FM 7-8 *Infantry Rifle Squad and Platoon* has not been updated since 1992. There was a 13-year gap between the 1984 version of FM 101-5 *Staff Organization and Operations* and the new edition that was published in 1997. It takes a long time to write doctrine. And a lot happens in that time. New technologies are introduced and units identify new techniques that work. This especially has been the case based on training conducted at the CTCs and unit experience during contingency operations. There are several examples of how CALL has attempted to bridge the gap of doctrine.

A great example of the Army's lesson learned program working within Vetock's inner and outer circuits was in the publication of the CALL Handbook *Own the Night: Small Unit Night Fighter Manual*. This handbook contains TTPs on how to best employ the Army's night vision technologies in squad battle drills. FM 7-8 could not address the issue because the technologies had been introduced since the last revision of the manual. Therefore, the 2nd Brigade of the 82nd Airborne Division developed the TTP and submitted it to CALL. CALL published the TTP in March of 1996.

Another example is the newsletter *Tactical Decision-Making*. This newsletter provided TTP on the abbreviated decision-making process. The newsletter is also an example of techniques and procedures, written by CALL, being implemented in Army doctrine. At the time of the publication of the newsletter in December of 1995, FM 101-5, *Staff Organization and Operations* was under revision. The author of the newsletter took lessons from the CTCs and developed a TTP for an abbreviated decision-making process. The doctrine writers at Fort Leavenworth took some of the techniques provided in the newsletter and used them in the new edition of FM 101-5, which was published in 1997.

These are but a few examples and there are many others. The TTP used by CALL was identified either by passive or active means. Much of what CALL publishes, as is the example of

Own the Night, comes from units that identified solutions to problems during training and exercises. Most of the time the solutions came as a result of AARs. It is in the AAR process, where Vetock's inner circuit (squads through divisions) does most of its learning.

After-Action Reviews and the Inner Circuit

The very heart of the Army's ability to grow, particularly at the tactical level, is deeply rooted in the AAR process. It is through AARs that lessons are internalized because it is the soldiers within the units that discover them. As General Gordon R. Sullivan points out: "For America's Army, the AAR was the key to turning the corner and institutionalizing organizational learning. The AAR has ingrained a respect for organizational learning, fostering an expectation that decisions and consequent action will be reviewed in a way that will benefit both the participants and the organization, no matter how painful it may be at the time. The only real failure is the failure to learn."⁸⁹

The AAR, though a powerful vehicle for unit learning, must be performed to standard for its true benefit to be realized. The definition of the AAR provided by FM 25-100 *Training the Force* best summarizes those standards: "A structured review process that allows training participants to discover for themselves what happened, why it happened, and how it can be done better. The AAR is a professional discussion that requires the active participation of those being trained. An AAR is not a critique."⁹⁰ For the AAR to be anything less than a professional discussion with the active participation of all those being trained invites disaster to the learning environment of a unit.

The Army's training doctrine is very clear on the performance measures to meet those standards. Training Circular 25-20, *A Leader's Guide to After Action Reviews* expands on the standards outlined in FM 25-100, *Training the Force* and FM 25-101, *Battle Focused Training* and provides the leader with all the information necessary to effectively facilitate both formal and

informal AARs. The major difference between a formal and informal AAR is the amount of planning and preparation and the level of unit that participates in the AAR. Formal AARs require a significant amount of resources and planning. They usually occur during major training events and are similar to the AARs conducted at the CTCs. Formal AARs are usually conducted at the company-level and above, while informal AARs are conducted at the platoon-level and below. The TC identifies four steps to the AAR: planning, preparation, conduct of the AAR, and follow-up. Again, the planning and preparation for a formal AAR is significantly greater than that of an informal AAR. However, the performance measures for the conduct of the AAR and the follow-up are the same.

The conduct of the AAR should seek maximum participation, maintain focus on training objectives, constantly review teaching points, and record key points.⁹¹ To accomplish this the AAR should follow this sequence:

1. Introduction and rules
2. Review of objectives and intent
 - a. Training objectives
 - b. Commander's mission and intent (what was supposed to happen)
 - c. OPFOR commander's mission and intent
 - d. Relevant doctrine, tactics, techniques, and procedures
3. Summary of recent events (what happened)
4. Discussion of key issues
 - a. Chronological order of events
 - b. Battlefield operating systems
 - c. Key events/themes/issues
5. Discussion of optional issues
 - a. Soldier/leader skills

- b. Tasks to sustain/improve
 - c. Statistics
 - d. Other
6. Discussion of force protection (safety)
 7. Closing comments (summary)

The follow-up should identify those tasks requiring retraining, fix the problem immediately if possible, and use the results of the AAR in making the commander's assessment.

While the procedures for the conduct of AARs are clearly established there is some question whether the AARs are actually being conducted to standard. Major Justin Gubler, in his study, *Unit Simulations Training System After Action Reviews: A Novel Approach to Achieve Combat Effectiveness*, found that "the majority of AARs are not problem solving sessions nor are AAR leaders following doctrinal AAR guidance with respect to discussion participation."⁹² Major Gubler, a former O/C at the JRTC at Fort Polk, Louisiana, reviewed 17 AAR tapes from JRTC and the NTC and conducted interviews with trainers throughout the Army to determine if AARs were being conducted in accordance with our training doctrine. Major Gubler found that based on his research that "The majority of AARs are not problem solving sessions nor are AAR leaders following doctrinal AAR guidance with respect to discussion participation. Ineffective AARs are occurring at the CTCs and since they are the model for the training and R&D communities, the ineffectiveness may be propagated."⁹³ If this is the case, then the Army's lesson-learned program is in serious trouble.

Even if AARs are being conducted to standard, doctrine still does not fully support the Army's program for learning. The requirements to "record key points" and "use the results of the AAR in making the commander's assessment" are important aspects of the AAR process. However, neither the TC nor FM 25-100 and FM 25-101 require leaders to write up the results of the AAR and submit them to CALL. In fact, there is no requirement at all for a written product to

be produced. If this is the case, how can units in the Vetock's inner circuit (MACOMs) support the Army's outer circuit (CALL)?

What happens is that the results of the AAR usually remain localized. Therefore, the unit that learns a lesson from the AAR process is the only one that benefits from that newly obtained knowledge, except if it is passed by word of mouth. This is a major failing in the Army's learning doctrine. Units must have systems in place to archive the results of AARs and then disseminate those results throughout the entire organization and eventually to CALL. If this does not happen, then the entire Army lesson-learned program is in jeopardy. However, the reason for this failure may be that tactical units are not structured within their staffs to use the information from AARs to their best advantage.

Dennis Vetock determined that for lesson learning to be used to its fullest potential, the efforts to collate, analyze, and then disseminate the information must be centralized. Vetock states, "After surveying more than two hundred years of American lesson learning, a number of conclusions emerge about exploiting battle experience. Guidance became increasingly necessary as wars grew in scale and complexity. Where the efforts of individuals once sufficed, modern warfare demanded organizational efforts to effectively gather, analyze, and apply the lessons of the battlefield."⁹⁴

What this means for tactical units is that a central agency must be responsible for collecting, analyzing, and disseminating lessons. It makes the most sense that the G3/S3 take the lead as the focal point for collating lessons in tactical units. However, this is not normally the case. FM 101-5, *Staff Organization and Operations* does not designate a staff with responsibility to collect, analyze, and disseminate lessons. Although the Army has identified CALL as its focal point, centralization of lesson learning at the division level and below has not been clearly delineated.

The result of this lack of structure within the staff to centralize learning in the unit is that lessons are learned locally and on an ad hoc basis. The entire organization does not benefit from the lessons gained. Until the responsibility of centralizing the collection and dissemination of lessons in tactical units is mandated in doctrine, it is unlikely that it will occur uniformly throughout all units in the Army. This is not to say that leaders cannot implement such a structure within their units. However, to accomplish this requires the creation of a unit culture that promotes learning to its fullest potential.

To evaluate the level of learning in a unit and to establish the standards by which leaders can create a learning organization requires several things. First, leaders must know the Army's program and what the program requires of the leadership. Second, the leader must understand how the program has evolved over time and the lessons from the evolution. This has been done. Now, the leader must evaluate where the program falls short. The Army's lesson-learned program, as outlined in AR 11-33 is doctrine and it has not been revised in nine years. There must be a revision of AR 11-33, but in the meantime, leaders must understand the shortfalls of the system in its current state. This is important to the leader as he or she develops their unit learning program. As significant, it is important to the Army as a whole, if the Army is going continue to grow and evolve as a learning organization.

The Shortfalls of the System

A Failure to Nest Learning Programs

AR 11-33 does not contend to establish a lesson learned program for tactical units -- it is with the Army's program that it is concerned. FM 25-100 and 25-101 provides the standards for the AAR, but does not mention how the AAR is linked with the Army's lesson-learned program. The Army's program is not "nested" throughout the entire organization. In practice, the two circuits described by Vetock do not support and complement one another -- this is the biggest

shortfall of the Army's lesson learned program. Leaders of tactical units must understand this shortfall, learn from it, and apply the lessons to their organizations.

The notion of nesting is essential to commanders as they develop their concepts of operation for operations orders. Subordinate plans must support the higher commander's concept of operation. The same is true for leaders as they develop their concept of learning within their units. When that concept is clearly articulated, then subordinate leaders are obliged to develop concepts that support the higher commander's intent for learning. This cascades all the way down through the chain of command to the squad leader and ultimately to the individual soldier. The key is for the leader to clearly articulate the intent to the subordinate.

A Failure to Communicate

There is a general lack of knowledge of the requirements of AR 11-33. A former G3 of a division was asked if he knew that divisions were required to submit AARs to CALL within 120 days from the completion of a CTC rotation or major training events. He did not know of such a requirement. This is one example, but the fact that CALL rarely receives AARs from MACOMs is a clear indicator that the provisions of the AR are not known.

If division-level commanders and staffs do not know of the requirements of AR 11-33, it is unlikely that subordinate leaders even know that an Army Lesson-Learned Program exists, let alone that they are key players in its success. This may be remedied with the new emphasis on learning in the new FM 22-100 and OPMS XXI. However, this may not be enough.

The provisions of AR 11-33 are not incorporated in a doctrine that the tactical leader reads and uses. Doctrinal material on how to create and sustain a learning organization does not exist. Consequently, there are no performance measures for learning within tactical units. Leaders need a guide to let them know if they met the standard or not.

A Failure to Define and Measure

There is considerable ambiguity of the meanings of the terms lesson and lesson learned. Understanding the meanings of these terms is central to learning in tactical units. The relationship of doctrine, TTP, lessons and lessons learned is also unclear. Without a clear distinction of the inter-relationship of these terms, the goal of learning in units can become convoluted.

Additionally, defining the characteristics of a learning organization is an elusive challenge. Peter Senge, author of the book *The Fifth Discipline*, made the term learning organization popular for both civilian and military leaders. Senge defines the learning organization as: "An organization that is continually expanding its capacity to create its future ... it is not enough to merely survive. 'Survival learning' or what is more often termed 'adaptive learning' is important. But for a learning organization, adaptive learning must be joined with 'generative learning,' learning that enhances our ability to create."⁹⁵

What does this definition offer a second lieutenant that is newly arrived to his or her unit or a battalion commander for that matter? This begs the question: How does one know when they have a learning organization? FM 22-100 does an adequate job of describing the characteristics of a learning organization, but it is conceptual in nature. It does not provide the performance measures for learning. The task is relatively clear: Create and sustain a learning organization. The conditions may be in a combat, training, or garrison environment. But what are the standards? This question remains unresolved.

Doctrine is also limited in providing organizational support to the leaders as they attempt to create learning organizations. A leader may have a clearly articulated intent for learning within their unit and he or she may adequately define what they mean by learning, but the staff must be structured to support the program initiated by the leader.

A Failure in Staff Structure that Supports Learning

The staff must support the commander's learning program by collating, analyzing, and disseminating the lessons that are identified during AARs. This is another failure of doctrine. This responsibility must be given to a single staff agency. Other staffs and subordinate commanders must support that staff by providing information to that designated staff. To best accomplish this, technology must be leveraged to facilitate the process.

A Failure to Leverage Technology

In garrison, most companies in the Army have computers that are linked to a local area network that allows the use of email. If this is not the case for all units now, it will be in the very near future. The computer and email, as well as file transfer protocol (FTP), offer a very powerful tool for the transfer of information within units. This tool must be used to maximize the collation and dissemination of lessons throughout the unit. This is probably being done on a limited basis, but not to its fullest potential. Even if it is being used, quality information in the form of usable lessons must be derived and then passed through the system. The best way to identify those lessons is through the AAR process.

A Failure in Standards?

It would be nearly impossible to determine if all units in the Army conduct AARs to standard. However, if Major Gubler's study on the quality of AARs is an accurate reflection of most units, then the current state of learning in the Army is in serious trouble.

A Model in Learning

During Operation JOINT ENDEAVOR, the 1st Armored Division, under the command of Major General William Nash, effectively established a learning culture that stands as a model for units in both peacetime and during contingency operations. The 1st AD was the nucleus of the "Multinational Division -- North" (MND-North), one of three multinational divisions

comprising the Implementing Force (IFOR). MND-North or "Task Force Eagle" was tasked to assist in the implementation of the requirements outlined in the General Framework Agreement for Peace (GFAP), which was signed by the former warring factions on 14 December 1995.

CALL was tasked in November of 1995 to plan for support of a collection mission in Bosnia. At the time, the 1st AD was preparing to conduct training in Hohenfels and Grafenwoer, Germany. A team of collection officers and NCOs assigned to CALL deployed to Germany to conduct coordination and liaison with the leadership of the 1st AD. During the deployment, the team established the framework for the collection mission.

First, two CALL collection officers would be "embedded" in the two US maneuver brigades. They would work directly for the brigade commander. The CALL officer's primary responsibility was to support the commander operationally. The officer's secondary responsibility was to collect lessons and support the CALL team chief. As it turned out, one officer became the brigade assistant plans officer and the other worked as a brigade battle captain. The two officers performed these duties during the exercises conducted in Germany, becoming familiar with the standard operating procedures of the units and establishing a rapport with the commanders and staff members of the brigades.

The CAAT command and control (C2) cell would be located with the division main command post. This cell would include the CAAT team chief, a CALL operations/collection officer, and an operations NCO. The team chief would work for the Major General Nash with the primary mission of coordinating the collection mission. Additionally, the C2 cell would assist the division commander in implementing the division's internal lessons learned program. A CALL operations/collection officer would also be located with the division rear and coordinate collection of logistics lessons.

Upon completion of the training in Germany, the CALL members returned to Fort Leavenworth to begin final planning of the collection mission. A team chief was designated and

requests for subject matter experts (SME) were submitted to various TRADOC schools. The team chief would be Lieutenant Colonel David Fastabend, a war college fellow and School of Advanced Military Science (SAMS) graduate. The remainder of the team would consist of 6 officers and NCOs assigned to CALL and 25 officers and NCOs from the TRADOC schools who would perform the duties of SME and collection officer/NCO. The final component of the team was a 5-member combat camera crew from the 55th Signal Company at Fort Meade, Maryland.

The SMEs provided expertise in the following areas:

Infantry	Civil Affairs/PSYOP
Field Artillery	Quatermaster
Engineer	Ordnance
Signal	Judge Advocate
Army Aviation	Chaplaincy
Chemical	Safety
Logistics	Transportation
Armor	Medical/Preventive Medicine
Military Intelligence	Army Material Command
Military Police	Leadership/NCOES

The CAAT assembled at Fort Leavenworth to conduct a workshop, which consisted of development of the collection plan, computer and automation training, and training on the CALL collection methodology. The CAAT then deployed to Fort Benning, Georgia for mission-specific pre-deployment training and then to Germany to linkup with the 1st Armored Division. While in Germany, the CAAT made final preparations for deployment into Bosnia. The collection plan was updated based on new mission requirements which were identified as a result of the publication of the General Framework Agreement for Peace and the division's continuing course of action development. CALL collection/operations officers and designated SMEs linked up with

subordinate units and began the collection mission. This also facilitated deployment of the SMEs into the area of responsibility (AOR) in Bosnia. Around Christmas of 1995, the first units of Task Force Eagle, along with members of the CAAT began their deployment into Bosnia.

The purpose of this study is not to describe in detail the operations of the CAAT in its support of the CALL collection mission, but rather how CALL supported Task Force Eagle in Bosnia. Normally, CALL is associated with support to the Army's overall lesson-learned program. This has been discussed in other publications. Suffice it to say that from the initial collection mission, which last almost three months, CALL published over 500 written observations. In addition to the observations, CALL published an Initial Impressions Report, two newsletters, and numerous articles -- all of which have been valuable to the total Army. Nevertheless, one of the more important aspects of CALL's involvement in Operation JOINT ENDEAVOR was their support to Task Force Eagle's internal lessons learned program. It is in the analysis of this program where leaders of tactical units can truly discover how to leverage lesson learning to their advantage.

Major General Nash's lesson-learned program centered on the brigades within his task force. Each of the brigades within the task force was required to conduct AARs on a frequent basis. The information from the AARs was documented in written form and submitted to the division headquarters through CALL's team chief who was in charge of CALL's collection effort in Bosnia. The team chief who initially worked directly for Major General Nash (on subsequent CAAT's the team chief worked for the G3). The information was usually passed via email or on the maneuver control system (MCS). The team chief or his designated representative would then analyze the information and write what came to be known as "The Latest Lesson Learned" bulletin. Major General Nash would review the bulletin and upon his approval it would be published and disseminated to all platoon-sized units within the task force. A new bulletin would

be disseminated every 72 hours in paper copy, through the MCS, and on email. Additionally, a "Lessons Learned" folder was created on email to allow easy access to all units.

The key component of the process was the AAR. The brigades required all platoons to conduct AARs and document the results. The battalion S3s maintained copies of the AARs and archived them. Additionally, on at least one occasion, a task force level AAR was conducted and facilitated by Major General Nash. This occurred after the task force had experienced several mine incidents. For this particularly AAR, the brigades were required to develop mine awareness packets, which contained the results of the platoon level AARs and the lessons from the mine incidents. Each brigade commander was required to brief the significant findings from the AARs.

The Task Force Eagle model for learning provides a methodology for leaders, at every level throughout the Army. It is a start point. To determine that applicability for a platoon may requires some synthesis, but the use is clearly present.

1. Leaders must mandate that AARs occur on a frequent basis. At a minimum, they must occur after all training events in peacetime and after the completion of missions during contingency operations.

2. The results of the AARs must be documented and archived. There must be a system to determine if lessons are being relearned or if mistakes are being repeated. If this is the case the unit may have a systemic problem that must be addressed. A technique used by one battalion in the task force was to address the status of lessons learned from previous AARs. The commander would require leaders to describe the steps implemented to prevent the reoccurrence of problems that had already been identified.

3. There must be a system to disseminate the lessons. As units become more automated this becomes easier. For smaller units, it is more difficult, particularly at company level and below. It can be done verbally, but the requirement to maintain written copies of the lessons remains.

4. The lessons must come through a central agency for analysis before they are disseminated. As Major General Nash pointed out, "Lesson Learning is dangerous business."⁹⁶ Precautions must be taken to ensure soldiers do not learn the wrong lessons. What may have worked in one instance may have been an anomaly.

5. The leader of the unit must take the lead in establishing the environment that facilitates learning. He must create a "learning culture." Major General Nash clearly did this.

6. Clearly, the presence of a CALL CAAT greatly assisted Major General Nash in collecting and disseminating the lessons learned. On major contingency operations, it is almost assured that a CAAT will be deployed with the unit. Major General Nash used the CAAT to his advantage by co-opting them into his staff. However, such a system can be established without a CAAT. In fact, it must be established.

One may ask: What benefit did Task Force Eagle gain for all their trouble? In an environment where death or injury was literally a step away, casualties to mine incidents were very few. This is but one example, but others include lessons on everything from conducting a joint patrol with the Russians to techniques on how to prevent tent fires.

The most prominent example is probably the overall success of the mission in Bosnia, where only two and half years ago the former warring factions were intent on killing one another to extinction. One need only to go to the Turkish market in Sarajevo where citizens walk free from the fear of mortar attacks to see the fruits our soldier's labor in Bosnia. It is not a stretch to say that our soldier's ability to learn and adapt to an ambiguous environment has contributed to that success.

¹Gordon R. Sullivan, and Michael V. Harper, *Hope Is Not A Method* (New York: Times Business, 1996), 189.

²Douglas Scalard, "People of Whom We Know Nothing: When Doctrine Isn't Enough," *Military Review* (July-August 1997, No 4), 10.

³Ibid., 11.

⁴US Army, US Army Regulation 11-33, *Army Lessons Learned Program: System Development and Application* (Washington, DC: Department of the Army, 1989) , 10.

⁵Ibid.

⁶US Army, TRADOC Regulation 11-13, *TRADOC Remedial Action Program* (Fort Monroe, VA: US Army Training and Doctrine Command, 1996) , 17.

⁷Ibid.

⁸US Army, FM 101-5-1, *Operational Terms and Graphics* (Washington, DC: Department of the Army, 1996) , 1-151.

⁹Ibid.

¹⁰Ibid.

¹¹Ibid.

¹² Dennis J. Vetock, *Lessons Learned: A History of US Army Lesson Learning* (Carlisle Barracks, PA: US Army Military History Institute, US Army War College, 1988) , 2.

¹³Ibid. , 2 (Authors emphasis)

¹⁴Ibid. , 3.

¹⁵Ibid. , 3.

¹⁶ US Army, CALL, *Operation Joint Endeavor Initial Impressions Report:Initial Operations* (Fort Leavenworth, KS: US Army Combined Arms Center, 1996) , iii.

¹⁷U.S Army, FM 22-100, *Army Leadership* (Initial Draft, 4 April 1997) (Fort Leavenworth, KS: Center for Army Leadership,1997) , 10-37.

¹⁸Sullivan and Harper , 192.

¹⁹National Research Council, Committee on the Techniques for the Enhancement of Human Performance, Commission on Behavioral and Social Sciences and Education, *Enhancing Organizational Performance* (Washington, D.C.: National Academy Press, 1997) , 68.

²⁰Ibid. , 90.

²¹Sullivan and Harper , 189.

²²Vetock , 38.

²³Ibid. , 39.

- ²⁴Ibid. , 46.
- ²⁵Ibid. , 47.
- ²⁶Ibid. , 48.
- ²⁷Ibid.
- ²⁸Ibid. , 127.
- ²⁹Ibid. , 57.
- ³⁰Ibid.
- ³¹Ibid. , 58.
- ³²Ibid. , 59.
- ³³Ibid. , 60.
- ³⁴Ibid. , 61.
- ³⁵Ibid. , 62.
- ³⁶Ibid.
- ³⁷Ibid.
- ³⁸Ibid. , 63.
- ³⁹Ibid. , 65.
- ⁴⁰Ibid. , 77.
- ⁴¹Ibid.
- ⁴²Ibid. , 80.
- ⁴³Ibid.
- ⁴⁴Ibid. , 81.
- ⁴⁵Ibid.
- ⁴⁶Ibid. , 82.
- ⁴⁷Ibid. , 83.

⁴⁸Ibid. , 85.

⁴⁹Ibid. , 86.

⁵⁰Ibid. , 104.

⁵¹Ibid. , 105.

⁵²Ibid.

⁵³Ibid.

⁵⁴Ibid. , 109

⁵⁵Ibid. , 107.

⁵⁶Ibid. , 115.

⁵⁷Ibid.

⁵⁸Ibid. , 125.

⁵⁹AR 11-33 , 3.

⁶⁰Ibid.

⁶¹Ibid.

⁶²Ibid.

⁶³Ibid..

⁶⁴Ibid.

⁶⁵Ibid.

⁶⁶Ibid.

⁶⁷Ibid.

⁶⁸Ibid.

⁶⁹Ibid.

⁷⁰Ibid.

⁷¹US Army, Center for Army Lessons Learned, *CALL: A Guide to the Services of CALL* (Fort Leavenworth, KS: US Army Combined Arms Center, 1997) , 3.

⁷²Ibid., 5.

⁷³Ibid.

⁷⁴US Army, Center for Army Lessons Learned, *Center for Army Lessons Learned Outbrief for CAATI*. (Kansas: 1996) , Tab D.

⁷⁵US Army, Center for Army Lessons Learned, *Center for Army Lessons Learned Collection Division Standard Operating Procedures* (Kansas: 1997) , 3-2.

⁷⁶CALL, *A Guide to the Services and the Gateway of CALL* , 9.

⁷⁷Ibid., 10.

⁷⁸Ibid., 9.

⁷⁹Ibid., 12.

⁸⁰Ibid., 13.

⁸¹Ibid., 19.

⁸²Ibid., 17.

⁸³US Army, Combat Studies Institute, Major Paul Herbert, *Deciding What Has To Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations* (Fort Leavenworth, KS: US Army Command and General Staff College, 1988) , 3.

⁸⁴Vetock , 68.

⁸⁵Ibid.

⁸⁶ Douglas Scalard, "People of Whom We Know Nothing: When Doctrine Isn't Enough." *Military Review* (July-August 1997 No 4), 6.

⁸⁷Ibid. , 6 and 7.

⁸⁸Ibid. , 6.

⁸⁹Sullivan, 193.

⁹⁰U.S Army, FM 25-101, *Training the Force: Battle Focused Training* (Washington, DC: Department of the Army, 1990), 5-2.

⁹¹US Army, TC 25-20, *A Leader's Guide to After Action Reviews* (Washington, DC: Department of the Army, 1993) , 4-2.

⁹² Justin Gubler, "Unit Simulation Training System After Action Reviews (AAR): A Novel Approach to Achieve Effectiveness" (Masters Thesis., University of Central Florida, 1997), 139.

⁹³Ibid., 139.

⁹⁴Vetock, 127.

⁹⁵Peter Senge, *The Fifth Discipline* (New York: Doubleday Publishing Group Inc., 1990), 14.

⁹⁶Center for Army Lessons Learned, *Operation Joint Endeavor Initial Impressions Report: Initial Operations* (Fort Leavenworth, KS: US Army Combined Arms Center, 1996), iii.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

Conclusion

The purpose of this study was to determine how leaders of tactical units could use the Army Lesson-Learned System to their best advantage. By considering the system in its current state, and in light of lessons from history and a review of literature, it can be concluded that the system falls short in giving tactical leaders what they need to truly leverage lesson learning in their units.

With a few exceptions, the system as it pertains to the Army, as a whole, is sound. The requirement for learning in organizations has been realized and it is emphasized in emerging leadership doctrine and in the Army's vision for OPMS XXI. Army Regulation 11-33, *The Army Lesson Learned System*, while outdated, provides a solid framework for collecting and disseminating lessons through CALL to the total Army. The Army's capstone training manuals, FM 25-100, *Training the Force* and FM 25-101, *Battle Focused Training* adequately provide the performance measures for the conduct of after-action review, which are the cornerstone to an effective learning program. Nevertheless, neither the AR 11-33 nor the training doctrine provides sufficient detail to assist leaders in developing internal lessons-learned programs in tactical units. Without such programs in tactical units, the Total Army's ability to learn and adapt to change is significantly hindered.

There is a short-term fix and a long-term solution to the problem. In the short-term, leaders of tactical units must develop and standardize procedures for lesson learning in their organizations. "To-the-standard" AARs must become a routine aspect of daily business in units. The information from the AARs must be collected, analyzed, disseminated, and archived. This must take place throughout the chain of command and the lessons identified by battalions (through the squads, platoons, and companies) must be collated in the division and then passed to

the respective MACOM headquarters and ultimately to CALL. Additionally, leaders must develop systems to determine if lessons are being relearned. To effectively accomplish this, leaders must create and sustain learning cultures within their units. This requires considerable work, but it can be done as was demonstrated by the 1st Armored Division in Bosnia.

The long-term solution will require some doctrinal revision and established measures to hold leaders accountable in supporting the Army-wide system. It is not unlike the training revolution that occurred in the late 1970s and early to mid 1980s. During that time, the Army introduced the notion of "task, conditions, and standards," which eventually became a part of the Mission Training Plans (MTP) and a standardized approach to training. In much the same way, the Army has recognized the importance of learning, but it lacks standardization at the lowest level where learning begins and arguable has the greatest impact. If lesson learning is not standardized and enforced, then it is unlikely to occur regularly and effectively throughout the Army. The exception will be in units with leaders enlightened to the benefits of learning quickly and effectively.

Chapter 4 of this study began with a quote from Michael Howard in which he stated, "Whatever doctrine the Armed Forces is working on now, they have got it wrong." He continued by saying that it does not matter that it is wrong, but what does count is the "capacity to get it right quickly, when the moment arrives."¹ Time and again history has demonstrated that an Army's doctrine rarely survives a conflict. Martin van Creveld, in *Technology and War*, pointed out in this regard, "Given an opponent who is capable of learning, a very real danger exists that an action will not succeed twice *because* it succeeded once."² Therefore, there seems to be a paradoxical struggle, where victory often goes to the Army that can out-learn the enemy. If this is the case, then "learning to learn" should be a priority during peacetime so that soldiers and leaders may adapt quickly and effectively in war.

Recommendations

Given the current state of US Army lesson learning and the system's shortfalls, this study concludes with several specific recommendations that will allow leaders of tactical units to maximize the potential of the ALLS. The responsibility of improving the system and overcoming the shortfalls rests at two levels. The first is at the Army level and the second is with the Major Army Commands and their subordinate units.

Revision of Army Regulation 11-33

Army Regulation 11-33 should be revised and updated. The AR was published in 1989 and considerable changes, particularly in technology, have occurred in the Army since that time. The changes in technology, especially with the Internet and computer software that could support unit lesson learning programs, significantly improves the Army's ability to disseminate lessons throughout the force. Specifically, the AR should address the technological architecture of how lessons are transferred from the unit through the chain of command and ultimately to CALL.

Compliance with the AR must be enforced. It is likely that because the current AR is outdated most commanders do not realize their responsibilities to support the ALLS. With OPMS XXI and the emerging leadership doctrine, there is a clear emphasis on learning in the Army. The vehicle to maximize the benefit of learning throughout the force is the ALLS.

Lesson Learning and Doctrine

Doctrine on learning is not fully developed. One indication of this is that there is not a recognized definition of lesson or lesson learned. FM 101-5-1, *Operational Terms and Graphics* does not define either term. A doctrinal definition for learning and lesson learned must be determined and be placed in FM 101-5-1. Additionally, the Army's training doctrine and its capstone doctrine on command and staff functions must address the duties and responsibilities for creating and sustaining unit learning.

Training Doctrine

The Army's training doctrine must better address the lesson-learning methodology. Doctrine for the conduct of after-action reviews does not require revision. However, procedures and guidance on how to use the information from AARs needs to be highlighted. At a minimum, this guidance should include the following:

1. Information from AARs must be documented. The information should include lessons, strengths and weaknesses of unit/soldier/leader performance, and possible trends.
2. The information must be analyzed using current doctrine. Lessons must then be identified, if they exist. If a particular technique worked and it is not written in doctrine, then it is probably a lesson.
3. The information must be archived and then reviewed after subsequent training events or missions. A system must be in place to identify whether lessons are being relearned and or if there is a systemic problem in the unit.
4. Lessons and or TTPs must be disseminated throughout the unit and the chain of command. The analysis process should occur at each level of command as appropriate. Ultimately, the lessons must be sent to CALL.

It would be advantageous to publish a training circular on lesson learning in units much like TC 25-20, *A Leader's Guide to After-Action Reviews*. At a minimum, an appendix on lesson learning should be added to FM 25-101, *Battle Focused Training*. In the interim, CALL should publish a newsletter on how to establish a lesson-learned program in a tactical unit.

Command and Staff Functions Doctrine

FM 101-5, *Staff Organization and Operations* should assign the G3/S3 the responsibility to collect, analyze, and disseminate lessons throughout the unit and to their higher headquarters. The S3 should be the "lesson learned manager" of the unit. The S3 should archive the lessons and have a system to analyze and then disseminate lesson information. While the S3 is the

lesson-learned manager, the commander must be overall responsible for the unit's lesson-learned program.

Training to Learn

Training programs on how to create and sustain unit learning should be embedded in the training at branch-specific schools (e.g. Basic and Advanced Officers Courses, Basic and Advanced NCO Courses, and the Pre-Command Courses). This training should include:

1. How to conduct an AAR (This is currently being done at the Infantry School).
2. How the Army Lessons-Learned Program works.
3. The characteristics of a learning organization and creating a learning culture.

The training should include information on the products and capabilities of CALL. CALL should develop a training support package (TSP) to be presented by course instructors that provides information on how CALL can support units with newsletters, mission-specific TSPs, videos, CD-ROMS, etc. It should also instruct the students on how to use the CALL homepage.

Demystification of the TTP

TTP does not get the credit it deserves, particularly at the CTCs. O/Cs at the training centers evaluate units on their compliance with doctrine. Based on personal experience, both as a player in several CTC rotations and as an O/C, this sometimes stymies player units from using TTPs that may not be outlined in doctrine. While it is important that leaders and soldiers know and understand doctrine, the significance of the TTP must be recognized. If a TTP is used at a CTC and it becomes a point of contention during the training or AARs, then the O/C should evaluate the TTP against doctrine. It may be discovered that the doctrine is inadequate or does not exist.

Filling the Gap of Doctrine

When properly analyzed, lessons and TTPs provided by CALL in their newsletters and bulletins should be considered as viable emerging doctrine. CALL is not and should not be in the

business of writing doctrine, but the information that CALL provides can fill the void between the updates of doctrinal manuals. Again, this is the case only when the lessons are adequately analyzed. Nevertheless, there must be some caution in over-bureaucratizing the approval of lessons as emerging doctrine. If the lessons have to go through several layers of approval before they are determined to be emerging doctrine or viable TTP, then the benefit gained from speed of dissemination of the lessons through CALL's homepage is lost. There has to be a balance.

Standard Learning Procedures

In the absence of learning doctrine, leaders should establish standard operating procedures (SOP) for learning in their units. It is recommended that CALL publish a newsletter or bulletin on TTPs for creating and sustaining learning organizations. At a minimum, the SOP and the newsletter/bulletin should include the following:

1. Standards for the conduct of AARs.
2. Procedures for collecting, analyzing, documenting, and disseminating information from the AARs. This should include responsibilities for each level of leadership from the squad to the highest headquarters.
3. Clarification of terms. This includes the definition of lesson and lesson learned. Until the terms are defined in doctrine, the definitions provided in TRADOC Regulation 11-13, *TRADOC Remedial Action Program* should suffice.
4. Specific procedures for analyzing lessons should be identified. For example, if a soldier believes he or she has discovered something new, then the soldier should review the doctrine before it is termed a lesson learned. The S3 should perform the role of quality control once the lesson has been passed up the chain of command.
5. A system must be in place to review AAR reports to determine if lessons are being "relearned."

6. An AAR should be conducted after most events to include seemingly mundane events such as road marches and unit organizational days.
7. Information on how to use the CALL homepage should be included in the SOP.
8. Unit CALL libraries of newsletters and bulletins should be maintained.

¹Michael Howard, "Military Science in the Age of Peace," *RSUI, Journal of the Royal United Services for Defence Studies* (March 1974, No 119) , 4.

²Martin van Creveld, *Technology and War: From 2000 BC to the Present* (New York: The Free Press, 1989) , 314.

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1. Certification Date: 5 June 1998

2. Thesis Author: Major Fred W. Johnson

3. Thesis Title: Leveraging Lesson Learning in Tactical Units

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