

No Longer Necessary: Long-range Surveillance Units in Unified Land Operations

A Monograph by

MAJ Jonathan T. Hartsock
United States Army



School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

2016

Approved for public release; distribution is unlimited.

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
The 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 the burden, to the Department of Defense, Executive Service Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ORGANIZATION.					
1. REPORT DATE (DD-MM-YYYY) 26-05-2016		2. REPORT TYPE Monograph		3. DATES COVERED (From - To) JUN 2015 - MAY 2016	
4. TITLE AND SUBTITLE No Longer Necessary: Long Range Surveillance Units in Unified Land Operations				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) MAJ Jonathan T. Hartsock				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) School of Advanced Military Studies, Advanced Military Studies Program				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for Public Release; Distribution is Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT The US Army created long range surveillance units during the cold war era to infiltrate far behind enemy lines to conduct surveillance and reconnaissance and provide commanders with intelligence. Lack of consistent employment across the Army since Viet Nam forces the question, do long-range surveillance units still perform a unique and necessary function for Unified Land Operations? Long-range surveillance units in Unified Land Operations face challenges associated with employment. They require high levels of training and selection, intensive oversight from parent headquarters, and take on high levels of risk to obtain the information they were designed to collect. Recent technological advancements provide similar information at a reduced risk. Disconnects exist between doctrinal and real world employment of long-range surveillance units. The Army lacks the institutional knowledge to employ long-range surveillance units for their namesake tasks, often employing them for either direct action missions or economy of force missions. Long-range surveillance units no longer perform a unique and necessary function. This monograph recommends how the Army should handle the future of long-range surveillance units and their place in Unified Land Operations.					
15. SUBJECT TERMS Reconnaissance, Surveillance					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			MAJ Robert R. Rodock
(U)	(U)	(U)	(U)		19b. TELEPHONE NUMBER (Include area code)

Reset

Monograph Approval Page

Name of Candidate: MAJ Jonathan T. Hartsock

Monograph Title: No Longer Necessary: Long-range Surveillance Units in Unified Land Operations

Approved by:

_____, Monograph Director
Stephen A. Bourque, PhD

_____, Seminar Leader
Charles T. Lombardo, COL

_____, Director, School of Advanced Military Studies
Henry A. Arnold III, COL

Accepted this 26th day of May 2016 by:

_____, Director, Graduate Degree Programs
Robert F. Baumann, PhD

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

Fair use determination or copyright permission has been obtained for the inclusion of pictures, maps, graphics, and any other works incorporated into this manuscript. A work of the United States Government is not subject to copyright, however further publication or sale of copyrighted images is not permissible.

Abstract

No Longer Necessary: Long-Range Surveillance Units in Unified Land Operations, by MAJ Jonathan T. Hartsock, 50 pages.

The US Army created long range surveillance units during the cold war era to infiltrate far behind enemy lines to conduct surveillance and reconnaissance and provide commanders with intelligence. Lack of consistent employment across the Army since Viet Nam forces the question, do long-range surveillance units still perform a unique and necessary function for Unified Land Operations? Long-range surveillance units in Unified Land Operations face challenges associated with employment. They require high levels of training and selection, intensive oversight from parent headquarters, and take on high levels of risk to obtain the information they were designed to collect. Recent technological advancements provide similar information at a reduced risk. Disconnects exist between doctrinal and real world employment of long-range surveillance units. The Army lacks the institutional knowledge to employ long-range surveillance units for their namesake tasks, often employing them for either direct action missions or economy of force missions. Long-range surveillance units no longer perform a unique and necessary function. This monograph recommends how the Army should handle the future of long-range surveillance units and their place in Unified Land Operations.

Contents

Abstract	iii
Contents.....	iv
Acknowledgements	v
Introduction	1
Section 1 – The Uphill Battle	9
Section 2- Harnessing Technology.....	21
Section 3- War on Paper or Real War	31
Bibliography	41

Acknowledgements

There are many people to thank, and many that have had some hand in the crafting of this monograph. The first and most important people for me to thank are my wife Jenny and son Colton. They are the reason to pursue such endeavors and they are the ones that experience the time taken away in order to complete the pursuit. I could not have accomplished this, nor any other task in my professional life without their full support.

I must thank Dr. Stephen Borque for his patience and guidance as I went through the process of developing and crafting this monograph, and COL Charles Lombardo for being a great sounding board for my ideas and providing constant feedback throughout the process. I owe Pete Rose, at the Capabilities Development and Integration Directorate, for his guidance throughout this process. His support saved me countless hours of research and provided valuable insight into this work.

Introduction

Late in the evening on February 23, 1990, from a small base in the Saudi Arabian desert, eighteen men from the XVIII Airborne Corps' long-range surveillance company boarded three blacked out UH-60 helicopters. Their packs bulged with over one hundred pounds of food, water, and equipment, which would sustain them for up to five days. Within minutes, the helicopters crossed the Iraqi border, evading detection by the Iraqi military, and inserted the teams. On the ground, they became the first soldiers from the Corps to enter Iraq. Infiltrating through the darkness, over 130 miles past the border to reach their intended destination, these men did not seek to destroy their targets through lethal direct fires or even air strikes. Instead, their mission was simple: observe and report. From their "hide sites," they hastily dug small holes in the ground to avoid detection with the intention to observe the movements of Iraqi military forces operating along a major highway deep inside Iraq. The three teams trained exclusively for this mission since their arrival in theater six months prior, and were ready to prove their significance. As the teams crossed the border, Major Peter Larson, the battalion operations officer overseeing the operation, was suddenly dwarfed in his own tactical operations center as two brigade commanders and three battalion commanders crammed into the small tent.¹ Each commander had a vested interest in the mission as their units were providing either intelligence or aviation assets to the surveillance teams. Their appearance reflected the high degree of oversight already devoted to employ such a small number of men across enemy lines. Each commander expected success; however, they were quickly disappointed. Within twenty-four hours of their insertion, all teams failed, forcing their headquarters to conduct three separate emergency extractions. One team was extracted after a group of women and children walking nearby observed their positions. Another team requested an emergency extraction shortly after insertion, having landed near a group of

¹ Charles L. Toomey, *XVIII Airborne Corps in Desert Storm: From Planning to Victory*. (Oregon: Hellgate Press, 2004), 294.

Bedouins tending to their flocks. The final team initially overcame a near disastrous unplanned separation between the six-man element, and became the last to be extracted when they were compromised after five Iraqi Army deserters stumbled across their positions. The team complicated the extraction process since they captured the deserters, making the helicopter ride back to Saudi Arabia slightly cramped.² As a result of their failed mission, the XVIII Corps was unable to observe the movements of the Iraqi Army deep into Iraq. Despite the failure and the resulting information gap, the corps would not delay its attack; instead, they discontinued their employment of their long-range surveillance units for the remainder of the war.

From the earliest time, military leaders have always sought information on the enemy, his strengths, his weaknesses, his intentions, and his dispositions.³ The reasons are evident. Concerning the necessity of producing good intelligence, George Washington noted, “. . . are apparent and need not be further argued.”⁴ Endeavoring to gain information and reduce uncertainty about the Iraqi Army before they met in battle, the XVIII Corps commander wanted to know “if and when, the Iraqis would move against the Corps.”⁵ Obtaining the desired intelligence fell under the corps’ deep operations, activities directed against enemy forces not in contact and designed to influence the conditions in which future close operations will be conducted.⁶ Often, deep operations are characterized by the distance beyond the front line where tomorrow’s fight is beginning to take shape. The corps employed the long-range surveillance company to conduct their namesake task of deep, systematic, visual observation of specified areas

² Toomey, 295. The operations officer had to rapidly adjust extraction plans while the aircraft were in the air to accommodate the five additional passengers.

³ John Keegan, *Intelligence in War* (New York: Knopf, 2003), 7.

⁴ Ibid., 7.

⁵ Toomey, 291.

⁶ US Army, Department of the Army Field Manual (FM) 100-5, *1986 (OBSOLETE): Operations* (Washington, DC: Government Printing Office, 1986), 19.

and activities to answer the commander's request. The failures of XVIII Corps' long-range surveillance units during Operation Desert Shield highlights the extensive challenges associated with employing small, lightly armed teams deep into enemy territory to collect information on an adversary.

The genesis of long-range surveillance units is found in the annals of the early Cold War in Europe. Officially, these units did not materialize in the US Army force structure until the 1980s. Prior to their coming of age, the Army employed another similar organization, long-range reconnaissance patrols whose name initially reflected the unique and necessary missions given these units. Long-range surveillance unit researchers are in disagreement over the exact lineage of these units, some preferring a line traced back to either the Alamo Scouts of World War II or the Ranger companies of Korea.⁷ Each of these units proved to be highly effective in their respective missions, and became the forefathers of modern Special Operations forces.⁸ It is imperative to recognize that modern long-range surveillance units are not Special Operations forces, as they do not fall under the Army's Special Operation Command. Rather, they are task organized under the US Army's conventional headquarters, Forces Command. The history of these units is interwoven and, more importantly, highlight similar cultures today. For the purposes of this study, the focus is limited to the modern era long-range surveillance units that manifested with the long-range reconnaissance patrols of the late 1950s.⁹

⁷ For more information on the Alamo Scouts of World War II and Ranger companies in Korea, see MAJ Lewis Cochran, "Human Intelligence: Long-Range Surveillance for Force XXI" (monograph, School of Advanced Military Studies (SAMS), 1994), 5-10.

⁸ Joint Chiefs of Staff, Joint Publication (JP) 3-05.1, *Joint Special Operations Task Force Operations* (Washington, DC: Government Printing Office, 2007), 1-8. Special Operations Forces-Those Active and Reserve Component forces of the Military Services designated by the Secretary of Defense and specifically organized, trained, and equipped to conduct and support special operations. Also called SOF; see Air Force Special Operations Forces, Army Special Operations Forces, and Naval Special Warfare Forces.

⁹ Most notably the work of James F Gebhardt, *Eyes Behind the Lines* (Fort Leavenworth, KS: Combat Studies Institute Press, 2005) 2-5.

The strategic positioning of Soviet and NATO forces in Europe at the outset of the Cold War fostered new tactical and operational challenges for the US Army. Confronted with a highly capable Russian military, the Army needed a capability to acquire high-value targets for long-range artillery and air strikes.¹⁰ Coupled with the desire not to cause widespread physical destruction to Europe through indiscriminate use of firepower, commanders experimented with long-range patrols. The patrols, composed of small teams, would covertly infiltrate deep behind the front lines to identify and target enemy forces.¹¹ From 1957 to 1968, four long-range reconnaissance patrol organizations emerged across Europe under several headquarters to serve such a purpose. The first doctrine to address these units, US Army Field Manual 31-18, *Long-range Reconnaissance Patrols, Division, Corps, and Army*, first published as a draft in December 1961, refined in 1962, and then officially approved in 1962. The manual describes the unique patrols as a force, organized and trained as an information-gathering agency responsive to the intelligence requirements of the tactical unit commander.¹²

Training long-range surveillance units focused around potential combat employment and included many specialized skills. Airborne insertions, advanced land navigation, survival, long-range communications, first aid, heavy physical training, and study of the Soviet order of battle were all training that a long-range reconnaissance patrol soldier could expect to endure. Additionally, these units conducted military free-fall parachute training to provide additional insertion capabilities. Indicative of the robust airborne capabilities and the need to reach restricted areas, long-range reconnaissance patrols relied heavily on both fixed and rotary wing support for insertions and extractions. For this reason, a majority of these units were operationally connected

¹⁰ Gebhardt, 5.

¹¹ Ibid., 5.

¹² US Army, Department of the Army Field Manual (FM) 31-18, *Long Range Patrols, Division, Corps, and Army* (Washington, DC: Government Printing Office, 1962).

with an air cavalry unit since such units provided the requirements for helicopter lift, gunship support, and a quick reaction force in the event of a compromise.¹³

The proving ground for long-range reconnaissance patrols would not be amongst the French hedgerows or the Fulda Gap where the initial units trained, but rather became the vast countryside of Vietnam. In July 1966, the commander of Military Assistance Command in Vietnam, General William C. Westmoreland, authorized the creation of four provisional long-range reconnaissance patrol units in the 1st, 4th, and 9th Infantry Divisions, and the 173rd Airborne Brigade. Gaining interest from the Chairman of the Joint Chiefs of Staff, by December 1968, the community grew to six long-range reconnaissance patrol companies and four separate long-range reconnaissance patrol detachments.¹⁴ Deploying to Vietnam, they were intended to be agile and adaptable organizations whose primary mission was to enter a specified area within the enemy's rear to observe and report enemy dispositions, installations, and activities.¹⁵ This was a unique mission that commanders felt was necessary to gain information on the enemy. Vast differences in the countryside, coupled with the fluctuating tactical and operational situation throughout the war, created conditions that make any broad characterization of unit employment in Vietnam problematic. The majority of the missions assigned to these units fall along a spectrum ranging from information gathering activities to full offensive combat operations. No one long-range reconnaissance patrol unit conducted operations solely on the periphery, but rather operated up and down the spectrum. The study of these units also become delicate due to the "reflagging" of all but one company and all of the detachments to "Ranger" companies in February 1969. The history of several long-range reconnaissance patrols and subsequent Ranger units during the Vietnam War provided insights into the uniqueness of their assigned missions,

¹³ Gebhardt, 18-23.

¹⁴ Ibid., 23.

¹⁵ FM 31-18, 4.

the level of effectiveness of those missions, and how necessary each mission was towards winning the war.

In late 1974, following Vietnam, the Army deactivated all long-range reconnaissance patrol units, providing a substantial amount of personnel to the newly formed Ranger Battalions. This action created a gap in information collection capability for operational commanders. In April 1979, a study directed by the Army's Deputy Chief of Staff for Operations addressed the requirement and recommended that two long range patrol companies be activated and deployed to organic elements of the Corps intelligence groups.¹⁶ Once again, long-range surveillance units were assigned the unique and necessary tasks of conducting reconnaissance, surveillance, and target acquisition operations in support of the Corps to a depth of 150 kilometers past the forward line of troops. Additionally, three Army division commanders formed provisional long-range reconnaissance units in their respective units in the early 1980s.¹⁷ Over the next three decades, the long-range surveillance community continued to evolve and provided units for operations in both Panama and Iraq. Mirroring the rest of the Army, the size of the community swelled and contracted as resources expanded and constricted over time.

Following the US Army's initial success after the 2003 Iraq invasion, the Combat Studies Institute at Fort Leavenworth published *On Point: The United States Army in Operation Iraqi Freedom*.¹⁸ The work intended to provide a performance review of the US Army's actions

¹⁶ Strategic Studies Institute, *Organization, Missions, and Command and Control of Special Forces and Ranger Units in the 1980s* (Carlisle Barracks, PA: US Army War College, 1979), Appendix A, quoted in Shimon Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory* (New York: Routledge, 2013), 359.

¹⁷ Gebhardt, 118.

¹⁸ Gregory Fontenot, E. J. Degen, and David Tohn, *On Point, the United States Army in Operation Iraqi Freedom* (Fort Leavenworth, KS: Combat Studies Institute Press, 2003), 163. Published in 2004 for the Army Chief of Staff General Shinseki. He directed "a quick, thorough review that looks at the US Army's performance, asses the role it played in the joint coalition team, and captures the strategic, operational, and tactical lessons that should be disseminated and applied in future fights."

following offensive operations in Iraq in 2003, capturing strategic, operational, and tactical lessons learned.¹⁹ Citing the poor intelligence provided by long-range surveillance units compared to the risks they endured, the authors questioned the use of long-range surveillance units during the campaign and suggested conducting an assessment, evaluating their continuing utility and means of employment.²⁰

In response to the concerns laid out by *On Point*, the Combat Studies Institute published *Eyes Behind the Lines: US Army Long-Range Reconnaissance and Surveillance Units* to provide Army decision makers with historical perspectives of long-range surveillance units.²¹ This publication provides an extremely thorough historical analysis, focusing strictly on doctrine, organization, training, material, leadership, and personnel of long-range surveillance units.²² Addressing the utility and future of these units, the author centered his final discussion on three key issues: the increasing capability of alternate means of reconnaissance, the high-level commander's concern for survivability of its soldiers, and the resource problem exacerbated by a long-standing proponent split between the Military Intelligence and Infantry branches.²³ The author simply concludes that such units can conduct deep reconnaissance and surveillance missions and survive.

In addition to the two aforementioned works, several previous long-range surveillance unit commanders contributed to the intellectual discussion of such units, highlighting both the problems and the potential they observed. Michael M. Larsen's, *Organizational Structure of*

¹⁹ Fontenot, Degen, and Tohn, iii.

²⁰ Ibid., 423.

²¹ Gebhardt, 163.

²² Ibid., 2.

²³ Ibid., 163. The US Army Infantry School and the US Army Military Intelligence Center have battled over the proponentcy of the LRSUs in the Army since 1985.

Deep Ground Reconnaissance for Future Divisions, and Corps, and Valery C. Keaveny, Jr.'s, *Ensuring the Continued Relevance of Long-range Surveillance Units*,²⁴ are the two most recent monographs that examine the challenges related to long-range surveillance unit operations. Frustrated by the complex problems facing these operations, Cochran, Anders, and Meadows also determined that the force structure of long-range surveillance units is flawed and each identified methods to improve its capabilities and make the units more effective.²⁴ Each former commander grappled with how these units are unique and necessary to the Army.

After more than a decade of sustained combat operations, the US Army is at a point in history where it must reduce its force structure while maintaining its capability to fight and win the nation's wars. Budgetary cuts imposed on the Department of Defense in recent years highlight the need for institutional reform in the Army in order to maintain the capability to protect and advance US interests and execute the defense strategy. The Army must ensure that every organization is optimally manned and contributes effectively to the combined arms team. Reducing the force from its height during Operation Iraqi Freedom at 566,000 to as low as 420,000 soldiers, the Army must find the means to generate greater efficiencies across the force to maximize its readiness and combat power over the long term.²⁵ Given the order to reduce the structure of the force, the Army must review all formations to ensure that each provide a

²⁴ David Anders, "Long-Range Surveillance Unit Application in Joint Vision 2010" (master's thesis, U.S. Army, Command and General Staff College, 1999), 78-97; Lewis Cochran, "Human Intelligence: Long-Range Surveillance for Force XXI" (monograph, School of Advanced Military Studies (SAMS), 1994); 38-39.; Mark Meadows, "Long-Range Surveillance Unit Force Structure in Force XXI" (master's thesis, U.S. Army, Command and General Staff College, 2000), 60-76.

²⁵ Budget Control, 112th Cong., 1st sess., 2011, H. Rep. S. 365. The Budget Control Act of 2011 (BCA) contained two different mechanisms to achieve spending reductions, both commonly referred to as "sequester." The deficit reduction sequester required nine annual sequesters of \$109 billion – half from defense and half from non-defense programs – to reduce the deficit by \$1.2 trillion.

necessary capability as part of Unified Land Operations.²⁶ The recent reduction of long-range surveillance units on active duty to three companies is indicative of such a review and suggests a belief that there is no longer a need for such units.²⁷ Given the inherent challenge associated with employing small, lightly armed teams to collect information behind enemy lines, recent technological advancements, and a lack of consistent employment for the tasks they were created: Are long-range surveillance units needed by the United States Army in Unified Land Operations?

Reviewing the genesis of long-range surveillance units and their performance during major operations is essential in understanding the unique and necessary function long-range surveillance units perform. The measure to which they performed indicate the probability of their success in the future. Historical examples of long-range surveillance unit operations during Operation Desert Shield and Storm, Operation Joint Guardian, and Operation Iraqi Freedom provide examples of long-range surveillance unit operations in offensive, defensive, and stability operations. Based on modern combat experience, it is evident these units are no longer necessary to the US Army because of the distinct challenges associated with employing such forces, continual technological advancements, which provide similar capabilities, and the near absence of employment for the tasks which they were created.

Section 1 – The Uphill Battle

Prior to crossing over the Iraqi berm on February 23, 1991, the men of the XVIII Corps long-range surveillance unit fought their first battle, only this battle would be fought against soldiers wearing the same uniform. In the early stages of Operation Desert Shield, the Corps commander, Lieutenant General Luck, concerned about the risks inherent to long-range

²⁶ US Army, Department of the Army Doctrine Publication (ADP) 3-0, *Unified Land Operations* (Washington, DC: Government Printing Office, 2012), 1-13.

²⁷ US Army Maneuver Center of Excellence, “After Action Report” (presented at the Long Range Surveillance Workshop, Fort Benning, GA, 24-25 June 2014), 2.

surveillance unit missions, issued guidance that no long-range surveillance team would be inserted unless there were specific areas vital to the overall operation that could not be covered with other resources.²⁸ At fifty-three years of age, Luck served earlier in his career in Vietnam as the leader of a Green Beret "A Team" and as a helicopter troop commander.²⁹ These experiences undoubtedly informed Luck's decision about the challenges that long-range surveillance units faced and the role they would play in his Corps' fight. LTG Luck's guidance severely restricted the long-range surveillance units across the Corps, and forced them to fight for an employment opportunity to prove their relevancy. His decision reveals the inherent challenges associated with employing long-range surveillance units deep behind enemy lines to serve as a commander's eyes and ears. Long-range surveillance units require an excessive level of training and selection compared to that of a standard conventional unit, a high-degree of oversight from the parent division or corps headquarters, and require both the commander, and more importantly, the individual soldiers, to assume a high level of risk for the potential information gained. The challenges associated with building and employing long-range surveillance units question any benefits they might provide.

Before a long-range surveillance unit is employed, each individual soldier must first be recruited, selected, equipped, and trained for the unit. The inherent nature of long-range surveillance unit operations requires specially selected and well-trained soldiers, who are capable of operating independently in austere conditions, and are experts of reconnaissance and surveillance tasks. Physically, the soldiers are required to be in excellent condition. At their genesis, long-range surveillance units stationed in Europe, prior to the Vietnam War, recruited from across each Corps. The minimum requirements for a soldier to be considered included

²⁸ Toomey, 292.

²⁹ "General Gary Edward Luck Biography," US Army GOMO, accessed 15 March 2016, <https://www.gomo.army.mil/Ext/Portal/Officer/Resumes.aspx?Ltr=L&Type=Retired>.

airborne qualification, the absence of physically limiting profiles, a General Technical score of at least one hundred, and prior training as an infantryman.³⁰ Soldiers were required to be capable of carrying loads in excess of seventy pounds for ten or more kilometers, and be able to conduct military free-fall and underwater operations to facilitate an insertion behind enemy lines.

In addition to the physical requirements, long-range surveillance unit members also require extreme psychological toughness. Soldiers who can sit along the side of a trail with a large enemy formation going by and not have the slightest inclination to stand up and fire or even move, are all desirable qualities emulating psychological toughness.³¹ Given the nature of their mission, the selection process should be brutally competitive to ensure only the very best, most capable, and experienced soldiers make the teams.

It is imperative that long-range surveillance units conduct a selection process to recruit and choose the select few. Similar to long-range surveillance units, Special Forces also require above average soldiers, who can perform under intense pressures. Despite a shared history and nearly identical requirements, the process to become a member of each unit is dramatically different.³² For a soldier to earn his Green Beret, he must first undergo the “SF pipeline,” consisting of an intense assessment and selection process followed by a qualification course that includes individual skill training, military specialty training, unit level training, and intense language training. The entire pipeline takes on average of sixteen months with no guarantees that a soldier will make it all the way through.³³ The process for becoming a member of a long-range

³⁰ Gebhardt, 25.

³¹ *Ibid.*, 85.

³² “Soldier Life: Special Forces Training,” GoArmy.com, accessed 10 Mar 2016, <http://www.goarmy.com/soldier-life/being-a-soldier/ongoing-training/specialized-schools/special-forces-training.html>.

³³ “Special Forces Qualification Course,” Special Operations Recruiting Battalion, accessed 15 March 2016, <http://sorbreuiting.com/Docs/SFAS%20Pipeline.pdf>.

surveillance unit bears no resemblance to the SF pipeline. It lacks a standardized selection process, and results in soldiers being haphazardly placed in long-range surveillance units. As a commander of the long range surveillance unit at Fort Bragg from 2010 to 2011 I observed the selection process, if even performed, varies unit to unit and relies heavily on the support of the command at the given time.³⁴ As expected, the units that pose reduced standards or no standards at all for acceptance into their organization generally earn reputations for a lack of discipline, reduced skills, and unreliability.³⁵

Recruitment and selection of soldiers is a problem, and unless adequate measures are established, complications will continue to plague long-range surveillance units. In 1991, long-range surveillance unit leadership in the 10th Mountain Division echoed concerns from previous commanders, and requested that incoming soldiers to the Division be screened, and if selected, be given a 30-day assessment period prior to being assigned to the unit.³⁶ In 2007, with less than sixty days prior to deploying to Iraq, the long-range surveillance unit for the XVIII Corps received over thirty soldiers who lacked any advanced training. To make matters worse, they received two new detachment commanders fourteen days before the deployment.³⁷ In 2010, as commander of the same unit, still addressing manning problems, I requested actions similar to those of the 10th Mountain Division after having been assigned an influx of soldiers who did not

³⁴ Based on personal observations from commanding a Corps Long Range Surveillance Unit at Fort Bragg, NC from 2010 to 2011 and as a Squadron Executive Officer and Operations Officer for the unit's parent headquarters from 2011 to 2013. Observations included operational deployments to Afghanistan and Kosovo.

³⁵ Michael Larsen, "Organizational Structure of Deep Ground Reconnaissance for Future Divisions and Corps" (master's thesis, U.S. Army, Command and General Staff College, 2006), 37.

³⁶ Gebhardt, 122.

³⁷ Global Security, "Army Transformation 525th Battlefield Surveillance Brigade, Operation Iraqi Freedom 07-09, March 2009; Center for Army Lessons Learned: Support Brigades Newsletter; Collection Report," October 2009, accessed March 10, 2016, http://www.globalsecurity.org/military/library/report/call/call_10-06.pdf, 6.

meet the physical or mental requirements, and even a few who adamantly refused to go to Airborne school. In 2014, a long-range surveillance workshop held at Fort Benning, Georgia, included nearly all long-range surveillance unit participants and interested agencies. They identified the problem that long-range surveillance units simply lack the means to recruit potential qualified soldiers, and the Army lacks a personnel policy system to manage long-range surveillance units effectively.³⁸

The cost of manning a long-range surveillance unit is high and severely affects the remaining units across its corps. Despite recruiting efforts by the unit leadership and the need for specialized soldiers, the first cohorts of these units consisted of volunteers who were either “cherry picked” from other units or simply assigned through normal personnel channels.³⁹ This process continues across long-range surveillance units today. While desirable for long-range surveillance units, this method creates consternation from line-unit commanders from which the soldiers come since the units “raided” its top caliber soldiers. Unhappy with the “cherry picking” that occurred to fill the long-range reconnaissance patrol units, a division commander commented that when selecting long-range surveillance unit soldiers, “. . . you get them from the combat elements of an infantry division, you have taken two hundred potential fire team and squad leaders. Believe me, that hurts a division.”⁴⁰ If filled in accordance with current doctrine, today’s active duty long-range surveillance company requires a minimum of nineteen Airborne and Ranger-qualified Infantry senior Noncommissioned Officers.⁴¹ A standard light infantry company requires significantly less.

³⁸ US Army Maneuver Center of Excellence, “After Action Report,” 2.

³⁹ Gebhardt, 25.

⁴⁰ Ibid., 11.

⁴¹ Senior noncommissioned officers for a company-sized formation include all noncommissioned officers in the rank of staff sergeant and above.

Selecting soldiers for long-range surveillance units is less than half the problem of fielding such units. Once selected, the units must first prepare the soldiers for future missions they might encounter, and then retain them for operational employment. Once selected, soldiers become experts on advanced reconnaissance and surveillance tasks, and receive specialized schooling such as Ranger, Airborne, Pathfinder, Military Free-Fall, and Survival, Evasion, Resistance, and Escape Training. Long-range surveillance units also send their soldiers to attend Air Assault School, the Reconnaissance and Surveillance Leaders' Course, and the Combat Diver Qualification Course. Despite the "embarrassment of riches" prescribed by the Army, long-range surveillance units struggle to gain admittance for these schools due to limited seat allocations across the Army, which are not reserved specifically for units requiring the capabilities. One long-range surveillance unit veteran commented that long-range surveillance units fight a two front war: one, against their Military Intelligence Brigade headquarters to first get the school slots, and then, against the Special Forces community to get into the schools.⁴²

Despite the significant amounts of time and effort long-range surveillance units invest to train their soldiers, they face pandemic problems retaining them.⁴³ Lacking any program from the Army Human Resources Command to retain trained soldiers in the units, long-range surveillance unit veterans often leave the unit for a multitude of reasons. Unlike Special Forces soldiers, whose careers are managed specifically by Special Forces assignment officers or non-commissioned officers, long-range surveillance unit soldiers are managed in the same pool as the remainder of the conventional Army. This forces soldiers, especially the Noncommissioned Officers, to leave the long-range surveillance community and return to more conventional units in order to remain competitive for promotions and choice assignments. The 2014 Long-Range

⁴² Thomas W. Doherty, "LRSUs (Long-Range Surveillance Unit) in the Current OE (Operational Environment)," *Infantry Magazine* 100, no. 3 (Jun-Aug 2011): 40.

⁴³ US Army Maneuver Center of Excellence, "After Action Report," 28.

Surveillance workshop also agreed that all units struggle to retain trained soldiers, and acknowledged that they rely heavily on individuals with long-range surveillance unit experience at Human Resources Command as the only way to help mitigate this issue.⁴⁴

As previously mentioned, when two brigade commanders and three battalion commanders invaded Major Larson's Operation Center to watch the mission unfold in Iraq, they highlighted another challenge associated with long-range surveillance unit employment. Given the relative size of the formation, these units require an extremely high-degree of oversight for employment compared to that of other Infantry, Armor, or Cavalry formations. The oversight involves intensive planning at the corps level and includes insertion and extraction support and the designation of a quick reaction force should the unit be compromised. As historical data shows, long-range surveillance units provide little tangible benefit in return for the resources they absorb, and the time required to plan.

Long-range surveillance units are designed to provide corps commanders with reliable, persistent intelligence in the corps' area of operations, influence, or interest. For that reason, the corps staff must first provide long-range surveillance units with the desired information requirement or target packet. Once given an area or target to conduct surveillance on, units undergo intensive planning to cover their insertion, infiltration, surveillance, exfiltration, and extraction. Each phase must be thoroughly planned to mitigate operational and individual risk. Communications, fire support, insertion support, extraction support, and friendly unit coordination must all be conducted during the planning phase. In the event of a compromise, an escape and evasion plan is also needed to increase the chance of survival for the soldiers. A typical planning cycle for a long-range surveillance unit is 24 to 48 hours, and typically includes coordination with the Air Force, Army Aviation units, friendly subordinate units, and the entire

⁴⁴ US Army Maneuver Center of Excellence, "After Action Report," 28.

targeting community.⁴⁵ While necessary to conduct essential planning and resourcing, the planning cycle does not facilitate the fast tempo of combined arms maneuver. American military might is based largely on the ability to maintain an operational tempo that vastly exceeds that of an adversary.⁴⁶

During Operation Desert Storm and Shield, the 24th Infantry Division and 101st Airborne Division inserted three and four teams respectively behind enemy lines prior to G-Day. All seven teams successfully inserted, remained undetected, and provided information on enemy movements back to their parent headquarters. However, following their initial success, none of these teams would again perform doctrinal missions during the operation as their parent division's attack into Iraq passed through their planned surveillance position sites before they could be occupied. A decade later during the initial stages of Operation Iraqi Freedom in 2003, V Corps attempted to utilize their long-range surveillance unit to gain intelligence in preparation for 3rd Infantry Division's attack. Unlike their Desert Storm predecessors, the enemy would not contribute to the unit's misfortune, but rather the army itself would prohibit the long-range surveillance units from being employed effectively. V Corps' rapid advance to Baghdad created havoc with the doctrinal planning cycle for a long-range surveillance mission. Unable to accurately hypothesize where the corps would be in three to four days, planning long-range surveillance missions proved challenging, and inserting teams nearly impossible. Out of twenty-seven potential sites identified by the corps long-range surveillance company at the start of the

⁴⁵ Fontenot, Degen, and Tohn, 163.

⁴⁶ Curtis D. Taylor, "Can Surveillance Technology Replace Traditional Aggressive Reconnaissance?" in "Trading the Saber for Stealth." Special issue, *AUSA Land Warfare Paper: The Institute of Land Warfare* 53 (September 2005): 1-33. The operational tempo of the battlefield is the primary determining variable on a commander's decision to employ passive reconnaissance or fight for information. In Operation Iraqi Freedom, as in Desert Storm, the tempo was sufficiently fast to preclude the effective use of long-range surveillance units in the majority of cases. The high tempo forced long-range surveillance units to rapidly adjust to stay ahead of the main body and dramatically reduced the ability to employ by stealthy infiltration.

operation, only three teams were inserted.⁴⁷ During the initial phase of Operation Iraqi Freedom, the long-range surveillance teams were recognized for achieving little in return for the risks that they took and the effort expended to employ them.⁴⁸

Adding to the complex challenges of long-range surveillance unit employment, the methods of insertion and extraction obfuscate operations significantly. These units are intended to be capable of multiple insertion and extraction methods ranging from a simple foot movement, to helicopter assaults, waterborne movements, and military freefall operations.⁴⁹ Each insertion method requires specialized training for individual soldiers and the unit as a whole and provides unique options that a commander can tailor to the given situation. Although the units require special insertion and extraction capabilities to proceed to their surveillance locations, their access to advanced schooling that trains these capabilities are limited. In recent years, long-range surveillance units struggled to graduate soldiers from Combat Dive and Military Freefall Schools. From 2010 to 2015, XVIII Airborne Corps long-range surveillance company graduated less than ten soldiers from each school. In addition to gaining access to the schools, long-range surveillance units must also rely on their higher headquarters to allocate support from across the corps, and must request support from the Air Force in the case of airborne and military free-fall insertions. The lack of any recorded long-range surveillance unit military free-fall operation in a combat environment highlights the challenges associated with this method of insertion. Lacking organic rotary wing lift capabilities, long-range surveillance units require their parent headquarters to task aviation units to support their missions over other units requiring the same support. When unable to garner lift support, or when the situation deems appropriate, the units

⁴⁷ Fontenot, Degen, and Tohn, 163.

⁴⁸ Ibid., 163.

⁴⁹ US Army. Department of the Army Field Manual (FM) 3-55, *Information Collection* (Washington, DC: Government Printing Office), 93.

conduct mounted insertions utilizing available vehicles. During recent operations in Afghanistan, this proved problematic given the strict rules emplaced to ensure every soldier has a seat in a vehicle. Limited to utilizing four-seat armored vehicles, long-range surveillance units require at least a dedicated cavalry platoon to insert a lone six-man team.

Once employed beyond friendly lines or in remote areas, long-range surveillance units require support that can quickly respond in the event that the units are compromised. These units are designated as quick reaction forces, and are often assigned from subordinate brigades and battalions. The units remain untasked, and responsible only for the assistance of the long-range surveillance units. The challenges of setting aside a quick reaction force were first realized in Vietnam, and continue throughout operations today. The commander of the 4th Infantry Division in Vietnam remarked that, “. . . at any time you get about five or six LRPs (referring to the long-range reconnaissance patrol soldiers) out you have to keep about two gunships, sometimes four gunships depending on the situation, and two to four slicks setting aside that you cannot use for anything else.”⁵⁰ During Operations Desert Shield, the VII Corps long-range surveillance unit conducted operations in front of the 1st Squadron, 4th Cavalry Regiment, which would serve as their quick reaction force. Due to inadequate coordination, faulty leadership in the unit, and frequent communication failures with the corps headquarters, the squadron constantly delayed their own operations to support the long-range surveillance teams and facilitated the team’s extraction five days after insertion.⁵¹

Crossing into Iraq during under darkness, the men of the XVIII long-range surveillance unit were unaware of what lay ahead of them. Their training to this point had all been preparation for this mission. Mission success would mean they provided the necessary information on the

⁵⁰ Gebhardt, 76.

⁵¹ Stephen A. Bourque and John W. Burdan III, *The Road to Safwan: the 1st Squadron, 4th Cavalry in the 1991 Persian Gulf War* (Denton, TX: University of North Texas Press, 2007), 76-77.

Iraqi army back to their headquarters. Mission failure could mean they do not come home. Long-range surveillance unit operations require both the commander and the soldier to assume a high level of risk to accomplish their missions. The employment of these units throughout their history indicates the assumed risk does not justify the reward.

At their genesis during the cold war in Europe, long-range surveillance units were assigned six primary missions focused on reconnaissance and surveillance tasks. The patrol personnel anticipated being employed up to three hundred miles behind enemy lines as Russian forces advanced westward towards the English Channel.⁵² Realizing the high risk associated with employing these unique units, commanders expected only 50 to 75 percent of the patrols to survive; the soldiers tasked to conduct the patrols felt their odds were much worse.⁵³ With the demise of the Soviet Union, modern long-range surveillance unit soldiers no longer anticipate such staggering odds; however, the inherent nature of their missions, given the distances they are employed from friendly support combined with their lack of organic medical capability, significantly elevates the risk they assume over other conventional units.

During Desert Storm, the VII Corps Commander, believing that his long-range surveillance teams from F Company, 51st Infantry, could not provide him with unique intelligence capabilities, made the decision to not employ his teams in a doctrinal manner behind enemy lines. In his mind, the risk of failure to the long-range surveillance teams outweighed any possible benefit from their employment.⁵⁴ Also during Desert Storm, the XVIII Airborne Corps employed five Special Operations A-Teams in a long-range surveillance capacity to observe high-speed routes emanating deep in Iraq to detect the committal of Iraqi reinforcements. Five of their

⁵² Gebhardt, 16.

⁵³ Ibid., 25. Gebhardt's interview with veterans noted they did not anticipate such a high survival rate.

⁵⁴ Gebhardt, 131.

eight hide sites became compromised by children, Bedouins, or Iraqi soldiers. One team was extracted under fire after being surrounded by over forty Iraqis. The 7.62mm mini-guns of the rescuing MH-60 helicopter saved the day. Another team's compromise led to the "Battle of Suwayj Ghazi," where the withdrawing of an eight-man team created a firefight against an entire Iraqi infantry company. Their extraction was only possible after Air Force F-16s dropped munitions within a few hundred yards of their positions.⁵⁵ During Operation Iraqi Freedom a long-range surveillance team from the 3rd Infantry Division proved successful in accomplishing their surveillance mission, but at an extreme risk. The six-man team provided surveillance of a brigade level objective near Baghdad, identifying around sixty paramilitary fighters composed of militia and Fedayeen, who came very close to the teams positions.⁵⁶

From the origins in the Cold War through the battlefields of Iraq and Afghanistan, long-range surveillance units struggled to perform their namesake doctrinal mission. Throughout their history, they lacked thorough Army oversight, and struggled to properly recruit, select, and train soldiers for their complex and dangerous missions. Once deployed, headquarters employing long-range surveillance units face tremendous organizational strain for employing such a small, lightly armed force. Identifying timely targets, allocating air support, lift assets, and designating quick reaction forces are a few of the hurdles that must be overcome. Once employed, long-range surveillance units face tremendous risks to the individual soldiers and their units for the information they might gain. The historical data reflects the unique challenges associated with employment of long-range surveillance units and clearly indicate that these units are no longer necessary to the US Army.

⁵⁵ Toomey, 297-299.

⁵⁶ Fontenot, Degen, and Tohn, 164.

Section 2- Harnessing Technology

Faced with the dilemma of not knowing the intent of the Iraqi Army in Kuwait and charged with first stopping their advance and then defeating them, the XVIII Corps staff needed to first gain intelligence on their opponent before they could develop their operational plans. Considering his options and desire for intelligence, Lieutenant General Luck's thoughts most likely echoed the Duke of Wellington's almost two hundred years earlier, ". . . the whole area of war consists of getting at what lies on the other side of the hill, or in other words, what we do not know from what we do know."⁵⁷ Luck had to know if, and when, the Iraqis would move against his Corps.⁵⁸ Recalling his guidance to limit the risk to the long-range surveillance teams and employ them only to specific areas vital to the overall operation that could not be covered with other resources, his intelligence staff assigned the mission to their long-range surveillance teams to observe a junction of desert tracks to watch for Iraqi movement towards the Corps from either northern Kuwait or from a northern airbase.⁵⁹ Carrying only a few spotting scopes, binoculars, and primitive night vision devices, the teams infiltrated through the darkness into their positions to report what they observed. Their most technologically advanced equipment was not their optics, which might allow them to see their enemy from a safe distance, but rather their high frequency radio, which they would use to relay information back to their headquarters. To the south, the 24th Infantry Division employed their long-range surveillance teams in a similar manner; however, the division chose to harness available technology to better serve their cross-border reconnaissance needs. Utilizing their Apache and Cobra helicopters, the 101st probed deep into Iraq to gain intelligence and identify enemy targets. Unlike the XVIII long-range surveillance

⁵⁷ Elizabeth Longford, *Wellington* (New York: Harper and Row, 1970), 295.

⁵⁸ Toomey, 292.

⁵⁹ *Ibid.*, 294.

teams, who were extracted with little to no information gained, the 24th Infantry Division crossed the border on G-Day, knowing there were no Iraqis to the front for the first ninety miles.⁶⁰

In the 1970s, the US military set about crafting a new strategy to offset Russian military might and retain an advantage over superior numbers. The strategy, based on advanced digital microelectronics and the explosion in information technology, was applied to a new generation of smart weapons, sensors, targeting and control networks that could offset the quantitative superiority of the Soviet forces.⁶¹ That offset strategy provided the foundation for the US military's unchallenged superiority during the first two decades after the fall of the Soviet empire, and is why information technology is a central theme of American military dominance.⁶² Why did the 24th Infantry Division harness technology and employ their helicopters over their long-range surveillance units to gain cross-border intelligence? Based on modern combat experience, it is evident long-range surveillance units are no longer necessary to the US Army because technological advancements provide similar information gathering capabilities while reducing or eliminating the risk to the soldier.

Technological advancements over the last thirty years have eclipsed the need to employ long-range surveillance units to gather information. Recent advances in airborne sensor technology enable the US military to gather real-time information for intelligence collection and target identification at great distances without risking soldiers' lives. Additionally, technological advancements increased the US Army's capabilities to collect, process, and exploit information through the intelligence disciplines rather than relying strictly on reconnaissance and surveillance

⁶⁰ Toomey, 286.

⁶¹ Bob Work, "Deputy Secretary of Defense Speech," US Department of Defense, August 5, 2014, accessed February 2, 2016, <http://www.defense.gov/News/Speeches/Speech-View/Article/605598>.

⁶² Max Boot and Jeane J. Kirkpatrick, "The Paradox of Military Technology," Council on Foreign Relations, 2006, accessed March 15, 2016, <http://www.cfr.org/information-warfare/paradox-military-technology/p11666>.

operations to facilitate increased situational understanding and support decision-making. Finally, technological advancements at the tactical level now provide the capability to conduct surveillance from farther distances and identify targets with greater precision while reducing the need to infiltrate soldiers to a closer proximity. Given the advantages of these technological advantages to the intelligence gathering community, why does the army continue to need long-range surveillance units when they can obtain similar information from other sources without incurring the risk or organizational strain?

Long-range surveillance units observe their targets from a relative close proximity utilizing hand held, lightweight optics, and thermal scopes. The hide sites from which they intend to watch their targets are selected prior to insertion, and are refined on the ground based on a number of environmental and mission factors to include terrain, distances, and the subject being observed. Numerous variables are injected into the team's decision-making process of site selection. If the ground is rocky and prohibits digging, then the teams may be forced to observe from alternate, possibly less suitable, locations. Other factors such as precipitation, winds, and civilian patterns of life are also considered in site selection. Each variable has the chance to severely negate the capability of the long-range surveillance team to capture the desired information. Given the challenges long-range surveillance units face in observing a target while remaining undetected, the US military has preferred in recent combat operations to conduct surveillance from the sky. Advances in airborne sensor technology enables the US military to gather real-time information for intelligence collection and target identification at great distances without risking soldiers' lives.

In 2002, American special operations forces fought against al Qaeda insurgents during the Battle of Takur Ghar, Afghanistan. During the fight, a small ranger element began receiving direct fire from an elevated enemy machine gun bunker. Unable to move and receiving casualties, the captain in charge of the Ranger team utilized an unmanned aerial vehicle armed with a

Hellfire missile to destroy the bunker.⁶³ Since that battle, the drone has become central to US military operations across the globe. The US military's fleet of drones varies by size, shape, and sophistication, from the army's hand-thrown Ravens to the Air Force's Global Hawk, which can reach altitudes of sixty thousand feet. Regardless the size of the drone, they all perform the same basic functions: providing commanders and their staffs with intelligence, surveillance, and reconnaissance. The year before the terrorist attacks of September 11, 2001, drone funding approached \$284 million. By the fiscal year 2016, the Pentagon plans to spend over to \$3 billion on drones. Between 2002 and 2010, the Pentagon's inventory of drones increased forty-fold, and it now owns a fleet of some eleven thousand drones, hundreds of which are weaponized.⁶⁴

The advantages of using unmanned aerial vehicles, relative to use of long-range surveillance units, are numerous. Unmanned aerial vehicles do not need a pilot on board, and thereby can enter environments that pose higher risks to human life. The vehicles can also stay in the air for up to thirty hours, performing a precise, repetitive scan of a region, day-after-day, night-after-night in complete darkness or in fog, under computer control. Properly equipped, unmanned aerial vehicles can perform geological surveys, visual or thermal imaging of a region, and intercept cell phone, radio, or television transmissions⁶⁵. Mainly used for intelligence gathering, drones are increasingly used for killing targets once they are identified. In this role, the drones have done their job remarkably well, killing key leaders and denying terrorists sanctuaries in Pakistan, Yemen, and, to a lesser degree, Somalia. They have done so at little financial cost, at no risk to US forces, and with fewer civilian casualties than many alternative methods.⁶⁶

⁶³ Sean Naylor, *Not A Good Day to Die* (New York: Berkley Books, 2005), 357.

⁶⁴ Jeremiah Gertler, "U.S. Unmanned Aerial Systems," Congressional Research Service, January 3, 2012, accessed March 1, 2016, <https://www.fas.org/sgp/crs/natsec/R42136.pdf>.

⁶⁵ Gertler.

⁶⁶ Daniel L. Byman, "Why Drones Work: The Case for Washington's Weapon of Choice," The Brookings Institution, accessed March 1, 2016, <http://www.brookings.edu/research/>

Operations Desert Shield and Desert Storm saw the first major use of unmanned aerial vehicles by the US military. Several systems were used, the most expensive of which the Pioneer system was purchased by the Navy from Israel in 1986.⁶⁷ Ground forces from both the Marines and the Army used Pioneer to gain intelligence on and target the Iraqi Army. The Army's Pioneer platoon deployed in support of VII Corps operations, flying forty-three missions in February 1991, including one especially productive mission in which a single vehicle discovered three Iraqi artillery battalions, three free-rocket-over-the-ground sites, and an antitank battalion. While supporting a Marine assault on Faylaka Island, a group of Iraqi soldiers waved white flags toward an approaching Pioneer. For the first time in history, enemy units surrendered to an unmanned vehicle. Throughout Operation Desert Storm, only one vehicle was left to enemy action during operations in the Persian Gulf.⁶⁸ The successful deployment of the Pioneer system during this operation proved the value of unmanned aerial vehicle's in combat operations and highlighted their increased information gathering capability over long-range surveillance units.

In addition to unmanned aerial vehicles, the US military also maintains the capability to employ other airborne sensors that provide similar or enhanced information compared to what long-range surveillance units are capable of providing. Evolving from the need to detect, locate, and attack enemy formations at ranges beyond the forward area of troops, the US Air Force employs the Joint Surveillance Target Attack Radar System and RC-135 Rivet Joint to provide theater ground and air commanders with ground surveillance to support attack operations and targeting that contributes to the delay, disruption and destruction of enemy forces.⁶⁹ First

articles/2013/06/17-drones-obama-weapon-choice-us-counterterrorism-byman.

⁶⁷ John David Blom, *Occasional Paper*, vol. 37, *Unmanned Aerial Systems: a Historical Perspective* (Fort Leavenworth, Kan.: Combat Studies Institute Press, 2010), 88.

⁶⁸ Blom, 89.

⁶⁹ "E-8C Joint Stars," US Air Force, accessed March 1, 2016, <http://www.af.mil/AboutUs/FactSheets/Display/tabid/224/Article/104507/e-8c-joint-stars.aspx>.

deployed operationally in 1991 during Operation Desert Storm and again in 1995 during Operation Joint Endeavor, the Joint Surveillance Target Attack Radar System is embedded on a Boeing 707 airframe, and is modified with the radar, communications, operations, and control subsystems required to perform its operational mission. The radar and computer subsystems on the aircraft can gather and display detailed battlefield information on ground forces where it is relayed in near-real time to the Army and Marine Corps common ground stations. The antenna can be tilted to either side of the aircraft where it can develop a 120-degree field of view covering nearly 19,305 square miles (50,000 square kilometers) and is capable of detecting targets at more than 250 kilometers (more than 820,000 feet).⁷⁰ Similarly, the RC-135V/W Rivet Joint reconnaissance aircraft supports strategic and operational level commanders with near real time intelligence collection, analysis, and dissemination capabilities. The aircraft is an extensively modified C-135, which enables it to detect, identify, and geolocate signals throughout the electromagnetic spectrum.

Initially employed by Strategic Air Command to satisfy nationally tasked intelligence collection requirements, the RC-135 fleet has participated in every sizable armed conflict involving US assets since 1962. Most recently, RC-135s also supported Operation Allied Force in Kosovo, and Operation Odyssey Dawn/Unified Protector in Libya.⁷¹

The aviation units also harnessed aviation technology to contribute to intelligence collection and targeting capabilities. During Operation Desert Storm, the 101st Airborne Division conducted helicopter reconnaissance to learn what lay ahead of them, specifically Iraqi dispositions where they intended to establish a forward operating base in Iraq. Utilizing AH-64 Apache helicopters, the division conducted around the clock coverage for several days, moving

⁷⁰ Ibid.

⁷¹ "RC-135V/W Rivet Joint," US Air Force, accessed March 1, 2016, <http://www.af.mil/AboutUs/FactSheets/Display/tabid/224/Article/104507/e-8c-joint-stars.aspx>.

over fifty miles into Iraq. Unlike long-range surveillance units who have very limited direct fire capability, the Apaches were able to not only identify Iraqi positions, but also to force over seventy-five Iraqi soldiers to surrender.⁷²

In addition to aerial based collection platforms, recent technological advancements increased the US Army's capabilities to collect, process, and exploit information through the intelligence disciplines rather than relying strictly on reconnaissance and surveillance operations. Geospatial intelligence, signals intelligence, as well as measurement and signature intelligence all employ modern technological advancements to provide unique intelligence capabilities to commanders and their staffs, and contribute to increased situational understanding.

In 1984, the US Army released its operational concept for long-range surveillance units, specifying the task to provide information on terrain and weather, and obtain information on possible airborne drop zones and landing zones.⁷³ Long-range surveillance units were expected to infiltrate undetected to specified areas to identify and report these information requirements. Today, this information is simply acquired through geospatial intelligence. Technological advancements such as Global Positioning Systems and satellite imagery capture devices enable the US military to analyze and exploit imagery and geospatial information without the need to physically see the terrain. Organizations such as the National Geospatial Intelligence Agency provide a unique combination of intelligence and combat support through timely, relevant, accurate, and actionable geospatial intelligence.⁷⁴ A predecessor of the agency existed during Desert Storm, and negated the use of long-range surveillance units for geospatial intelligence

⁷² Toomey, 287.

⁷³ US Army, US Army Training and Doctrine Command (TRADOC) Pamphlet 525-42, *US Army Operational Concept for Long-Range Surveillance Units* (Fort Monroe, VA: Government Printing Office, October 26, 1984), 4.

⁷⁴ "About NGA," National Geospatial-Intelligence Agency, accessed March 10, 2016, <https://www.nga.mil/About/Pages/Default.aspx>.

collection. By late August 1990, a DOD-level Joint Intelligence Center was established in Washington, DC, with the charter to use national collection assets to produce intelligence for the Kuwaiti theater of operations. Their intelligence collection and fusion resulted in a map, which depicted every Iraqi division in the theater on one over 50,000-scale maps. Accurate to four hundred meters, the templates showed individual tanks, armored vehicles, artillery positions, trucks, command posts, and supply facilities, and provided commanders with a blueprint of the Iraqi obstacle system.⁷⁵

An additional specified task to long-range surveillance units in 1984 doctrine directed the emplacement of unattended sensors and electronic intelligence equipment.⁷⁶ Long-range surveillance unit soldiers were expected to emplace primitive sensors near enemy locations to gather information on the enemy. These operations posed significant risk, not only in inserting the devices, but also in retrieving them after an allotted time. Today's technology enables similar information to be collected through less risky means. Signals intelligence involves collecting information from adversary's communications and information systems. The National Security Agency is the lead proponent for signals intelligence, and provides their products across the US government and military.⁷⁷ At the operational level, the US Army employs the Prophet system to provide a near-real-time picture of the operational environment through the use of signals intelligence sensors with the capability to detect, identify, and locate selected emitters. A 24-hour, all weather, near real time, ground-based system, the Prophet provides actionable intelligence, situational understanding, and force protection, and is organic to the brigade combat teams.

⁷⁵ Robert H. Scales Jr., "Culture-Centric Warfare," U.S. Naval Institute Proceedings 130 (October 2004): 164-165.

⁷⁶ DA PAM 525-42, 4.

⁷⁷ "Frequently Asked Questions about NSA," National Security Agency, accessed February 15, 2016, https://www.nsa.gov/about/faqs/about_nsa.shtml#about1.

Additionally, Prophet's tactical mobility allows supported units to easily reposition its collection capability on the battlefield to support evolving situations.⁷⁸

A final task, specified to long-range surveillance units in 1984 doctrine, directed the units to determine and report the location of high value targets, to include nuclear, biological, and chemical weapon delivery systems and nuclear weapons storage sites.⁷⁹ Today, it is almost unthinkable that small, six man elements could be capable of tracking such systems.

Technological advancements over the last three decades enable the measurement and signature intelligence branch to detect, track, identify, and describe the specific characteristics of fixed and dynamic target objects and sources from afar. These collection systems include radar, electro-optical, acoustic, radio frequency, nuclear detection, and seismic sensors, as well as techniques for gathering chemical, biological, nuclear, and other material samples.

In addition to aerial based collection platforms and recent technological advancements in the intelligence community, recent technological advancements at the tactical level provide the capability to conduct surveillance from farther distances and identify targets with greater precision, reducing the need to infiltrate soldiers to a close proximity. Limited to what they can carry on their backs, long-range surveillance units employ technologically primitive systems such as scopes and binoculars to collect visual information on their adversaries. These systems fail to provide standoff capability outside of standard threat direct fire and sensor ranges, and have limited far target location capability. Modern technology now enables vehicular mounted soldiers to observe targets from farther distances with greater accuracy and reduced risk, and provide considerable advantage over long-range surveillance units.

⁷⁸ "Prophet," US Army Acquisition Support Center, accessed February 20, 2016, <http://asc.army.mil/web/portfolio-item/iews-prophet/>.

⁷⁹ DA PAM 525-42, 4.

The Long-Range Advanced Scout Surveillance System is a long-range multi-sensor system employed by army formations, which provides the real-time ability to detect, recognize, identify, and geo-locate distant targets.⁸⁰ Fielded to armor and mechanized infantry battalion scout platoons, brigade reconnaissance troops, and light infantry division cavalry squadrons, the system utilizes advanced optics that triple the detection capability of scouts employing previously issued devices.⁸¹ The system contains a built in global positioning system and laser range finder which when coupled together, provides far target locations, providing a ten-digit grid coordinate of a target within 4/10 of a second after lasing. Allowing the operator, the ability to update the target grid every second, if needed, the data is accurate to within sixty meters at a distance of ten kilometers. During Operation Iraqi Freedom, elements from the 3rd Brigade, 3rd Infantry Division, used the system to acquire precise 10-digit grids of enemy vehicle and dismounts at a range of 3,600 meters, which resulted in first round hits for the resulting artillery strikes.⁸² Simply, the Long-Range Advanced Scout Surveillance System harnesses technology to allow its operators to acquire and identify targets at ranges beyond the capability of long-range surveillance units. The increased standoff distance significantly reduces the risk of the operator while also greatly increasing the level of information gained on the target.

Technology continues to change the way we live and work. Over the last thirty years, advancements in military technology changed the way the army trains, communicates, and fights. By employing new technologies, the army developed entire units whose mission is to employ these new technologies to our advantage.⁸³ Despite their addition, the army has neglected to

⁸⁰ “Long Range Advance Scout Surveillance System,” Raytheon Company, accessed March 2, 2016, <http://www.raytheon.com/capabilities/products/lras3/>.

⁸¹ Captain Michel Jones and Sergeant First Class Christopher Wagner, “Long Range Scout Surveillance System (Lras3),” *Armor* (November-December 1998): 23.

⁸² Taylor, 10.

⁸³ Mark Pomerleau, “Army Equips First Combined Shadow/apache Unit,” *Defense Systems*, April 14, 2015, accessed March 1, 2016, <https://defensesystems.com/articles/>

remove those units that fail to harness new technologies. Recent advances in airborne sensor technology, intelligence collection capabilities, and tactical level optics all provide distinct advantages on the modern battlefield. Collectively, they contribute to an increase in situational understanding while simultaneously reduce the risk to soldiers. The advantages of technological advancements across the formation indicate that the Army no longer needs long-range surveillance units as part of the force structure.

Section 3- War on Paper or Real War

Less than twenty-four hours after their insertion into Iraq, the long-range surveillance teams of the XVIII Corps were extracted. Despite the team's successful infiltration and performance in accordance with their training and standing operating procedures, the overall mission was a failure.⁸⁴ To the south, the long-range surveillance units of the 24th Infantry Division proved more successful in their reconnaissance mission; however, they shared the same fate as their XVIII Corps counterparts. Following extraction, the Division attack passed through their next planned surveillance positions before the scheduled insertion times.⁸⁵ Neither element would be utilized again in their doctrinal role for the remainder of the war. The fate of these and other long-range surveillance units during Operation Desert Storm are indicative of the disconnects between doctrine and real-world application. Carl von Clausewitz argued that human passions and the element of chance were so deeply woven in the phenomenon of warfare, "real wars" would always look very different from "war on paper."⁸⁶ In the case of long-range

2015/04/14/army-rq7b-shadow-apache-single-unit.aspx. The Army began equipping aviation battalions with unmanned aerial vehicles in 2015. Under a new Aviation Restructure Initiative, the army is planning to allocate unmanned aerial vehicles to make operations more seamless.

⁸⁴ Toomey, 295.

⁸⁵ Toomey, 293

⁸⁶ Carl von Clausewitz, *On War*, ed. Michael Howard, Peter Paret, and Bernard Brodie, *On War* (Princeton: Princeton University Press, 1989), 119.

surveillance units in modern warfare, Clausewitz was correct. Long-range surveillance unit operations in Iraq, Kosovo, and Afghanistan reveal that the conventional Army lacks the institutional knowledge to utilize them for their namesake tasks. Additionally, commanders often employ them as direct action forces rather than for conducting surveillance and reconnaissance tasks or for non-doctrinal economy of force roles, which are normally assigned to standard conventional units. Based on modern combat experience, it is evident these units are no longer necessary to the US Army because of the near absence of employment for the tasks which they were created.

In late 2002, the first long-range surveillance unit deployed in support of the Global War on Terrorism. The 82nd Airborne Division's long-range surveillance unit landed in Afghanistan, prepared to conduct operational level reconnaissance for Combined Task Force-82. Once on the ground, the unit found itself not working for their parent divisional headquarters, but rather were placed under the tactical control of the 7th Special Forces group, followed by the 82nd Division's, 1st Brigade Combat Team.⁸⁷ Under 7th Group's control, the unit did not conduct long-range reconnaissance operations; rather, they conducted thirty-two "scout missions" aimed primarily at identifying locations used by the enemy to launch rockets onto their base.⁸⁸ Returning to the 82nd, the unit commander could not gain approval to conduct operational level reconnaissance for the division.⁸⁹ Unable to gain employment for the two-star headquarters, the unit was placed under tactical control of 1st Brigade. Halfway through its deployment, the unit began conducting reconnaissance operations in specific areas of interest for the brigade. The deliberate passing of

⁸⁷Major Tom Sager, interviewed by Laurence Lessard, Fort Leavenworth, KS, March 14, 2007, transcript, Operational Leadership Experiences, Ike Skelton Combined Arms Research Library, Fort Leavenworth, KS, 6.

⁸⁸ Sager, 6.

⁸⁹ Ibid., 7. "They didn't feel comfortable with it, or they didn't want to deal with it"; "Divisions . . . they're not forced to go into the amount of detail that's necessary."

tactical control from higher echelons to tactical headquarters is a common occurrence for long-range surveillance units and indicates that the conventional Army lacks the institutional knowledge to utilize them for their namesake tasks at the operational level.

The following year, the 10th Mountain Division long-range surveillance unit also deployed to Afghanistan where they faced similar employment challenges. Realizing that Army doctrine for long-range surveillance missions did not fit into the asymmetric, non-contiguous counterinsurgency they faced, and citing the lack of proper equipment and training to handle it, the unit quickly developed tactics utilizing non-standard vehicles, such as all-terrain vehicles and Toyota trucks.⁹⁰ Similar to their 82nd predecessors, their parent division, which served as the Combined Joint Task Force Headquarters, did not employ them at the operational level. Instead, they assigned them to the Ground Force Commander, 1st Brigade. Lacking the robust staff structure to provide missions for the long-range surveillance unit and “complications” between the staff members and unit leadership, the brigade commander subsequently placed them under the operational control of a French Special Forces group, designated *Task Force Aries*. This long-range surveillance unit spent the last five months of their deployment working directly for a foreign, unconventional force during which the unit collected intelligence and captured high-value targets alongside for the Task Force Aries.⁹¹ The unit, learning from the French, adapted techniques involving surveillance of a village before, during, and after another team conducted overt reconnaissance in the village, talking with the local population.⁹² The long-range

⁹⁰ Major Robert Schexnayder, interviewed by Major Brian Riniker, 21 February 2007, transcript, Operational Leadership Experiences, Ike Skelton Combined Arms Research Library, Fort Leavenworth, KS, 3.

⁹¹ Unlike most SOF units, which fell under a SOF chain of command, TF Aries fell under CJTF-10.

⁹² This technique proved effective, and despite any continuity, the same technique was adapted in the same area of Afghanistan again in 2010 by the long-range surveillance unit from XVIII Corps.

surveillance units of the 82nd Airborne and 10th Mountain Divisions accomplished the tasks assigned by their commander; however, considering their employment resembled those of standard infantry and cavalry units, it was the “embarrassment of riches” needed for this mission?

Despite their unconventional roots, long-range surveillance units have commonality with the conventional cavalry force. Each force is designed to conduct reconnaissance to gain intelligence for their commanders, and each has faced their own similar “reconnaissance paradox.” The oldest debate concerning mounted reconnaissance units is whether the units should be equipped with light or heavy vehicles. If the forces are too light, commanders perceive they are not survivable on the battlefield, and thus tend to use other formations for reconnaissance normally replaced by the lead element of their formation. On the other hand, if the mounted reconnaissance forces are too heavy, commanders use these forces as an additional maneuver or combat support force.⁹³ Likewise, long-range surveillance units are caught in the dilemma between being perceived as “too light” and “too heavy.” Commanders, like those in Desert Storm, perceived them to be “too light,” and failed to employ the units for reconnaissance purposes because of their high risk. Commanders also tend to view the “embarrassment of riches” inside a long-range surveillance unit as being “too heavy” or simply too much combat power to waste on reconnaissance. Due to this paradox, long-range surveillance units are often employed as direct action forces rather than for conducting surveillance and reconnaissance tasks or for non-doctrinal economy of force roles, which are normally assigned to standard conventional units. Since the Army retains units that specialize in direct action missions and more conventional units that can accomplish the same economy of force missions without the high training requirements required of a long-range surveillance unit, why are they still necessary?

The reconnaissance paradox for long-range surveillance units is not a new phenomenon. Throughout the Vietnam War, long-range reconnaissance patrols were designed, trained, and

⁹³ McGrath, 198-199.

equipped to conduct a unique and necessary function for that specific war. The units were the only ground force capable of conducting reconnaissance deep behind enemy lines. Despite this purpose, they were utilized extensively for conducting high-intensity direct action operations. For example, in the 9th Infantry Division, the long-range surveillance patrols found intelligence driven operations challenging as patrols frequently had to be extracted after short durations because of compromise by civilians.⁹⁴ Unable to affect the intelligence fight, the teams conducted joint operations with the US Navy Special Operations teams, conducting ambushes and raids along the Mekong Delta. Indicative of the manner he employed his long-range reconnaissance patrol teams, the Division Commander in his post-command debriefing report characterized the units as “hunter-killers.”⁹⁵ Also in Vietnam, the 1st Brigade, 101st Airborne Division employed long-range reconnaissance patrols primarily conducted intelligence driven operations including prisoner interrogation.⁹⁶ The unit also performed a various economy of force missions including road checkpoints, blocking positions for advancing infantry and direct action ambushes. During the Vietnam War, no other organization in the US Army was expected to perform such a vast array of missions along the spectrum between standoff reconnaissance and direct action missions.

In 1984, Training and Doctrine Command published the first doctrine specified for long-range surveillance units, Pamphlet 525-42, *US Army Operational Concept for Long-range Surveillance Units*.⁹⁷ This publication marked the official name change from long-range reconnaissance patrols to long-range surveillance units, deliberately intending to emphasize the

⁹⁴ Faced operational challenges while deployed in December 1967 to the densely populated lowlands south of Saigon

⁹⁵ LTG Julian J. Ewell to Commanding General, 9th Infantry Division, April 15, 1970, *Senior Officer Debriefing Report: Period 25 February 1968 to 5 April 1969 (U)*, 6.

⁹⁶ Gebhardt, 50.

⁹⁷ DA PAM 525-42, 1-22.

intelligence nature of these organizations and personnel.⁹⁸ In 1987, Field Manual 7-93, *Long-range Surveillance Unit Operations*, mirrored earlier doctrine and sought to indoctrinate the lessons learned from the Vietnam war, also emphasizing the information collection nature of these units and strongly discouraging their use for direct action missions.⁹⁹ Notably, the manual doctrinally linked long-range surveillance unit missions directly to the Corps and Division commander's priority intelligence requirements for the first time.¹⁰⁰ Despite the doctrinal push, commanders continued to employ their long-range surveillance units for direct action missions. In 2005, the long-range surveillance unit for the Task Force Liberty was deliberately employed in an interdiction role with the expressed intent of killing the enemy as part of the task force's counter improvised explosive device and counter mortar fight.¹⁰¹

In addition to being employed in direct action roles because they are 'too heavy', commanders also employ long-range surveillance units in non-doctrinal economy of force roles because they are "too light." The majority of these economy of force missions mirror those normally assigned to standard conventional units and negate the need for specialized training and selection. During Desert Storm, long-range surveillance units were commonly perceived as being "too light." Four long-range surveillance teams from F Company, 51st Infantry, working for the 207th Military Intelligence Brigade, inserted north of the Iraqi border, but not behind enemy lines, to provide surveillance of the terrain in front of the corps and report any enemy movement. Following the same procedures as a conventional cavalry unit would follow, the teams inserted into their positions via a truck, which was followed by a short foot movement to their observation

⁹⁸ Gebhardt, 111-112.

⁹⁹ US Army. Department of the Army Field Manual (FM) 7-93, *Long-range Surveillance Unit Operations* (Washington, DC: Government Printing Office, 1995), 1-3.

¹⁰⁰ Gebhardt, 114.

¹⁰¹ Mike Manning, "Know Your Beat: National Guard Unit Conducts Long-Range Surveillance in Iraq," *Infantry Magazine* 95, no. 1 (Jan-Feb 2006): 14-19.

sites.¹⁰² Following G-Day, F Company performed three non-doctrinal missions in Iraq. The first mission found their teams employed in a scout role, detecting possible Iraqi forces withdrawing from Kuwait along the corps right flank. The long-range surveillance teams also conducted security for an unmanned aerial vehicle task force, which launched its aircraft deep into Iraq. During this mission, they also served in a military police capacity, taking custody of approximately three hundred and fifty enemy prisoners of war.¹⁰³ Similarly, the 1st Infantry Division long-range surveillance unit, D Company, conducted operations prior to G-Day, which mirrored those of their F Company counterparts, conducting fourteen missions along the Iraqi border. As with F/51st, D Company teams employed in front of their division, but not behind enemy lines, utilizing Bradley Infantry fighting vehicles as their primary means of insertion and extraction. Following G-Day, the unit unglamorously entered Iraq alongside support soldiers in the long supply convoys, which emanated in Saudi Arabia. During the move north, they also served in a military police capacity, managing enemy prisoners of war. Following combat operations, D/101 was utilized for its communications package, serving as a long-range relay station to assist the division in consolidating and reorganizing before redeploying from Kuwait.¹⁰⁴

More recently, operations in Kosovo, in support of Operation Joint Guardian, employed long-range surveillance units in economy of force roles. In 2013, the XVIII Corps long-range surveillance unit, C Company, 1st Squadron, 38th Cavalry, deployed with their parent unit the 525th BFSB out of Fort Bragg. They were replaced as part of the planned rotation by their sister company, C Company, 2nd Squadron, 38th Cavalry, from Fort Hood in early 2014. During both rotations, the long-range surveillance units were deployed to conduct peace support operations.

¹⁰² To the dismay of the corps commander, one team lost communications with its headquarters and forced both the 207th MI brigade and elements of the 1st Infantry Division to concentrate their efforts to regain contact with the team.

¹⁰³ Gebhardt, 25, 132.

¹⁰⁴ Gebhardt, 133.

For this mission set, the units' primary focus was to serve as a crowd and riot control maneuver force in the event of a civil disturbance. Both units also conducted reconnaissance missions along the administrative boundary line between Kosovo and Serbia to assist Kosovar institutions in enforcing laws. In this role, both units employed four small, unmanned aerial systems to provide additional coverage of the boundary area.¹⁰⁵

Two centuries ago, Carl von Clausewitz described the tension between theoretical possibilities suggested by the limits and capabilities of war, his war on paper, and the hard realities of real warfare. The tension continues today in the US Army. The way in which the US Army employed long-range surveillance units over recent conflicts indicates that these units are no longer necessary to the US Army in Unified Land Operations. The lack of employment during operations across Kosovo, Iraq, and Afghanistan for the tasks they were created support this conclusion. The Army lacks the of institutional knowledge needed to employ them in their intended role, thus commanders typically employ them as direct action forces rather than for conducting surveillance and reconnaissance tasks for non-doctrinal economy of force roles, which are normally assigned to standard conventional units. Given this, the Army should utilize already existing conventional forces rather than generate long-range surveillance units to conduct direct action and economy of force missions.

Conclusions & Recommendations

In February 1991, after conducting an emergency extraction, the XVIII long-range surveillance unit returned to their base in Kuwait having failed to achieve their reconnaissance objectives. As a result of their aborted mission, the XVIII Corps was unable to observe the movements of the Iraqi Army deep into the Iraq. Despite this failure and the resulting information gap, the Corps would not stop its attack; instead, they would discontinue their employment of their long-range surveillance units for the remainder of the war. As the historian of the XVIII

¹⁰⁵ US Army Maneuver Center of Excellence. "After Action Report," 4.

Corps noted, “The failure and the inadequacy of the deep surveillance missions would not stop the corps from its attack.”¹⁰⁶ As the attack commenced, the long-range surveillance unit remained sidelined for the remainder of the war. Despite an embarrassment of riches in the forms of training and personnel, the unit proved unnecessary to the XVIII Corps during defensive or offensive operations. The failures of the XVIII long-range surveillance unit in Desert Storm highlight many of the challenges associated with their employment.

The Army created long-range surveillance units to perform unique and necessary reconnaissance operations during the Cold War. Composed of infantrymen, capable of operating for a week or more deep in enemy territory, six-man teams perform as the eyes and ears of the commanders they serve, often beyond range of friendly artillery fire or support. Information provided by these assets was to contribute to the intelligence process and assist in providing commanders intelligence about the threat and other aspects of the operational environments at all times during operations.¹⁰⁷ The intent behind the creation of these units was never fully achieved as the research indicates several challenges hindered long-range surveillance unit employment. Operations over the last three decades across Kosovo, Iraq, and Afghanistan provide concrete examples of the challenges long-range surveillance units face in employment. Requiring high levels of training and selection, and intensive oversight from parent headquarters to be employed, these units accept unusually high levels of risk to obtain the information they were designed to collect. Recent technological advancements in the forms of unmanned aerial vehicles provide similar information that a long-range surveillance unit may provide at a substantially reduced risk while also providing the capability to lethally target if desired. Other technological advancements across the US Army’s intelligence disciplines, tactical level optics, and sensors also provide

¹⁰⁶ Toomey, 299.

¹⁰⁷ Army Doctrine Publication 2-0, *Intelligence* (Washington, DC: Government Printing Office, 2012), 2-1.

Commanders with information once obtained only through a soldier's eyes and ears. Since Viet Nam, disconnects between doctrinal and real world employment of long-range surveillance units highlight the lack of institutional knowledge of long-range surveillance units. Often employed for either direct action missions or economy of force missions, long-range surveillance units consistently perform tasks for which they were not created nor trained. Given the challenges associated with employment, recent technological advancements which provide similar information at a reduced risk and disconnects, which exist between doctrinal and real world employment, long-range surveillance units have not performed a unique function in the past and are not necessary for Unified Land Operations.

The emergent theme and conclusions suggest that long-range surveillance units be eliminated from the Army force structure and removed from their role in Unified Land Operations. As research for this paper concluded, the Army began the process of de-activating all long-range surveillance units. The elimination of these units provides the opportunity to increase the force structure across the remainder of the army in need areas such as aviation, air defense, military police, and tactical mobility units.¹⁰⁸ Given the consistent lack of employment across the Army since Viet Nam, any perceived capability gap resulting from the elimination of these units would be ill formed. The US Army's primary school for long-range surveillance units and the Reconnaissance and Surveillance Leaders Course should remain and potentially expand to increase capacity for soldiers from brigade and battalion reconnaissance organizations to attend.¹⁰⁹

¹⁰⁸ National Commission on the Future of the Army. "Report to the President and the Congress of the United States." January 28, 2016. Accessed March 2, 2016. http://www.ncfa.ncr.gov/sites/default/files/NCFA_Full%20Final%20Report_0.pdf. Also short are tactical mobility; missile defense; chemical, biological, radiological, and nuclear; field artillery; fuel distribution; water purification; watercraft; and military police capabilities.

¹⁰⁹ U.S. Army Maneuver Center of Excellence, "Reconnaissance and Surveillance Leaders Course 2E-F173/011-ASI6B," March 4, 2016, accessed January 15, 2016, <http://www.benning.army.mil/armor/316thCav/content/rslc/>.

Bibliography

- Anders, David. "Long-Range Surveillance Unit Application in Joint Vision 2010." Master's thesis, U.S. Army, Command and General Staff College, 1999.
- Blom, John David. *Occasional Paper*. Vol. 37, *Unmanned Aerial Systems: a Historical Perspective*. Fort Leavenworth, Kan.: Combat Studies Institute Press, 2010.
- Boot, Max, and Jeane J. Kirkpatrick. "The Paradox of Military Technology." Council on Foreign Relations. 2006. Accessed January 18, 2016. <http://www.cfr.org/information-warfare/paradox-military-technology/p11666>.
- Boot, Max. *The Savage Wars of Peace: Small Wars and the Rise of American Power*. New York, NY: Basic Books, 2002.
- Bourque, Stephen A. *Jayhawk: the VII Corps in the Persian Gulf War*. Washington, DC: CreateSpace Independent Publishing Platform, 2015.
- Bourque, Stephen A., and John W. Burdan III. *The Road to Safwan: the 1st Squadron, 4th Cavalry in the 1991 Persian Gulf War*. Denton, TX: University of North Texas Press, 2007.
- Burford, John. *LRRP Team Leader*. New York: Ivy Books, 1994.
- Byman, Daniel L. "Why Drones Work: The Case for Washington's Weapon of Choice." The Brookings Institution. Accessed March 2, 2016. <http://www.brookings.edu/research/articles/2013/06/17-drones-obama-weapon-choice-us-counterterrorism-byman>.
- Camper, Frank. *L.R.R.P.: The Professional*. New York: Dell, 1988.
- Chamberlain, Major Robert L., and First Sergeant Ralph Kluna. "Long-Range Surveillance Operations in Kosovo: Complementing Existing Capabilities." *Military Intelligence* 27, no. 1 (January-February 2001): 47-52.
- Chambers, Larry. *Recondo: LRRPs in the 101st*. New York: Ivy Books, 1992.
- Clausewitz, Carl von. *On War*. Edited by Michael Howard, Peter Paret, and Bernard Brodie. Princeton: Princeton University Press, 1989.
- Cochran, Lewis. "Human Intelligence: Long-Range Surveillance for Force XXI." Monograph, School of Advanced Military Studies (SAMS), 1994.
- Cole, Henry. "Bring Back the LRRP." Occasional paper, Strategic Studies Institute for the US Army War College, 1981.
- Doherty, Thomas W. "LRSUs (Long-Range Surveillance Unit) in the Current OE (Operational Environment)." *Infantry Magazine* 100, no. 3 (Jun-Aug 2011): 40-42.
- Fontenot, Gregory, E. J. Degen, and David Tohn. *On Point, the United States Army in Operation Iraqi Freedom*. Fort Leavenworth, KS: Combat Studies Institute Press, 2003.
- Galula, David. *Counterinsurgency Warfare: Theory and Practice*. Westport, CT: Greenwood Press, 1964.
- Gebhardt, James F. *Occasional Paper 10: Eyes Behind the Lines: US Army Long-Range Reconnaissance and Surveillance Unit*. Fort Leavenworth, KS: Combat Studies Institute Press, 2005.
- Gertler, Jeremiah. "U.S. Unmanned Aerial Systems." Congressional Research Service. January 3, 2012. Accessed January 10, 2016. <https://www.fas.org/sgp/crs/natsec/R42136.pdf>.

- Global Security. "Army Transformation 525th Battlefield Surveillance Brigade, Operation Iraqi Freedom 07-09, March 2009; Center for Army Lessons Learned: Support Brigades Newsletter; Collection Report." October 2009. Accessed February 15, 2016. http://www.globalsecurity.org/military/library/report/call/call_10-06.pdf.
- Hyneman, Kevin A. "Long-Range Surveillance Missions: What Generates the Need for Them?" *Infantry Magazine* 86, no. 3 (May-Jun 1996): 14-16.
- Joint Chiefs of Staff. Joint Publication (JP) 3-05.1. *Joint Special Operations Task Force Operations*. Washington, DC: Government Printing Office, 2007.
- Jones, Captain Michel, and Sergeant First Class Christopher Wagner. "Long Range Scout Surveillance System (Lras3)." *Armor* (November-December 1998): 23.
- Jordan, Major Thomas M. "Improving the Division LRSU." *Infantry Magazine* 80, no. 1 (Jan-Feb 1990): 11-12.
- Jorgenson, Kregg P. J. *Acceptable Loss*. New York: Ivy Books, 1991.
- . *LRRP Company Command: The Cav's LRP/Rangers in Vietnam, 1968-1969*. New York: Ballantine Books, 2000.
- . *The Ghosts of the Highlands: 1st Cav LRRPs in Vietnam, 1966-67*. New York: Ivy Books, 1999.
- . *MIA Rescue: LRRP Manhunt in the Jungle*. Boulder, CO: Paladin Press, 1995.
- Keaveny, Valery. "Ensuring the Continued Relevance of Long-Range Surveillance Units." Master's thesis, US Army Command and General Staff College, 1989.
- Keegan, John. *Intelligence in War*. New York: Knopf, 2003.
- Kensinger, LTG Phillip R. Memorandum to Brigadier General John C. Woods. Memorandum. 13 October 2005. Fort Bragg, NC. *USASOC's Position on ARSOF in Reconnaissance and Surveillance Support*. Fort Leavenworth, KS: Combined Arms Center.
- Lanning, Michael Lee. *Inside The LRRPs*. New York: Ballantine Books, 1988.
- Larsen, Michael. "Organizational Structure of Deep Ground Reconnaissance for Future Divisions and Corps." Master's thesis, U.S. Army, Command and General Staff College, 2006.
- Linderer, Gary A. *Six Silent Men: 101st LRP/Rangers*. Vol. 3. New York: Ivy Books, 1997.
- Longford, Elizabeth. *Wellington*. New York: Harper and Row, 1970.
- Manning, Mike. "Now Your Beat: National Guard Unit Conducts Long-Range Surveillance in Iraq." *Infantry Magazine* 95, no. 1 (Jan-Feb 2006): 14-19.
- Marks, James. *Just Do It: Close the Collection Gap*. Monograph, School of Advanced Military Studies (SAMS), 1989.
- McBride, Captain David A. "Selecting and Training Long-range Surveillance Unit Commanders," *Infantry Magazine* 82, no. 4 (July-August 1992): 42-4.
- McGrath, John J. *Scouts Out!* Fort Leavenworth, KS: Combat Studies Institute Press, US Army Combined Arms Center, 2008.
- McRaven, William H. *Spec Ops: Case Studies in Special Operations Warfare: Theory and Practice*. Novato, CA: Presidio, 1995.
- Meadows, Mark. "Long-Range Surveillance Unit Force Structure in Force XXI." Master's thesis, U.S. Army, Command and General Staff College, 2000.

- Miller, Kenn. *Six Silent Men: 101st LRP/Rangers*. Vol. 2. New York: Ivy Books, 1997.
- National Commission on the Future of the Army. "Report to the President and the Congress of the United States." January 28, 2016. Accessed March 2, 2016. http://www.ncfa.ncr.gov/sites/default/files/NCFA_Full%20Final%20Report_0.pdf.
- National Geospatial-Intelligence Agency. "About NGA." Accessed January 10, 2016. <https://www.nga.mil/About/Pages/Default.aspx>
- National Security Agency. "Frequently Asked Questions about NSA." 2009. Accessed March 10, 2016. https://www.nsa.gov/about/faqs/about_nsa.shtml#about1.
- Naylor, Sean. *Not a Good Day to Die: The Untold Story of Operation Anaconda*. New York: Berkley Books, 2005.
- O'Neill, Bard E. *Insurgency and Terrorism: Inside Modern Revolutionary Warfare*. Dulles, VA, Brassey, Inc., 1990.
- Parker, Geoffrey. *Cambridge Illustrated History of Warfare: The Triumph of the West*. New York, 1995.
- Pendall, David. "The Promise of Persistent Surveillance: What are the Implications for the Common Operating Picture." Master's thesis, US Army, Command and General Staff College, 2005.
- Pomerleau, Mark. "Army Equips First Combined Shadow/apache Unit." Defense Systems. April 14, 2015. Accessed March 1, 2016. <https://defensesystems.com/articles/2015/04/14/army-rq7b-shadow-apache-single-unit.aspx>.
- Powell, Captain Stephen, and Captain William Soderberg. "Eyes Behind the Lines," *Military Intelligence* 14, no. 3 (July 1988): 44-45.
- Raytheon. "Long Range Advance Scout Surveillance System." 2015. Accessed March 1, 2016. <http://www.raytheon.com/capabilities/products/lras3/>.
- Scales, Robert H. Jr. "Culture-Centric Warfare." *U.S. Naval Institute Proceedings* 130 (October 2004): 32-36.
- Special Operations Recruiting Battalion. "Special Forces Qualification Course." Accessed February 10, 2016. <http://sorbrecruiting.com/Docs/SFAS%20Pipeline.pdf>.
- Stanton, Shelby L. *Rangers at War: LRRPs in Vietnam*. New York: Ivy Books, 1992.
- Strategic Studies Institute. *Organization, Missions, and Command and Control of Special Forces and Ranger Units in the 1980s*. Carlisle Barracks, PA: US Army War College, 1979. Quoted in Shimon Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*. New York: Routledge, 2013.
- Taylor, Curtis D. "Can Surveillance Technology Replace Traditional Aggressive Reconnaissance?" in "Trading the Saber for Stealth." Special issue, *AUSA Land Warfare Paper: The Institute of Land Warfare* 53 (September 2005): 1-33.
- Toomey, Charles Lane. *XVIII Airborne Corps in Desert Storm: From Planning to Victory*. Central Point, OR: Hellgate Press, 2004.
- Trinquier, Roger. *Modern Warfare: A French View of Counterinsurgency*. London, England: Pall Mall Press, 1964.

- US Air Force. "E-8C Joint Stars." September 25, 2015. Accessed March 12, 2016.
<http://www.af.mil/AboutUs/FactSheets/Display/tabid/224/Article/104507/e-8c-joint-stars.aspx>.
- . "RC-135V/W Rivet Joint." May 23, 2012. Accessed March 12, 2016.
<http://www.af.mil/AboutUs/FactSheets/Display/tabid/224/Article/104608/rc-135vw-rivet-joint.aspx>.
- US Army Acquisition Support Center, "Prophet," accessed March 12, 2016,
<http://asc.army.mil/web/portfolio-item/iews-prophet/>.
- US Army GOMO. "General Gary Edward Luck Biography." Accessed 15 March 2016.
<https://www.gomo.army.mil/Ext/Portal/Officer/Resumes.aspx?Ltr=L&Type=Retired>.
- US Army Maneuver Center of Excellence. "After Action Report." Presented at the Long Range Surveillance Workshop, Fort Benning, GA, 24-25 June 2014.
- US Army Maneuver Center of Excellence. "Reconnaissance and Surveillance Leaders Course 2E-F173/011-ASI6B." 4 March 2016. Accessed March 2, 2016. <http://www.benning.army.mil/armor/316thCav/content/rslc/>.
- US Army. Command and General Staff College. *Initial Manuscript, First Draft, Advance Plan Table of Organization and Equipment 31-57 (Proposed), Long-Range Reconnaissance Patrol Company*. Fort Leavenworth, KS: Government Printing Office, November 18, 1961.
- . Department of the Army Doctrine Publication (ADP) 3-0. *Unified Land Operations*. Washington, DC: Government Printing Office, 2012.
- . Department of the Army Field Manual (FM) 100-5. *1986 (OBSOLETE): Operations*. Washington, DC: Headquarters, Department of the Army, 1986.
- . Department of the Army Field Manual (FM) 31-18 C1. *Infantry Long-range Patrol Company*. Washington, DC: Government Printing Office, March 7, 1969.
- . Department of the Army Field Manual (FM) 31-18. *Infantry Long-range Patrol Company*. Washington, DC: Government Printing Office, January 13, 1965.
- . Department of the Army Field Manual (FM) 31-18. *Infantry Long-range Patrol Company*. Washington, DC: Government Printing Office, August 23, 1968.
- . Department of the Army Field Manual (FM) 31-18. *Long-range Patrols. Division, Corps, and Army*. Washington, DC: Government Printing Office, June 18, 1962.
- . Department of the Army Field Manual (FM) 7-93. *Long-range Surveillance Unit Operations*. Washington, DC: Government Printing Office, 1995.
- . Department of the Army. *Army Campaign Plan*. 2004.
- . US Army Training and Doctrine Command (TRADOC) Analysis Center. *Modularity Reports, Battlefield Surveillance Brigades, Phase II*. Fort Leavenworth, KS: Government Printing Office, 2005.
- . US Army Training and Doctrine Command (TRADOC) Analysis Center. *Long-range Ground Reconnaissance Study (Final Report)*. Fort Leavenworth, KS: Government Printing Office, November 2005.
- . US Army Training and Doctrine Command (TRADOC) Analysis Center. *Task Force Modularity: Integrated Analysis Report. Analysis Underpinnings Recommendation to the CSA*. Fort Leavenworth, KS: Government Printing Office, March 31, 2004.

- . US Army Training and Doctrine Command (TRADOC) Analysis Center. *Task Force Modularity: The Role of Analysis in the Creation of the Modular Force*. Fort Leavenworth, KS: Government Printing Office, July 1, 2005.
- . US Army Training and Doctrine Command (TRADOC) Pamphlet (PAM) 525-42, *US Army Operational Concept for Long-Range Surveillance Units*. Fort Monroe, VA: Government Printing Office, October 26, 1984.
- . US Army Training and Doctrine Command (TRADOC). *Army Comprehensive Guide to Modularity, Version 1*. Fort Monroe, VA: Government Printing Office, October 2004.
- . US Department of Field Manual (FM) 3.55-93. *Long-range Surveillance Operations. Preliminary Draft, LRS Doctrine*. Washington, DC: Government Printing Office, 2004.
- US Congress. House Budget Control. 112th Cong., 1st sess., 2011. H. Rep. S. 365.
- Whalen, Robert P. Jr. “Everything Old Is New Again Task Force Phantom in the Iraq War: Sometimes Army Doctrine Actually Works When Given the Chance.” *Military Review* (May-June 2007): 31-37.
- Work, Bob. “Deputy Secretary of Defense Speech.” US Department of Defense. August 5, 2014. Accessed DATE. <http://www.defense.gov/News/Speeches/Speech-View/Article/605598>.