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MASTER OF MILITARY STUDIES

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**TITLE:**

**The Cost of an Expeditionary Army:  
Reduced Corps and Division Reconnaissance and Security**

SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF MILITARY STUDIES

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## EXECUTIVE SUMMARY

**Title:** The Cost of an Expeditionary Army: Reduced Corps and Division Reconnaissance and Security

**Author:** Major Allan Buck Carroll, United States Army

**Thesis:** The Army's transformation from the division-centric Army of Excellence to the modular brigade-centric Objective Force model has resulted in inadequate reconnaissance and security forces and doctrine for their employment at the corps and division levels. There are three reasons for this. First, flawed assumptions regarding the substitution of ground reconnaissance troops for unmanned surveillance systems; second, the necessity of fighting for information; third, the requirement for a dedicated security force.

**Discussion:** Throughout its history, the United States Army has enabled divisions and corps to conduct security and reconnaissance operations through designated cavalry organizations. With the introduction of mechanized and motorized platforms and demotion of the horse as a viable means of maneuver, the cavalry had an identity crisis during the interwar period between the two world wars resulting in an initially ill-equipped force entering the war. Inadequate firepower, protection, and mobility during World War II led to the creation of the division cavalry squadron and armored cavalry regiment of the Army of Excellence force structure unveiled during the Cold War. The Army's most recent transformation to the modular brigade-centric Objective Force model, initiated in 2001, substantially changed the reconnaissance and security capabilities at the corps and division level. The transformation replaced the robust division cavalry squadrons and the armored cavalry regiments with the battlefield surveillance brigade. Ultimately, this study finds the underlying assumptions that the Army utilized in developing the new doctrine and resulting force structure to be flawed.

**Conclusion:** Due to flawed assumptions and the future threat, the Army must revise its current doctrine on security and reconnaissance operations at the corps and division levels and reinstate the original force structure for corps and division reconnaissance and security, revamp the battlefield surveillance brigade structure, or conduct dynamic re-tasking of specific brigade combat teams.

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## **PREFACE**

The initial focus of my research was not on reconnaissance and security transformation but on the transformation of the United States Army as a whole. As I conducted my initial research, however, I discovered that while many authors focused on the overarching transformation and some had written about reconnaissance at the brigade level, none had focused on the transformed reconnaissance and security capabilities for the upper echelons. For this reason, I devoted my time and energy to identify the capabilities of the future force at the corps and division levels.

I owe many thanks to the individuals who have shared in the completion of this work. As with every assigned paper at the Marine Corps Command and Staff College, I want to thank the Marine Corps University Leadership Communications Skills Center for their honesty on the quality of my writing and the advice on ways in which to improve it. I want to thank my mentor, Dr. Charles D. McKenna for his support both as an academic and as a retired officer. His input was invaluable. Finally, I would like to thank my inspiration and unwavering proofreader, my wife, for all of the assistance with the paper and always reinforcing my efforts with additional confidence in my ability.

## INTRODUCTION

Sun Tzu said, “Therefore, determine the enemy’s plans and you will know which strategy will be successful and which will not; agitate him and ascertain the patterns of his movement.”<sup>1</sup> This statement highlights the main objective of reconnaissance and security operations throughout history, namely to reduce uncertainty.<sup>2</sup> Reconnaissance and security operations provide the commander with information that informs decisions. Reconnaissance, a mission to obtain information about the enemy or terrain, can be either offensive or defensive in nature.<sup>3</sup> In contrast, security operations are ultimately defensive and provide the commander with both early warning of enemy operations and the time and ability to maneuver forces to counteract the enemy course of action.<sup>4</sup>

Throughout history, the presence, absence, or misuse of dedicated reconnaissance security assets has both won and lost battles. If in 1863, during the battle of Chancellorsville, General Joseph Hooker had utilized his cavalry to screen the Union positions, General “Stonewall” Jackson would likely have failed in his envelopment of the Union flank.<sup>5</sup> Likewise, the Union Cavalry’s security operations against General Stuart prior to the battle of Gettysburg denied General Lee knowledge of the disposition and composition of the force that would ultimately defeat him.<sup>6</sup> In 1876, substantial reconnaissance may have caused Colonel George A. Custer to postpone attacking the Sioux at Little Big Horn and avoid a massacre.<sup>7</sup>

In 2001, the conventional Army initiated a transformation that substantially changed security and reconnaissance organizations and doctrine at the corps and division levels. The transformation altered the Army from its division-centric Army of Excellence to the brigade-centric modular Objective Force. The catalyst for the transformation was the Department of Defense transformation initiated by the Chairman of the Joint Chiefs, General John M.



Shalikashvili, and Secretary of Defense, William Perry, in 1996 through *Joint Vision 2010*.<sup>8</sup> The foundation of the joint transformation, as outlined in the document, was a force focused on utilization of new technology to achieve and then exploit information superiority.<sup>9</sup> These concepts were later solidified by the Department of Defense through the *Quadrennial Defense Review Report* in 2001 and the *Transformation Planning Guidance* in 2003.<sup>10</sup> The planning guidance further prescribed that the individual services were required to submit transformation roadmaps, outlining their transformational process and concepts, to the Chairman of the Joint Chiefs of Staff annually for approval.<sup>11</sup>

The Army published the first of their *Transformational Road Maps* in 2004.<sup>12</sup> In the initial roadmap, the Army stated that its intention was to create smaller deployable expeditionary units that, through the utilization of new technology, were capable of conducting operations against a redefined threat that includes the asymmetric.<sup>13</sup> This threat was later defined as the hybrid threat, defined by *Operational Terms and Military Symbols* (ADRP 1-02), as a threat which consisted of a “combination of regular forces, irregular forces, terrorist forces, and/or criminal elements.”<sup>14</sup>

The Army’s change in vision resulted in a dynamic shift in designated combat power at each level and in its doctrinal application. Most of the assumptions utilized in the transformation were well informed and tested. Unfortunately, flawed assumptions regarding the substitution of unmanned surveillance systems for ground reconnaissance troops, the necessity of fighting for information, and the requirement for a dedicated security force resulted in inadequate reconnaissance and security forces at the corps and division levels and misguided doctrine.

## **METHODOLOGY, SCOPE AND LIMITATIONS OF THE STUDY**

This study utilized historical, doctrinal, theoretical, and strategic documents to outline the underlying assumptions guiding the new reconnaissance and surveillance doctrine and formation. While the analysis was substantial, the body of evidence was so extensive that it would be impossible to examine all of it here.

**Methodology and Scope.** Initially, the study clarifies the broad organizational transition within the Army and then highlights the differences between the corps and division cavalry in both the Army of Excellence and the Objective Force models. The study then outlines three exercises that the Army utilized in its attempts to validate the new formations to familiarize the reader with them prior to the discussion regarding the assumptions. The next section seeks to establish the process by which the doctrinal changes were made in concert with the organizational changes, and introduces the underlying assumptions guiding the reconnaissance and security doctrinal transitions.

Each of the following three sections is dedicated to one of the assumptions and has a similar structure. First, the assumption is explained and the new doctrinal precedent established. Second, historical context for the assumption is developed. Third, the assumption is scrutinized in relation to foundational military theory. Finally, the insights gleaned from the transformation exercises, and from contemporary leaders are applied.

The paper closes with a quick summary of the findings, conclusions from the analysis, and recommendations for correcting inadequacies identified. These sections utilize both the concepts outlined within the paper and the author's perceptions.

**Limitations.** Due to limitations in the study's breadth, this paper will discuss only the regular United States Army with little detail on system capabilities. While the military continues

to work through issues regarding interoperability and interdependence in the joint force, the possible enhanced capabilities through joint operations, while important, will not be presented or analyzed. The study also excludes discussion of foreign successes and failures in reconnaissance and security but acknowledges their contributions to the development of United States doctrine. While special operations forces have unique capabilities in the realm of reconnaissance, they are not necessarily a source of corps or division reconnaissance and for this reason will not be evaluated. Finally, the study does discuss some of the technological advances in equipment, specifically unmanned aerial systems, but does not provide detailed technical information.

### **ARMY TRANSFORMATION: 2001 TO 2012**

Prior to focusing strictly on the cavalry organizations, baseline knowledge of the organizational transformation is crucial. The central theme of the Army transition was the creation of the brigade combat team (BCT), the intended cornerstone of the modular expeditionary Army. To accomplish this, all preexisting general-purpose brigades transitioned into this modular entity by adding organic sustainment capabilities and reconnaissance squadrons. To round out the force, an additional medium weight brigade was introduced, the stryker brigade combat team (SBCT), which utilized the newly fielded Stryker vehicle family. In the end, three different general-purpose forces were in the Army's inventory: armor brigade combat teams (ABCTs) composed of mainly tracked vehicles; infantry brigade combat teams (IBCTs) capable of aerial and ground insertion; and SBCTs.

In addition to the general-purpose forces, the *Army Transformation Roadmap* outlined five separate support brigade variants. The variants consisted of the battlefield surveillance brigade (initially called the Reconnaissance, Surveillance, Target Acquisition Brigade), the

Aviation Brigade, the Fires Brigade, the Maneuver Enhancement Brigade, and the Sustainment Brigade.<sup>15</sup> The intent of the brigades was to consolidate specific specialized capabilities for augmentation at the Combatant Command (COCOM), corps, or division level when necessary. Unfortunately, to strengthen the general-purpose brigades' capabilities, the Army siphoned capabilities from the higher echelons and their supporting brigades. The resulting reconnaissance and security formation, the battlefield surveillance brigade, was a case in point.

**Cavalry Organizational Transformation.** The reconnaissance and security capabilities in the Army of Excellence construct resembled an inverted pyramid from the corps to the battalion level. The armored cavalry regiment was the corps level asset and it contained three separate cavalry squadrons, each containing organic artillery, aviation, engineer, and anti-tank capabilities.<sup>16</sup> Each division contained a division cavalry squadron, which contained three ground cavalry troops and two air cavalry troops.<sup>17</sup> Each brigade contained a Brigade Reconnaissance Troop with two motorized platoons and each battalion had a reconnaissance platoon (See Table 1).<sup>18</sup>

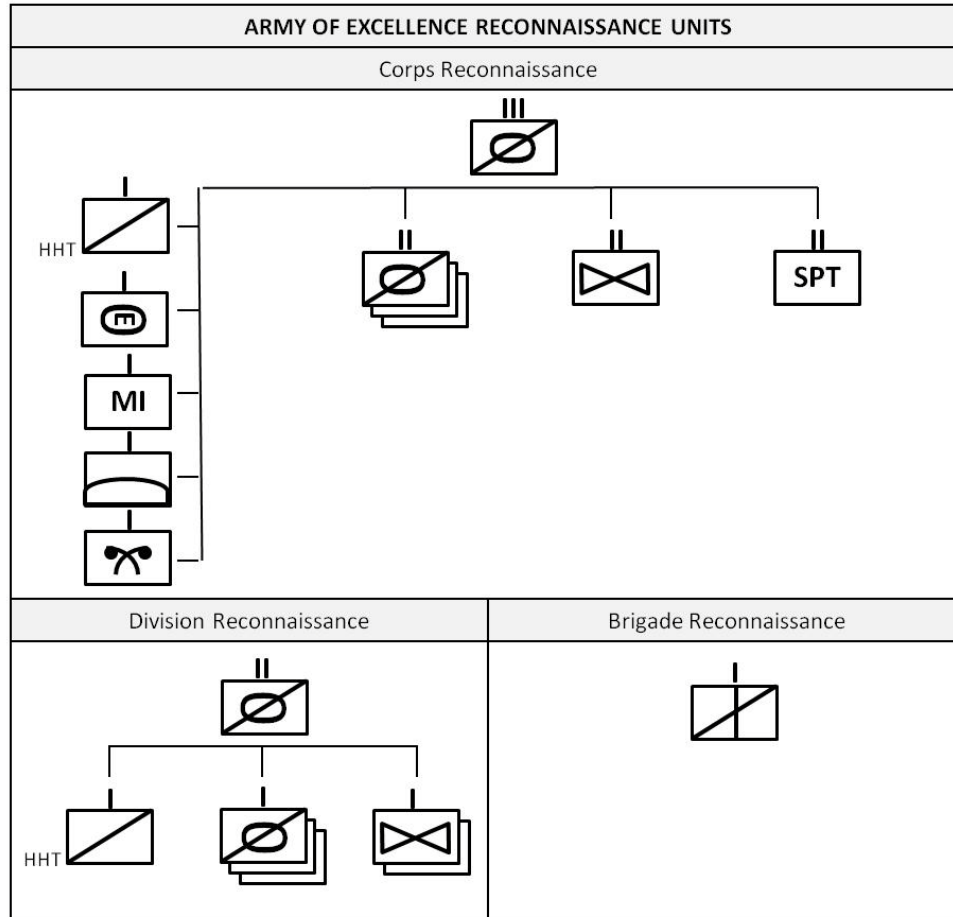


Table 1: Army of Excellence Reconnaissance Table of Organization

Source: Headquarters U.S. Army, *Armored Cavalry Regiment and Squadron*, FM 17-95-10. Washington, DC: Headquarters U.S. Army, September 1993, 1-3.

In contrast, the cavalry military tables of organization (MTOEs) in the Objective Force are nearly identical at the corps, division, and brigade levels, with the addition of an unmanned aerial system (UAS) platoon at the corps and division levels. The only organization designated to conduct reconnaissance at the corps and division levels is the battlefield surveillance brigade (BfSB), consisting of a military intelligence battalion and a ground reconnaissance squadron.<sup>19</sup> The ground reconnaissance squadron is composed of two motorized cavalry troops and a long range surveillance (LRS) company.<sup>20</sup> While the corps level asset decreased in size, the brigade level increased drastically with the transition from a singular troop to a reconnaissance squadron.

Each reconnaissance squadron consists of two mounted troops and a dismounted reconnaissance troop (DRT) (See Table 2).

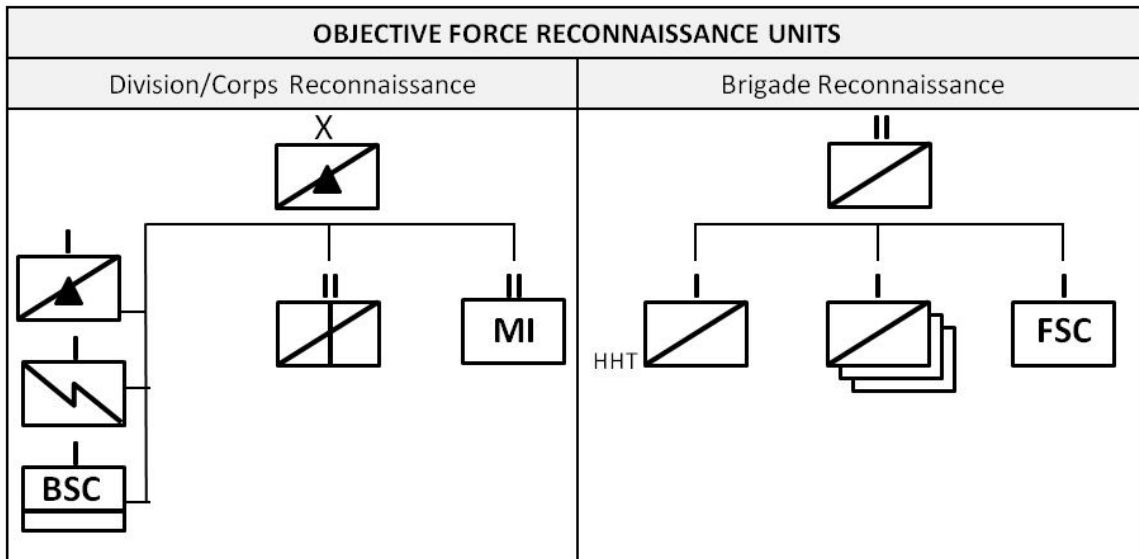


Table 2: Objective Force Reconnaissance Table of Organization

Source: Headquarters U.S. Army, *Battlefield Surveillance Brigade (BFSB)*, FM 3-55.1.

Washington, DC: Headquarters U.S. Army, June 2010, 2-16.

**Conceptual Testing of the Transformed Organizations.** Prior to and during the transformation, multiple studies, simulations, and exercises were conducted to identify the capabilities and flaws of the transformed organizations. The ultimate objective was to validate organizations against all four components of the hybrid threat, regular, irregular, terrorist, and criminal.

This study utilized three exercises that addressed the crucial concerns of conducting corps and division level reconnaissance and security operations. The first was a detailed study conducted by the United States Army Training and Doctrine Command (TRADOC) Analysis Center (TRAC) at Fort Leavenworth. The study consisted of multiple simulations conducted prior to transformation to test the ability of each type of BCT to conduct the different variants of reconnaissance and security operations.<sup>21</sup> The second was a series of exercises conducted by the Cavalry Leader’s Course at Fort Knox in 2005 to test the ability of the BCT reconnaissance

squadrons to conduct reconnaissance operations.<sup>22</sup> The third exercise was Joint Readiness Training Center (JRTC) Rotation 11-01 conducted in October 2001, the first combat training center (CTC) rotation focused on decisive action and fighting the hybrid threat with a transformed brigade. The findings of these exercises were utilized in the analysis of each of the assumptions regarding the Objective Force and its doctrine.

**Reconnaissance and Security Doctrinal Transition.** The conceptual testing conducted by the Army enabled the Training and Doctrine Command (TRADOC) to update Army doctrine. The transition proceeded quickly until General Martin Dempsey, as the Chief of Staff of the Army, ordered the Combined Arms Center to revise the doctrine hierarchy to better synthesize the current manuals.<sup>23</sup> In the process, the doctrine manuals were broken into Army Doctrine Publications (ADPs), Army Doctrine Reference Publications (ADRP), and Field Manuals (FMs). Unfortunately, while almost all of the new ADPs and ADRPs have been released, only a tentative architecture governing the prescribed 50 FMs has been published.<sup>24</sup> The proposed architecture only contains two FMs focused solely on reconnaissance and security and neither of them has been released at this date. The doctrine manuals that currently dictate reconnaissance and security operations at the corps and division levels are *Battlefield Surveillance Brigade* (FM 3-55.1), *Brigade Combat Team* (FM 3-90.6), and *Corps Operations* (FM 3-92).

The current cavalry and security doctrine was developed in accordance with three unstated but critical new assumptions that dramatically altered previous universally held beliefs. The first assumption embraced by leadership within the Army was that unmanned surveillance systems could negate the corps and division's need for substantial numbers of dedicated reconnaissance forces on the ground.<sup>25</sup> The second assumption was that when extensive security operations, such as a guard or cover mission, were deemed necessary, general-purpose forces

were adequate. The third assumption was that the corps and division reconnaissance elements do not require the capability of conducting reconnaissance in force.

When fused, the information from the three manuals illuminates the doctrinal impacts of the underlying assumptions. While the dramatic transitions in doctrine were given incredible scrutiny, the Army's foundational theorists, historical insight, and results from previously conducted tests shed light on possible flaws in the assumptions. The reader must dissect each assumption. To understand these flaws, let us examine these assumptions more closely.

### **TRANSFORMATIONAL ASSUMPTION 1: UNMANNED PLATFORMS REDUCE THE REQUIREMENT FOR GROUND RECONNAISSANCE TROOPS**

The *2004 United States Army Transformational Roadmap* declared, "Unmanned and unattended systems will be used in maneuver, maneuver-support and maneuver-sustainment roles to augment and, in some cases, replace Soldiers."<sup>26</sup> While neither doctrinal nor transformational documents explicitly indicate that unmanned platforms reduce the requirement for ground reconnaissance troops, the assumption was developed based on the missions designated for the systems and a comparison of the new and old division and corps reconnaissance assets.

*Corps Operations* (FM 3-92) states that unmanned aerial systems (UAS) provide "surveillance, reconnaissance, attack, communications relay, and convoy overwatch."<sup>27</sup> The Field Manual further elaborates that the UAS was intended to coordinate indirect and aviation fires, gain and maintain contact with the enemy, enable reconnaissance handovers with follow on units, and conduct intelligence collection.<sup>28</sup> Every role identified was also a traditional role filled by cavalry scouts. While a comparison of the designated tasks was telling, a comparison of



combat power between the Army of Excellence reconnaissance assets and those of the Objective Force makes the point more clearly.

The battlefield surveillance brigade (BfSB) military table of organization and equipment (MTOE) contrasted with the MTOE of an armored cavalry regiment (ACR) clearly delineates the weight given to unmanned surveillance systems. The ACR had three ground cavalry squadrons with four company sized elements each and an aviation squadron containing rotary wing aircraft.<sup>29</sup> In contrast, the BfSB's reconnaissance assets consist of a single cavalry squadron bearing three company size elements and a tactical unmanned aerial system (TUAS) platoon with no dedicated rotary wing support.<sup>30</sup> Simple math suggests that the capabilities contained in the UAS company are weighted the same as two cavalry squadrons and an aviation squadron.

**Historical Precedent for Unmanned Systems.** While unmanned aerial systems only recently became a highly sought after and discussed capability, Nicola Tesla described an “armed, pilotless-aircraft designed to defend the United States” in his 1915 dissertation.<sup>31</sup> The first documented use of unmanned aircraft in combat occurred during the American Civil War. Both the Union and Confederacy utilized balloons laden with explosives in an attempt to destroy key enemy infrastructure.<sup>32</sup> While attempts were made to utilize unmanned aircraft during World War II in Operation APHRODITE, their first successful use occurred during the Vietnam War.<sup>33</sup> Firebee drones flew 3,400 sorties over North Vietnam losing a high percentage of the aircraft in the process of conducting reconnaissance, information operations, and radar detection.<sup>34</sup> Their success in Vietnam fueled the desire to continue their development and unmanned aerial vehicles were utilized in every conflict thereafter.

**Fundamental Doctrinal Principles of “Fog” and “Friction.”** While neither unmanned sensors nor aircraft were yet invented in 1832, Carl von Clausewitz's concepts of “fog” and

“friction” greatly reinforce the perceived requirement for reconnaissance and security operations. Clausewitz, one of the most widely quoted and possibly the most influential theorist in American military doctrine, believed that war was inherently ambiguous and that the most common reason for failure was an “imperfect knowledge of the situation.”<sup>35</sup>

The concept of “fog,” in his book *On War*, described those things invisible to the opposing combatants.<sup>36</sup> The concept references not only fully understanding the opponent but also fully understanding friendly forces and their capabilities. Fundamentally, reconnaissance is intended to expose the composition and disposition of the enemy, while security operations both expose the attacking enemy while denying the adversary the same information about friendly forces.

Clausewitz defined “friction” as the “only concept that more or less corresponds to the factors that distinguish real war from war on paper.”<sup>37</sup> He used the potentially destabilizing factors of the human will, weather, and chance as examples of factors that create friction.<sup>38</sup> If precautions are not taken to counter or withstand the effects of “friction,” the best equipped and manned army may be defeated.

Understanding the terms “fog” and “friction” not only enlighten the purposes of reconnaissance and security but also expose the issues with unmanned aerial systems attempting to perform the same role. Contemporary military leadership identified many of these issues.

**Contemporary Military Experience in Unmanned System Utilization.** Major General H.R. McMaster, the current commander of the Maneuver Center of Excellence, proclaimed that the military was “building tomorrow’s military force on the unfounded assumption that technologies emerging from the “information revolution” will lift the fog of war.”<sup>39</sup> Many current military professionals, like Major General McMaster, have deemed the assumption that

information superiority can be achieved through unmanned systems impossible due to “fog” and “friction.”

Clausewitz’s principle of “friction” influences the use of unmanned aerial systems due to physical limitations in the technology; two plausible examples are impacts in nature and those with an adaptive enemy combatant. Natural impacts of weather and terrain affect different systems based on their size and if they travel on ground or through the air. Inclement weather including sand storms, fog, and high winds can prevent aerial assets from conducting surveillance and often denies the ability to take flight at all. Mountainous or rocky terrain has the same potential impact on ground assets. Additionally, a RAND study conducted to assist in the transformation process found that “an enemy who relies on cover, concealment, intermingling, and dispersion will be difficult if not impossible to monitor from overhead assets.”<sup>40</sup>

On the tactical level, ground troops routinely eliminate “fog” for the commander through human interaction, but due to physical limitations, this is impossible for unmanned systems. General Anthony Zinni, then Director of Operations at United Nations Task Force Somalia, said that sensors were incapable of “[penetrating] the faction leaders and truly [understanding] what they were up to.”<sup>41</sup> Cavalry scouts, when necessary, conduct open source intelligence collection through conversing with civilians. Unmanned sensors, either aerial or ground, will never have the ability to interact and gain the same feedback from a human that another human can.

In a broad sense, “fog” currently obscures future battlefields to include the capacities and desires of future adversaries. While the Taliban and Al Qaeda have not been effective in countering unmanned aerial systems, future near peer hybrid threats such as Iran, Russia, North Korea, and China have weapon systems and military techniques that can effectively counter

unmanned systems (see Appendix 1 for additional information on emerging threats). Former Secretary of Defense Donald Rumsfeld once made a similar statement in relation to space assets. He stated, “No nation relies more on space for its national security than the United States. Yet elements of the U.S. space architecture, ground stations, launch assets and satellites in orbit, are threatened by capabilities that are increasingly available.”<sup>42</sup> Both a high-tech capability, such as an electromagnetic bomb, and a simple technology, such as an off the shelf global positioning system (GPS) jammer, have the capacity to disrupt or cause the destruction of unmanned systems.<sup>43</sup> Ultimately, rationalizing away the limitations and vulnerabilities of systems precludes a valid assessment of unmanned systems’ ability to provide information superiority.

#### **FOUNDATIONAL ASSUMPTION 2: GENERAL-PURPOSE FORCES ASSUMPTION OF SECURITY OPERATIONS**

The missions of guard and cover were clearly transitioned to the BCT as indicated in both *Battlefield Surveillance Brigade* (FM 3-55.1) and *Brigade Combat Team* (FM 3-90.6). *Battlefield Surveillance Brigade* (FM 3-55.1) proclaims that, in regards to security operations, “unlike the Army of Excellence division cavalry squadron or corps armored cavalry regiment the battlefield surveillance brigade will not perform guard and cover missions.” Likewise, *Brigade Combat Team* indicates that one of the key capacities of the armored brigade combat teams (ABCTs) is “conducting screen, guard, and cover missions.”<sup>44</sup>

To elaborate, the three variants of brigade combat teams, while assuming the general-purpose missions of their Army of Excellence counterparts, are now tasked to conduct operations previously conducted by division and corps level cavalry. According to *Brigade Combat Team* (FM 3-90.6), BCTs are expected to conduct “offensive, defensive, and stability and civil support tasks simultaneously” in addition to being able to conduct all variants of reconnaissance and

security operations.<sup>45</sup> *The Armored and Mechanized Infantry Brigade* (FM 71-3), published prior to the transformation, only tasked brigades with offensive, defensive, and security operations but never indicated that brigades must conduct reconnaissance operations.<sup>46</sup> It further elaborated that a division cavalry squadron must normally augment a brigade when the brigade was tasked to conduct a defensive cover mission.<sup>47</sup> Ultimately, the possible issues confronting the BCT, as the required competencies expand, lie in possible force structure inadequacies and over tasking.

**Historical Precedent in Security Operations.** Throughout American history, cavalry has functioned as the predominant security force due to their inherent mobility. The first American cavalry organizations began forming in troop strength as the Continental Army mustered in 1775 and the first regiments formed in 1776 due to the insistence of General George Washington.<sup>48</sup> Initially the mounted force was split among three separate distinctive commands, the heavy cavalry, used to conduct decisive attacks, the light cavalry, utilized for reconnaissance and security operations, and the dragoons, who were mounted infantrymen.<sup>49</sup> These roles remained consistent through both the American Revolutionary War and the War of 1812 but were consolidated under the banner of the cavalry immediately prior to the Civil War. From 1776 until the 1920s, despite shifts in size and nomenclature of units, the cavalry centered on the horse and the maneuverability that it provided.<sup>50</sup> The cavalry provided the Army with a highly maneuverable force to conduct offensive, defensive, reconnaissance, exploitation, and security operations.

The introduction of mechanization in the 1920s created a crisis in the cavalry branch as the Army questioned the horse and the cavalry's role on the battlefield for the first time. During the Spring Maneuvers in 1940, a new corps reconnaissance regiment construct, with both a

mechanized squadron and a horse squadron was tested.<sup>51</sup> Three subsequent tests during the IV Corps Maneuvers in 1940, the Louisiana Maneuvers in 1941, and the Carolina Maneuvers in 1941 validated the concept, which utilized the horse cavalry for the traditional roles of offense, defense, security, and the near reconnaissance and the mechanized cavalry for the deep reconnaissance.<sup>52</sup> Ultimately, horses were not transported to Europe or the Pacific during World War II and were phased out of the Army inventory.

The cavalry's role of conducting security operations was never phased out, and, until the Objective Force concept, the cavalry remained the proponent for division and corps level security. This fundamental role remained part of the doctrine of both the Army and cavalry.

**Fundamental Doctrinal Theories.** In 1893, Colonel Arthur L. Wagner released *Service of Security and Information*, the first American book to outline the role of cavalry in security and reconnaissance operations.<sup>53</sup> He initially wrote the book as a textbook for the United States Military Academy to teach enduring cavalry principles.<sup>54</sup> The work became much more significant as it served as the baseline for reconnaissance and security doctrine and training in the 1920s and 1930s.<sup>55</sup>

Colonel Wagner indicated that security was crucial, that a single unit should be identified to conduct security, and that security should never be separated from reconnaissance. He stated, "If the entire Army were constantly on the alert, its surprise would be impossible...but to keep the entire force consistently on the watch would be to ruin it by physical hardship."<sup>56</sup> He then elaborated, "The covering detachments, being nearer the enemy than the main body is, are charged either with gaining this information, or with the support of patrols or detachments engaged in scouting and observation."<sup>57</sup> Due to their mobility and reconnaissance capabilities, Wagner designated the cavalry as the best organization to conduct security operations.<sup>58</sup>

**Contemporary Military Experience.** Two contemporary viewpoints opposing the transition of security operations to general-purpose forces add additional credence to Wagner's findings. The opposition centers on the organic capabilities of the brigade combat teams (BCTs) and their inability to train to standard.

The United States Army Training and Doctrine Command Analysis Center (TRAC) at Fort Leavenworth conducted a study prior to transformation to gauge the capabilities of BCTs in offensive reconnaissance and security operations.<sup>59</sup> Out of the three variants, the stryker brigade combat teams (SBCT) fared the best in the security scenarios due to their third infantry battalion.<sup>60</sup> None of the constructs, however, had adequate force structure to conduct the guard or cover security missions or offensive reconnaissance against a conventional enemy.<sup>61</sup> No amount of training can overcome this issue; a drastic increase in combat power must be applied to enable mission success.

The other issue possibly affecting the brigade combat team's (BCT) ability to conduct security missions is over tasking. While BCTs are extremely effective in warfighting, as seen in Iraq and Afghanistan, units can potentially be over tasked to the point that they are mediocre at all tasks assigned. During the first Army Reconnaissance Summit at Fort Knox in 2010, Lieutenant General (Retired) Hart postulated that even if the force structure of the BCT was adequate the training time allotted was not.<sup>62</sup>

Current issues with artillery battalions during their Joint Readiness Training Center (JRTC) live fires display the effects of over tasking. Over the past ten years, artillery battalions have conducted a wide variety of missions in both Afghanistan and Iraq, including missions typically conducted by the infantry and military police. Only a small percentage of artillery units have performed their primary mission. As a result, in 2012 over three-quarters of the battalions fired

outside of the firing box during artillery live fires at JRTC.<sup>63</sup> Prior to 2002, firing outside the box was considered such an egregious error that the entire chain of command would have been relieved on the spot.<sup>64</sup>

### **FOUNDATIONAL ASSUMPTION 3: RECONNAISSANCE ORGANIZATIONS DO NOT NEED TO CONDUCT RECONNAISSANCE IN FORCE**

The mission of reconnaissance in force, also called fighting for information, no longer resides with the corps and division reconnaissance organizations. The mission was transitioned to the general-purpose brigade combat teams simultaneously with the organizational changes. *Battlefield Surveillance Brigade* explicitly states “the BfSB is not designed to conduct reconnaissance in force.”<sup>65</sup> *Brigade Combat Team* indicates that the BCT is required to conduct all forms of reconnaissance: route, zone, area, and reconnaissance in force, if required by a higher echelon commander.<sup>66</sup>

**Historical Precedence for Reconnaissance in Force.** During World War II, most corps had attached cavalry groups, while divisions had either squadrons or troops based on the individual division’s composition.<sup>67</sup> Despite their size, they did not have the organic equipment and personnel to enable successful execution of security operations or reconnaissance in force.<sup>68</sup> Despite their manning and equipment shortfalls, War Department Observer Reports noted that mechanized cavalry units were consistently given these missions and expected to excel.<sup>69</sup> As a result, the Army Ground Forces Staff Study following the war concluded that the cavalry required both increased dismounted capability and firepower.<sup>70</sup>

The lessons learned during World War II carried over into the assumptions utilized during the allocation of forces and doctrinal updates for the Army of Excellence. The Army assumed that commanders at all levels must have the flexibility to conduct active and passive



reconnaissance.<sup>71</sup> The determination was that at the division and corps levels these units must have robust organic air and ground capabilities. Generally, multifaceted units were believed incapable of adequate training and implementation of reconnaissance and security operations.<sup>72</sup>

**Foundational Theorist on Reconnaissance in Force.** Both Sun Tzu, in *The Art of War*, and Colonel Arthur L. Wagner, in *Service of Security and Information*, made clear the necessity of reconnaissance in force. Even though he wrote in the period between 546 B.C. and 496 B.C., Sun Tzu's book was clearly influential in the development of the United States Army's doctrine. He stated that the commander must "stimulate [the enemy] to know the patterns of their movement and stopping."<sup>73</sup> He later alleged that the commander must "probe them to know where they have excess, where an insufficiency."<sup>74</sup> Colonel Wagner further elaborated on the concept.

In the first American book delineating cavalry tactics, Wagner declared that there were three distinct types of reconnaissance: reconnaissance in force, special reconnaissance, and patrolling.<sup>75</sup> Later, he explains that a combined arms team of cavalry and artillery are superior for reconnaissance because they do not have the propensity to become decisively engaged with the enemy.<sup>76</sup> The Army of Excellence model was clearly built with this in mind, while the Objective force reconnaissance formations do not have organic artillery.

**Contemporary Military Experience.** Two recent exercises focused on the capabilities of the reconnaissance squadrons in the brigade combat teams (BCTs). Joint Readiness Training Center Rotation 11-01 and the 2005 Cavalry Leader's Course exercise both shed light on the necessity of survivability and the ability to fighting for information.

In 2005, the United States Armor School conducted twelve exercises over the span of four months to determine the survivability of the armor brigade combat team (ABCT) reconnaissance

squadron utilizing the Cavalry Leader's Course (CLC) and the Close Combat Tactical Trainer (CCTT).<sup>77</sup> The students and instructors conducting the exercises executed the breadth of reconnaissance and security tasks finding that, even with Bradley Fighting Vehicles, the squadrons consistently became decisively engaged and found it hard to break contact.<sup>78</sup> During most of the exercises, twenty-five to forty percent of the forces became casualties throughout the operation.<sup>79</sup> The conclusion of the exercises was that without additional equipment, including the tanks and organic aviation found in the armored cavalry regiment (ACR) and division cavalry squadron, "reconnaissance units will not last long on the battlefield of the future."<sup>80</sup>

While no battlefield surveillance brigade was utilized during Joint Readiness Training Center (JRTC) Rotation 11-01, the lessons learned by the BCT's reconnaissance squadron are directly applicable due to the similarities between the two cavalry organizations in equipment, manning, and capabilities. The rotation pitted the fully transformed 3<sup>rd</sup> Brigade Combat Team of the 82<sup>nd</sup> Airborne Division against the full complement of the hybrid threat, as simulated by the 1-509 Infantry Battalion and a thousand trained role players.<sup>81</sup> The brigade and its organic reconnaissance squadron, 5-73 Cavalry, initiated the rotation with the an airborne insertion, followed by five days in the defense and four days in the offense.<sup>82</sup> Prior to the brigade's transition to the offense, in accordance with the updated doctrine, the squadron conducted zone and area reconnaissance to identify the threat composition and disposition while confirming the intended maneuver corridors for the impending attack.<sup>83</sup> In the first twelve hours of reconnaissance, the two mounted troops were reduced to twenty-five percent of their original strength.<sup>84</sup> Because of the situation, Colonel Mark R. Stammer, the Commander of Operations Group (COG), gave the order to reconstitute the entire reconnaissance prior to continuing operations.<sup>85</sup> While on the surface, the order may seem insignificant, Operations Group, for the

first time in almost a decade, had retracted the ability to reconstitute personnel at the company or troop level and held the authority at the COG level for the express purpose of enforcing realism.<sup>86</sup> The decimation of 5-73 Cavalry casts doubt on the survivability of both the infantry brigade combat team (IBCT) reconnaissance squadron and the battlefield surveillance brigade's as well.

## **CONCLUSION AND RECOMMENDATIONS**

The United States Army is currently in a state of flux in terms of its organizational structure, doctrine, and vision for the future. As the Army transitioned to the modular Objective Force model with a renewed focus on being expeditionary, major paradigm shifts in corps and division reconnaissance and surveillance have occurred from manned to unmanned and specialized to general. The organic combined arms teams found in the armored cavalry regiment (ACR) and division cavalry squadron were replaced by the light surveillance focused organization of the battlefield surveillance brigade. The shifts are based on the assumptions that unmanned systems can replace ground troops, general-purpose forces can adequately perform security operations, and that reconnaissance formations do not need to fight for intelligence.

In the past, the Army has not anticipated future conflict well. Despite the desires of the nation, the likelihood that the next ten years will only consist of small-scale stability and support operations is unlikely. For this reason, the Army has shifted its enemy focus to the hybrid threat, which consists of regular, irregular, terrorist, and criminal forces. There are multiple countries including Iran, Russia, North Korea, and China, which could threaten our nation with one or all of these components. Wide area security and decisive action demand changes to the force structure and doctrine to meet the potential threat on the battlefield.

**Conclusion.** Major General H.R. McMaster postulated that the “primary difficulty with the Army’s SBCT and Objective Force initiatives is that that they are both advancing based on wishful thinking rather than on analysis.”<sup>87</sup> The evidence suggests that too much weight has been placed on current experiences in Operation IRAQI FREEDOM and Operation ENDURING FREEDOM. While the transformed Army was tested in combat, only three of the four components of the hybrid threat were present in Iraq and Afghanistan post transformation. The basic assumptions for the division and corps level reconnaissance organization and the transition to general-purpose forces for security operations are flawed. While the general-purpose brigade structure has improved, its improvement has come at the expense of corps and division reconnaissance and security.

With the vulnerabilities and capability gaps, the assumption that a single platoon of unmanned aerial systems provides the same capabilities as two squadrons of ground cavalry and a squadron of air cavalry is unfounded, misguided, and untested. The reduction of “fog” and neutralization of “friction” are the fundamental reasons for reconnaissance and security operations. The plethora of vulnerabilities and limitations alone make unmanned aerial systems unreliable in the reconnaissance role. While they are a good asset to enhance efforts, they can never replace the ground cavalry Soldier.

Additionally, the brigade combat team is incapable of performing the security missions of guard and cover without substantial augmentation and additional training. While the transformed brigade combat teams’ (BCTs) effectiveness on the battlefield is without question, the BCT is not trained or equipped to conduct robust security operations. To over task a unit forces them to either ignore portions of required training or train toward mediocrity. Brigade combat teams already ignore training required in their Army prescribed mission essential task list

(METL) due to training time allotted. Even if all the brigade had unlimited training time, the organic combat power provided to the organization is inadequate for the task.

In 1942, Major General Scott stated, “Reconnaissance capable of only observation is not worth the road space it takes.” As seen through the exercises conducted at the Armor Center and the Joint Readiness Training Center, this observation is still relevant. During World War II, cavalry units were utilized in roles other than reconnaissance ninety-seven percent of the time.<sup>88</sup> This fact was not due to their misuse but due to necessity. The majority of the time the organizations shifted into offensive, defensive, or security roles to enable future operations following the discovery of the enemy during reconnaissance.<sup>89</sup>

The Army has missed the mark on corps and division reconnaissance and surveillance transformation. Unmanned aerial systems are excellent enablers but poor replacements for cavalymen. While an excellent organization, the brigade combat team is incapable of performing robust security operations. Finally, limiting the remaining corps and division reconnaissance assets to passive reconnaissance severely restricts their capabilities against a future hybrid threat. Ultimately, the Army must take a hard look at its current organizational structure and make some small but crucial changes.

**Recommendations.** The United States Army must ensure that organizational knowledge is not lost following the transition of the final armored cavalry regiment (ACR) in 2012 to a Stryker brigade combat team (SBCT). The capabilities inherent in the ACR must be accounted for in a specific unit to adequately face the true hybrid threat. There are three different options that would enable the Army to regain the lost capabilities.

The first option, probably the least palatable to Army senior leadership, would be the reactivation of an armored cavalry regiment and three division cavalry squadrons. While this

option would not automatically create similar elements at division or corps, the organizations could be applied where necessary in a future theater of war. This is the only option that has already been thoroughly tested. Both the armored cavalry regiment and the division cavalry squadron constructs have conducted combat operations against all components of the hybrid threat, regular, irregular, terrorist, and criminal forces, in Vietnam and Iraq.

The second option would require a revamp of the current battlefield surveillance brigade (BfSB) structure to improve combat power and survivability. To enable survivability, the vehicles should be transitioned from motorized to mechanized vehicles. The ground combat power present in the BfSB should, at a minimum, be doubled and an aviation detachment should be included to enable organic air-ground integration. This option would enable increased military intelligence capabilities present in the BfSB while increasing survivability and the ability to conduct security operations.

The third and final option would focus on re-tasking general purpose brigades either temporarily or permanently. The temporary solution could identify specific brigade combat teams as they proceed through their force generation cycle to focus on division and corps level reconnaissance and security tasks. The tasking would resemble the re-tasking of brigades as “Assist and Advise Brigades” (AABs) in Iraq and Afghanistan. The more permanent solution would identify one brigade per corps and division to act as the primary reconnaissance and security force. The downside to these is the lack of organic aviation and military occupational specialties present in a cavalry organization.

During the inaugural Fort Benning Army Reconnaissance Summit, a retired Lieutenant General asked, why are we creating a unit incapable of conducting tasks without augmentation and eliminating an organization, the armored cavalry regiment, which can conduct the tasks?<sup>90</sup> It

is imperative that the United States Army account for the loss of reconnaissance and security capabilities at the corps and division levels. While the near term implications will not be readily apparent, issues in the long term will plague the Army and cost lives. The Army must wake up and make the hard decisions before the knowledge and experience are lost.

## **APPENDIX A**

### **Perceived Future Threats**

Over the past ten years, the transformed Army has demonstrated its effectiveness in both Operation IRAQI FREEDOM and Operations ENDURING FREEDOM. While Americans would like to believe that small-scale stability operations will be the only operations conducted in the near future, history has shown the difficulty in predicting future conflict. The Army of Excellence construct was created in response to the threat of Russia during the Cold War and was utilized in conflicts in Grenada, Panama, Vietnam, and Iraq with success. Many of the current threat countries have militaries that resemble the threat that the construct was built to withstand in both doctrine and formations. North Korea, China, Iran, and even Russia are possible threats in the future.

The Democratic People's Republic of Korea (North Korea) remains a viable threat to both the United States and its ally, the Republic of Korea (South Korea). The Korean War, which began on June 25, 1950 never officially ended. An armistice was concluded on July 27, 1953.<sup>91</sup> Currently a cease-fire agreement is signed monthly among the three parties and relations vary year to year. The North Korean military continues to develop its conventional arsenal of weaponry to augment its military which is currently at 1,106,000 personnel, 22 percent of the population.<sup>92</sup> Their army currently has over 5,100 artillery systems trained on population centers and military concentration in South Korea, considerably more than the United States has in its arsenal.<sup>93</sup> Weekly there are small scale conflicts along the demilitarized zone and North Korea continues to test long range ballistic missiles.

China's military is currently on the rise and continuing to gain power both militarily and economically. Although relations are not currently strained politically, due to ideological



differences between the Communist versus Democratic ideals the relations are often less than optimal. Throughout history, the Chinese have supported the United States' adversaries in a broad array of ways to include funding, equipping, and manning. During the Korean Conflict, the Chinese aided the North Koreans in pushing the allies back to the demilitarized zone (DMZ). The Chinese provided the North Vietnamese with arms, training, and mentorship during the Vietnam War. Currently the Chinese military ranks third in the world.<sup>94</sup> While the United States maintains dominance in equipment numbers and superiority, the Chinese military touts 2,285,000 personnel in comparison to the United States with 1,477,896.<sup>95</sup> The newest contribution to the Chinese military was an aircraft carrier, which was recently commissioned.

Ever since the Iran hostage situation in 1979, Iran and the United States have been in some form of conflict.<sup>96</sup> Although normally disguised, throughout both Operation IRAQI FREEDOM and Operations ENDURING FREEDOM, Iran has supported the insurgents and terrorists both passively and actively through training, monetary support, and weapons. The Iranian government has not disguised its hatred for the United States and the West. Geographically, Iran shares a border with Afghanistan and influences other countries and groups important to the United States. The Iranian military currently ranks sixteenth in the world and is believed to have nuclear ambitions.<sup>97</sup>

The American interest in Russia dwindled following the fall of the Soviet Union and the end of the Cold War in 1991 but it is still a potential adversary.<sup>98</sup> While the United States has never engaged in conventional battle with the nation, as the other superpower during the Cold War, Russia aided multiple countries and groups in their fight against democracy and the United States through funding, ideological backing, and military arms. Following the end of the Cold War and continued instability within the country, relations with the United States have been civil

but distrust continued to loom. In 2008, Russia invaded portions of a neighboring country, Georgia, despite diplomatic efforts by the United States.<sup>99</sup> Regardless of our close ties with Georgia due to their military support in both Iraq and Afghanistan, military support was not given but aid was provided following conflict resolution. Though the Russian military took a steep decline in numbers and quality, they still rank second in the world for military strength. The greatest issue remains their nuclear capability especially as internal instability is still present in the country.

## GLOSSARY

*Operational Terms and Symbols* (ADRP 1-02) consolidated the doctrinal terms and their corresponding definitions for the current Army doctrine.<sup>100</sup> The following terms aid the understanding of the terminology utilized in the article.

**Cover** - A security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. (FM 3-90)

**Guard** - A security task to protect the main force by fighting to gain time while also observing and reporting information and to prevent enemy ground observation of and direct fire against the main body. Units conducting a guard mission cannot operate independently because they rely upon fires and functional and multifunctional support assets of the main body. (FM 3-90)

**Hybrid Threat** - The diverse and dynamic combination of regular forces, irregular forces, terrorist forces, and/or criminal elements unified to achieve mutually benefitting effects. (ADRP 3-0)

**Mission-Essential Task List** – A compilation of collective mission-essential tasks. Also Called METL. (ADRP 6-0)

**Reconnaissance in Force** - A deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reactions or to obtain other information. (FM 3-90)

**Screen** - A security task that primarily provides early warning to the protected force. (FM 3-90) See also concealment; flank guard; guard; security operations; sensor; surveillance.

**Security Operations** - Security operations are those operations undertaken by a commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow the commander to effectively use the protected force. (FM 3-90) See also cover; guard; screen.

**Surveillance** - The systematic observation of aerospace, surface or subsurface areas, places, persons, or things by visual, aural, electronic, photographic, or other means. See FM 3-55.

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