



# Air Land Sea Application Center

Joint Base Langley-Eustis, Virginia

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## NO MAN'S LAND, PEANUT BUTTER, AND ARMY AVIATION:

### THE CASE FOR A FOURTH BCT TYPE AND REORGANIZING

#### THE US ARMY FOR A 200 MPH BATTLEFIELD

By LTC Beau G. Rollie

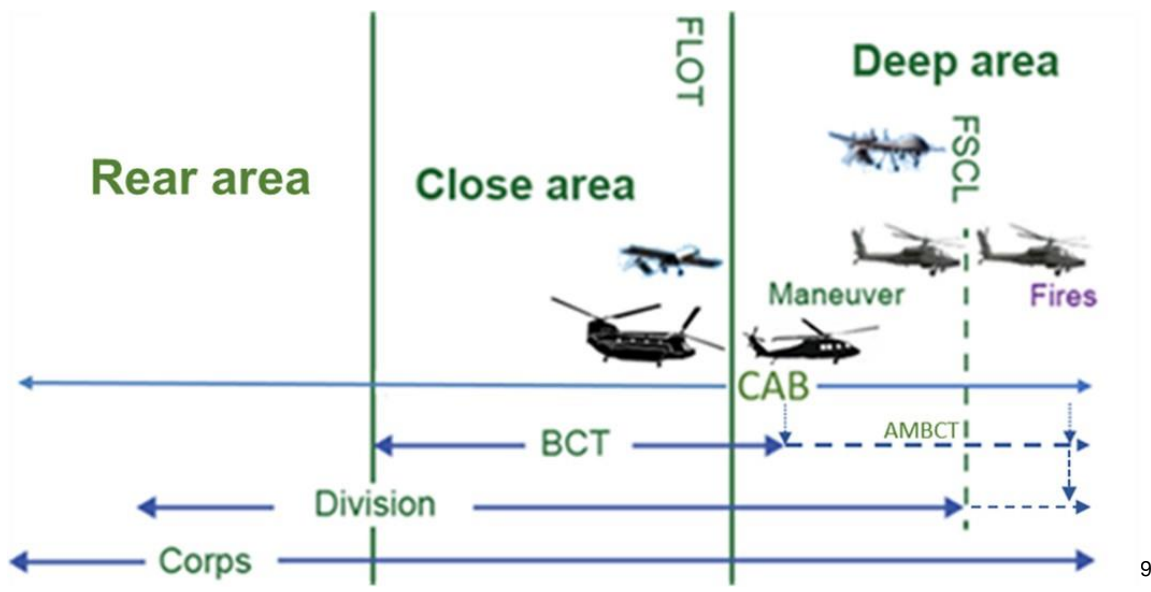
*"Klotzen Nicht Kleckern (Translated: Hit With the Fist, Don't Feel with the Fingers.)"—  
General Heinz Guderian*

The U.S. Army currently has 12 active Combat Aviation Brigades (CABs), and like peanut butter on a sandwich, each of the Army's ten active-duty divisions enjoys its own evenly spread CAB. The cost of equality in aviation support across the Army is paid by sacrificing our ability to conduct independent operational maneuver at air-mobile speeds.<sup>1</sup> Current American operational formations cannot assure U.S. land force domain overmatch against peer competitors. To maintain land dominance the U.S. Army must create a fourth Brigade Combat Team (BCT) type, the Air-Mobile Brigade Combat Team (AMBCT), and further we must arrange AMBCTs into air-mobile divisions aligned under an air-mobile corps. Our minimum benchmark for operational maneuver must include at least two divisions, able to lift by air, with all assets moving at air-mobile speeds up to 200 mph.<sup>2</sup> To state the problem simply, we have Armor divisions with enough armor, why don't we have Air-Mobile divisions with enough helicopters?

This article will convince/remind the reader that: 1) Army aviation with organic infantry is capable of autonomous maneuver 2) operational maneuver at air-mobile speeds is game-changing 3) air mobility is about penetration through the third dimension, seizure of positions of relative advantage, and successive maneuver to new advantageous positions to force the enemy to dislocate and eventually capitulate.<sup>3</sup> U.S. Army aviation helicopters with organic air-mobile infantry massed into brigades and divisions would maintain U.S. force dominance through maneuver overmatch. Additionally, organizing U.S. land forces for operational maneuver at air-mobile speeds and distances will enable us to outpace peer threats while better challenging enemy anti-access/area denial (A2AD) efforts.

Outpacing peer threat maneuver and firepower is a major concern on today's "multi-domain" battlefields. Throughout the history of warfare, the balance between maneuver and firepower remained in constant flux. Notably, the World War I western front stands as a strong example of a time when firepower took primacy over maneuver,

resulting in a four-year stalemate where both sides struggled to gain or maintain initiative. Maneuver did not re-take primacy over firepower until the adoption of massed mechanized warfare in the 1940s. Looking forward to current times, the balance between maneuver and firepower is at another nexus point where “multi-domain” and “A2AD” effects are poised to shift combatant’s focus from maneuver/offense back to firepower/defense. Potential peer competitors currently wield fires and multi-domain effects, including cyber and Electronic Warfare (EW), that strike with great accuracy and can affect vast stand-off distances, thereby creating a modern equivalent of the WW1 “no-man’s land” spanning vast distances.<sup>4</sup> Considering the A2AD capabilities our competitors will employ to create this “no-man’s land”, our Army must apply the tried and true principles of combined arms maneuver to mass effects at decisive spaces of our choosing to gain and maintain initiative.<sup>5</sup> The best way to ensure our ability to maneuver decisively against enemy multi-domain effects is to mass superior maneuver capabilities.<sup>6</sup> Massed air-mobile forces are America’s best option to achieve superior land domain maneuver, and if used operationally, rotary-wing aircraft would ensure effective convergence of effects, especially in deep areas.<sup>7</sup> Air-mobile forces applied en- masse are uniquely suited for modern operational maneuver, possessing the necessary capabilities to overcome limiting terrain and prosecute enemies in deep areas.<sup>8</sup>



In the defense, air-mobile tactics can help commanders limit tactical risk by enabling friendly force dispersion until offensive capability is required. When offensive capability is needed, air-mobile forces can mass rapidly and cross the modern no-man’s land to penetrate enemy lines in the third dimension with fewer limitations than light or mechanized counterparts.<sup>10</sup> Dispersion, quick concentration, and rapid power projection across vast distances are the advantages that define air mobility. Air-mobile forces can maneuver at speeds of 150-200 MPH out to operational distances (200-500 kilometers), which enables seizure of key terrain or interdiction of enemy lines of communication. Simply put, massed air-mobile infantry can sustain operations at speeds and distances impossible for light or mechanized infantry, but our current Army force structure does not support operational air-mobile maneuver.

U.S. land forces are not currently organized to outpace peers operationally at air-mobile speeds and distances. Modern mechanized and armor divisions are limited to two-dimensional maneuver and they cannot move fast enough or far enough to overcome current A2AD tactics and systems. Current U.S. Army operational force structures have a 50 MPH maximum speed, defined by the Armored Brigade Combat Team's (ABCT) rate of march.<sup>11</sup> The 50 MPH speed limit has not changed significantly since WWII and is tied to the speed of our primary land combat vehicles (M1, M2/M3, and Strykers). We should strive to increase this speed limit by organizing into brigades and divisions capable of moving at 150-200 MPH. To increase our speed to the higher limits, we should concentrate Army aviation and infantry into AMBCTs and an air-mobile corps. Driven by the superior mobility and accompanying firepower of helicopters and Unmanned Aircraft Systems (UAS) paired with organic infantry, we could optimize our formations for independent operational maneuver at 200 MPH.<sup>12</sup>

Increasing the speed and operating range of Army ground forces is crucial to enabling us to outpace potential competitors. If we can consistently outpace our enemies, our mobility becomes a potent psychological weapon able to terrify, bewilder, and sow confusion in enemy rear areas.<sup>13</sup> If the U.S. Army is able to consistently maneuver air-mobile brigades and divisions in the deep area, our mobility is weaponized. Mobility as a weapon isolates, disrupts, and eventually dislocates enemy frontline troops while defeating enemy sustainment or reserve forces. If done correctly, operational air-mobility presents enemies with multiple significant dilemmas, thereby challenging the enemy's will to resist.<sup>14</sup> Massed rotary wing assets paired with organic air-mobile infantry are the assets best poised to use mobility as a weapon, but to achieve true success, all assets within the BCT to Corps must move at the same speed.

### **Historical Perspectives**

Large formations with assets possessing matched speeds have been hallmarks of successful military force structure for hundreds of years. Civil War Horse cavalry units were completely mounted with every Soldier moving at horse speeds. In the 20th century, Soldiers swapped their horses for armored vehicles, with every Soldier riding a tank or Armored Personnel Carrier into battle. Army helicopters became the next cavalry evolution by trading tanks for helicopters, but air-mobile formations have fallen from favor since the Vietnam war. To understand the obstacles blocking the creation (or re-creation) of operational level air-mobile formations, one must examine the historical struggles which took place prior to the advent of both mechanized and air-mobile warfare.

Regarding the creation of mechanized forces, the British, French, and Germans all dabbled in armored warfare during WWI. WWI combatants used tanks as infantry support weapons to punch through no-man's land to aid light infantry attacks which could not penetrate independently. To overcome the stalemate caused by trenches, machine guns, and artillery, tanks were invented to protect from artillery while rolling over obstacles combinations that were previously insurmountable to regular infantry. The problem with early tanks was durability because the tanks would break-down before moving far enough to achieve operational breakthroughs.

Shifting focus to WWII, the German Army was the first military to prove the efficacy of mechanized mobility at the operational level of war. Specifically, during the Battle of Sedan in 1940, the German army rode their tanks into history by defeating the numerically superior French and British Forces in three weeks. To fully understand the success the Germans won between Sedan and Dunkirk, one must consider interwar years from 1919-1939. Following the lessons learned in WWI, German visionaries including Erich von Manstein and Heinz Guderian conceptualized new formations with massed tanks and motorized infantry to change the pace and tempo of battle. The German Army first employed their new Panzer divisions in Poland in 1939, and while the panzers dominated tactically, mechanized maneuver was not yet operationally decisive.

France and Britain's declaration of war on Germany after the seizure of Poland set the conditions for the miracle at Sedan, because an outnumbered German military had to conjure a maneuver magic trick to win. This magic trick was named operation "Sickle-Cut," a plan created by Manstein to sneak an armored group through the Ardennes, cross the Meuse River at Sedan to penetrate, and conduct a mechanized drive to the English Channel to split British and French forces.<sup>15</sup> Seeing few options that would bring about German victory, the German General Staff adopted the Sickle-Cut plan, which required massed tanks and motorized infantry formations that could maneuver independently at matched speeds much faster than their Allied enemies.<sup>16</sup> The Germans concentrated armor and motorized infantry into Panzer Group Von Kleist, which included about 50% of Germany's total tanks and motorized forces.<sup>17</sup> The 19th Panzer Corps, Led by Heinz Guderian, was to spearhead the attack for Panzer Group Kleist and was the first formation of its type in history, purpose built to allow armor to seek operational success independent from its parent infantry army groups.

As a point of interest, most of the German generalship stood in opposition to the creation of Panzer Group Kleist because each army commander wanted their own panzer division. It was only through the Fuhrer's personal intervention that the revolutionary panzer group was created.<sup>18</sup> On the allied side, the French and British spread their numerically and qualitatively superior tanks across their entire front.<sup>19</sup> When confronted by the massed armor and motorized infantry of Panzer Group Kleist, dispersed Allied tank formations and foot-marching infantry could not keep pace. Allied forces constantly surrendered initiative to the Germans and were always playing catch-up. The Germans had trained and rehearsed armored and motorized maneuver at the operational level (division/corps/group) while the Allies maneuvered separate tank battalions in support of foot marching infantry divisions (similar to how U.S. helicopters are applied today). Massed German tanks and motorized infantry won the day using mobility as a psychological weapon to defeat allied forces by continually seizing positions of advantage first. Following the German victory, allied forces mimicked German force structure and massed their tanks and motorized forces throughout the rest of WWII. The legacy of the German success in 1940 continues today, proven by the continued existence of U.S. Army armored divisions. As one might guess, the evolution of maneuver warfare did not stop with mechanized forces. Mass-production of helicopters after 1950 enabled another increase in the pace and tempo of maneuver warfare through air mobility.

The inspiration for large-scale American air-mobile units was born out of WWII airborne experiences, applied through the lens of potential nuclear battlefields, and realized through the Pentomic Division concept. Major General (MG) James M. Gavin, an airborne pioneer, perceived the need for ground force dispersion to counter nuclear attacks with an additional requirement to concentrate quickly for counter-attacks.<sup>20</sup> MG Gavin's helicopter-borne "sky-cavalry" became a potential solution for the vulnerabilities and obstacles presented by nuclear warfare. To investigate the viability of air mobility, Department of Defense conducted successive studies including the Rogers Board and the Howze Board in 1960 and 1962 respectively.<sup>21</sup> The recommendations and exercises resulting from these studies were integral to creating air-mobile force structure, eventually spawning the 1st Air Cavalry Division in 1965.<sup>22</sup>

The 1st Air Cavalry Division was a revolutionary unit which included a unique mix of infantry, artillery, and helicopters in a formation fielding 434 aircraft, where the entire division moved at matched air-mobile speeds.<sup>23</sup> In 1968 the U.S. Army added a second air-mobile division, the 101st Cavalry Division (air-mobile).<sup>24</sup> The simultaneous existence of two air-mobile divisions during Vietnam represented the apex of air mobility in U.S. Army history and enabled tactical dominance in Vietnam through maneuver superiority. The tactical dominance of air-mobile units in Vietnam was demonstrated by a 313-day study conducted by the 9th Infantry Division (ID) in 1968. The study found brigade echelons without helicopter support averaged one significant enemy contact every five days resulting in 1.6 enemy kills, but when the same brigade possessed an air cavalry troop and an assault helicopter company, the number of significant enemy contacts increased to every other day and resulted in 13.6 enemy kills per day.<sup>25</sup> The success afforded to discrete brigades in Vietnam is easily scalable to operational levels. In Vietnam, political constraints and poor strategy limited the operational and strategic employment of air-mobile formations and helicopters were not afforded the opportunity to truly prove themselves. Faced with resource challenges and changing threats after Vietnam, air mobility fell from favor in the U.S. Army, marked by the transition of 1st Air Cavalry Division to an armored formation in 1975.

Fast forward to 1991, and one witnesses a defining moment for operational air mobility. During Operation Desert Storm, the 101st Airborne Division conducted a series of successive brigade level air assaults from 24 February to 27 February 1991 to cut off the Iraqi Army's retreat from Kuwait.<sup>26</sup> These large-scale air assault operations proved air-mobile forces could achieve operational effects by enabling the dislocation and defeat of the Iraqi Army in less than 4 days. The U.S. Army maintained the 101st Airborne Division's air-mobile force structure until 2014, after which, the 101st Airborne Division (air-mobile) became a shadow of its former self. Of the originally assigned 400+ helicopters, the division shrank to 113 rotary wing aircraft, with the difference dispersed to the Army's 12 other evenly distributed CABs. Just like spreading peanut butter, every division got an equal taste of helicopters. By eliminating air-mobile divisions, the U.S. Army gave up its ability to conduct operational maneuver at air-mobile speeds. To understand why the U.S. Army dispersed its helicopters, one must examine America's recent wars in Afghanistan and Iraq.

## **Air Mobility Limits: Is aviation organized to feel with fingers?**

The current U.S. Army aviation force structure and distribution was born during America's recent 20 years of stability and counter-insurgency experience. The even spread of 12 modular CABs was needed for continuous stability operations, enabling tactical superiority over insurgent enemies while ensuring aviation forces capable of continuous deployments. Spreading CABs was useful during stability operations, but distributing helicopters evenly hinders effective training for and execution of operationally decisive air-mobile operations. Effective air-mobile maneuver in large-scale combat requires habitual/assigned command and support relationships. To witness what happens when helicopters and ground forces do not operate habitually, one need only visit the U.S. Army's Combat Training Centers (CTCs). Brigade level CTC training rotations usually pair ground brigades with ad-hoc aviation Task Forces (TF) consisting of 15-30 helicopters. The lack of habitual relationships and existing standard operating procedures makes effective integration of aviation forces into ground schemes of maneuver difficult. Symptomatically, Army units rarely conduct air assaults above battalion echelons. The current small-scale application of air mobility cannot realize the full potential of operationally decisive "vertical envelopment". Without brigades and divisions organized for large-scale air assault, our ability to make operationally decisive air-mobile maneuvers on the 200 MPH battlefield is limited.<sup>27</sup>

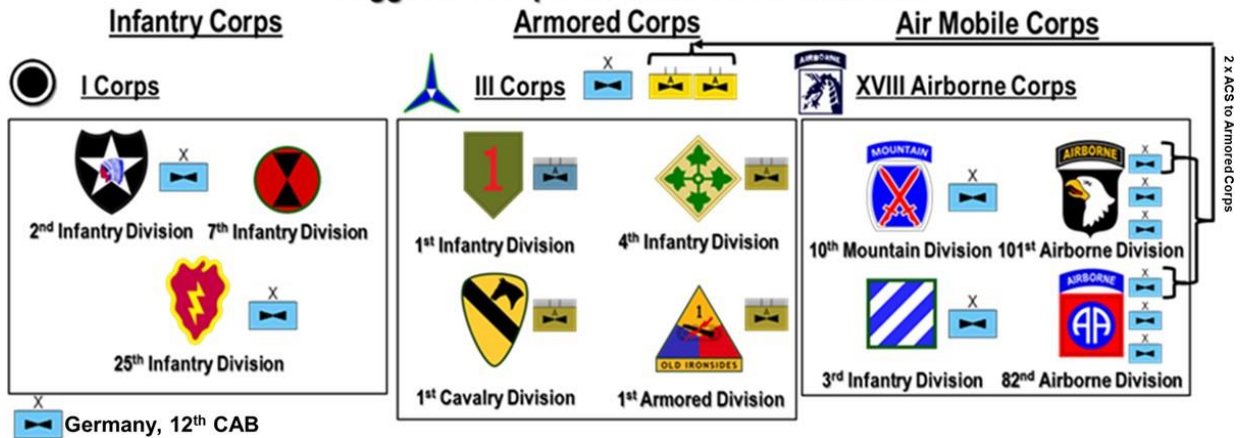
To better overcome modern battlefield challenges, the U.S. Army should take cues from the current organization of armored divisions and arrange our aviation forces in a similar fashion. We must ponder why American forces possess armored brigades, yet we do not have air-mobile brigades? We currently mass armor into ABCTs and heavy divisions (1 AD and 1 CAV) aligned under a single corps (III Corps). If tanks and mechanized forces work best when massed into brigades and divisions, then it follows that helicopters should mass as well.

As demonstrated by the historical cases presented, experience shows clear advantage to armies who mass mechanized and air-mobile forces. Just like tanks, helicopters are significantly more effective when massed and applied in conjunction with organic infantry where everything moves at the same speed. The best remedy to address the U.S. Army's current lack of operationally decisive air-mobile capability would be to create a AMBCTs and associated higher echelon force structures.

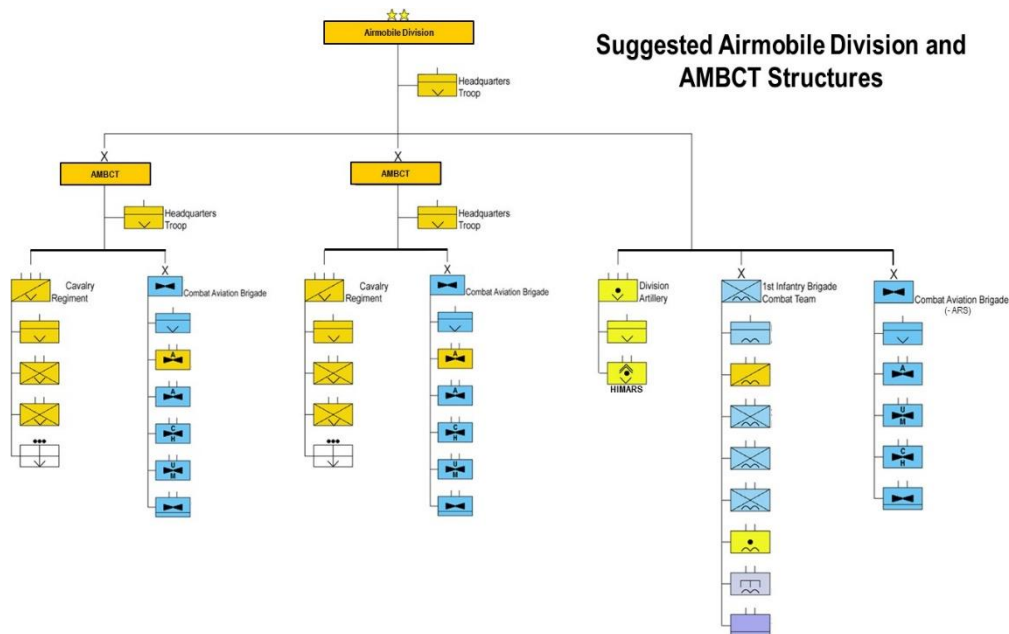
### **Air-mobile Force Structure Suggestions**

What should an AMBCT and its associated division force structure look like? The examples set by the air-mobile divisions of the 1960s and 1990s, where each division had 400+ helicopters and the ability to move entire brigades in a single lift are worth examining.<sup>28</sup> Also, beginning with the assumption that modularity in CABs is valuable, then we should mass half of existing CABs into two air-mobile divisions aligned under a single Corps.

## Suggested Corps Airmobile Force Structure



Regarding specifics, a way for air-mobile division structure would include two AMBCTs and one airborne Infantry Brigade Combat Team (IBCT). Each of the two AMBCTs pairs with an assigned CAB. The remaining CAB would serve as a divisional asset focused on air-mobile sustainment, division command and control transport, or movement of the airborne IBCT. The IBCT should retain airborne qualifications and would focus capability on operational maneuver into the deep area using Air Force aircraft.



AMBCT infantry combat power should be smaller than a regular IBCT with less artillery and engineers, similar to the smaller number of infantry assigned to an ABCT. The AMBCT's lack of artillery would be offset by the increased number of attack helicopters organic to its assigned CAB. Additionally, with 48 attack helicopters and 24 Tactical Unmanned Aircraft Systems (TUAS) per AMBCT, rotary wing firepower would enable independent maneuver by finding and destroying enemies autonomously, providing an integrated direct/indirect fire capability to offset the lack of artillery similar to Aerial Rocket Artillery during Vietnam.<sup>29</sup> The AMBCT engineer component should also

have capabilities similar to the Air Force Red Horse squadrons to build heli-ports. Additionally, in order to maintain the mobility required to effectively cross the modern day “no-man’s land”, CABs must acquire organic specialty capabilities including EW (think EH-60 or EH-64), SEAD (Army HARM/Spike equivalent), and helicopter-borne precision logistics support (CH borne containerized SSA).

### **Changing Speed Limits and Saying No to Peanut Butter**

The U.S. Army of 2021 has enough aircraft, if massed, to outpace any peer-competitor by an order of magnitude. Creation of AMBCTs, with associated organization, equipment, and training would make a capable air-mobile force able to conduct independent maneuver at 200 MPH. Further alignment of AMBCTs into air-mobile divisions and a corps would assure operational air mobility advantages, enabling U.S. land forces to gain physical, temporal, and cognitive advantages by using mobility as a weapon. Spreading aviation thin like peanut butter will not achieve the same decisive effects in large scale combat. Even considering recent efforts to re-equip the 101st airborne division with a heavy lift battalion of CH-47s, the air mobility gains do not accrue to operational level gains. If we continue to apply air mobility at small scale, without habitual command, support, and training relationships, we will ensure our land forces move at the same speed as everyone else. Compared to peer competitors, few have the requisite helicopters or organizational flexibility required for operational air-mobile power projection, and we can and should take advantage of enemy shortfalls. If the U.S. Army creates AMBCTs and rebuilds two or more air-mobile divisions, we would ensure our land domain maneuver superiority for the foreseeable future.

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### **End Notes**

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<sup>1</sup> Indirect quote from BG Roy Flint, head of the USMA History Department, 1981-85, from email correspondence with LTC (R) James Rainey (December, 2017).

<sup>2</sup> Ibid.

<sup>3</sup> Paraphrase from email correspondence with COL Kelsey Smith (December, 2017).

<sup>4</sup> Albert Palazzo, “Multi-Domain Battle: The Echoes of the Past,” The Strategy Bridge.org (October 11, 2017), <https://thestrategybridge.org/the-bridge/2017/10/11/multi-domain-battle-the-echo-of-the-past?rq=multi%20domain> (accessed 11 Dec 2017).

<sup>5</sup> TRADOC Pamphlet 525-3-1, The Army in Multi-Domain Operations 2028 (HQ, U.S. Army Training and Doctrine Command), ix.

<sup>6</sup> Ibid, pg. GL-7, Definition: A position of relative advantage imbues the holder with an advantage over the enemy for a finite amount of time. It is relative because a position of advantage is fleeting.

<sup>7</sup> FM 3-0, Operations (HQ, Department of the Army, 2017), 1-18.

<sup>8</sup> Ibid, 2-16.

<sup>9</sup> Ibid, 1-30.

<sup>10</sup> Walter J. Boyne, How the Helicopter Changed Modern Warfare (New York: Giniger, 2011), 112.

<sup>11</sup> Indirect quote from BG Roy Flint, from email correspondence with LTC (R) James Rainey (December, 2017).

<sup>12</sup> Ibid.



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- <sup>13</sup> Karl-Hienz Frieser with John T. Greenwood, *The Blitzkrieg Legend: The 1940 Campaign in the West* (Annapolis, MD: Naval Institute Press, 2005), 344.
- <sup>14</sup> FM 3-0, Operations, 5-3.
- <sup>15</sup> Frieser, *The Blitzkrieg Legend: The 1940 Campaign in the West*, 65-66.
- <sup>16</sup> *Ibid.*, 37-59.
- <sup>17</sup> *Ibid.*, 102.
- <sup>18</sup> *Ibid.*, 67; 75-76.
- <sup>19</sup> *Ibid.*, 37-59.
- <sup>20</sup> Boyne, *How the Helicopter Changed Modern Warfare*, 112.
- <sup>21</sup> Williams, James W., *A History of Army Aviation* (Lincoln, NE: iUniverse, 2000), 90.
- <sup>22</sup> *Ibid.*, 107.
- <sup>23</sup> Headquarters, Department of the Army, Troop Topics, DA Pam 360-216, the Airmobile Division (Washington, DC: 1965), 1, Paul Kasper Collection, <http://www.virtualarchive.vietnam.ttu.edu> (accessed 24 January 2013).
- <sup>24</sup> Boyne, *How the Helicopter Changed Modern Warfare*, 145.
- <sup>25</sup> John J. Tolson, *Vietnam Studies: Airmobility 1961-1971* (Washington, DC: Department of the Army, 1999), 181.
- <sup>26</sup> AIR ASSAULT IN THE GULF: An interview with MG J. H. Binford Peay, III, Commanding General, 101st Airborne Division (Air Assault) (5 June 1991 at the HQ 101st Airborne Division, Fort Campbell, Kentucky), <https://history.army.mil/documents/SWA/DSIT/Peay.htm> (accessed 13 Dec 2017).
- <sup>27</sup> Indirect quote from BG Roy Flint, from email correspondence with LTC (R) James Rainey (December, 2017).
- <sup>28</sup> Headquarters, Department of the Army, Troop Topics, DA Pam 360-216, the Airmobile Division, 1.
- <sup>29</sup> Paraphrase from email correspondence with COL Kelsey Smith (December, 2017).

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