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**THE CORPS AIR ASSAULT BRIGADE**  
**AN INTEGRATED COMBINED ARMS FORCE TO**  
**CONDUCT THE HEAVY CORPS DEEP, CLOSE,**  
**AND REAR BATTLE IN THREE DIMENSIONS**

A Monograph  
by  
Major Van-George R. Belanger  
Field Artillery



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**School of Advanced Military Studies**  
**United States Army Command and General Staff College**  
**Fort Leavenworth, Kansas**  
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Heavy Corps Deep, Close, and Rear Battle in Three Dimensions.

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<p>This monograph discusses the question, how should light forces be integrated into the heavy corpsto conduct three-dimensional deep, close, and rear battle in accordance with AirLand Battle doctrine?</p> <p>This monograph examines three historical examples identifying the applicability of depth, agility, initiative, and synchronization to heavy/light three-dimensional operations. Emphasis is placed upon air assault operations within a corps area. Current U.S. and Soviet force structures are compared identifying elements of air assault three-dimensional warfare incorporated into each Army. Several missions for air assault forces are examined within the context of the corps close, deep, and rear battle. Based upon these mission requirements, two options for integrating air assault forces into the heavy corps force structure are compared using the AirLand Battle tenets as criteria.</p>			
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ABSTRACT

THE CORPS AIR ASSAULT BRIGADE - AN INTEGRATED COMBINED ARMS FORCE TO CONDUCT THE HEAVY CORPS DEEP, CLOSE, AND REAR BATTLE IN THREE DIMENSIONS by Major Van-George R. Belanger, USA, 39 pages.

This monograph discusses the question, how should light forces be integrated into the heavy corps to conduct three-dimensional deep, close, and rear battle in accordance with AirLand Battle doctrine?

U.S. doctrine is called AirLand Battle because of the inherent three-dimensional nature of war. The corps plans, organizes, and conducts AirLand Battle tactical operations using a mix of heavy and light forces. Light forces are not integrated into the heavy corps or division force structure. The AirLand Battle tenets are used as criteria to determine heavy corps light force requirements.

This monograph examines three historical examples, identifying the applicability of depth, agility, initiative, and synchronization to heavy/light, three-dimensional operations. Emphasis is placed upon air assault operations within a corps area. Current U.S. and Soviet force structures are compared, identifying elements of air assault three-dimensional warfare incorporated into each Army. Several missions for air assault forces are examined within the context of the corps close, deep, and rear battle. Based upon these mission requirements, two options for integrating air assault forces into the heavy corps force structure are compared using the previously established criteria.

The monograph concludes that an air assault brigade integrated into the heavy corps force structure achieves the heavy/light mix required to conduct three-dimensional operations in accordance with AirLand Battle doctrine.

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## I. INTRODUCTION

The U.S. Army's basic fighting doctrine is called AirLand Battle.... It is called AirLand Battle in recognition of the inherently three-dimensional nature of modern warfare.<sup>1</sup>

Tactical operations, now and in the future, will occur in three dimensions throughout the depth of the battlefield. Air operations will affect most, if not all, ground actions.<sup>2</sup> Battlefield air interdiction will disrupt the attack of enemy follow-on forces. Attack helicopters, in combination with ground maneuver and fire support forces, will destroy enemy mechanized formations in the close battle. Friendly combat support and combat service support will defend against enemy air assault, airborne, and other rear area threats. The heavy corps will plan, organize, and conduct the deep, close, and rear battle simultaneously.<sup>3</sup> The corps will fight these high-tempo, fluid, and nonlinear battles in three dimensions using AirLand Battle doctrine. Historical precedents require integration of heavy and light forces in all three dimensions to achieve battlefield success. As General John R. Galvin stated in a 1984 article on heavy/light force operations:

The future tactical battle will present a definite challenge to our leaders. It will be fought by a mix of forces and our leaders will have to be expert at handling all variations of the mix. Since the mixing can occur at any level depending on the factors of METT-T, the leaders from squad and section all the way to the highest tactical echelons will be called on to make decisions that demand a knowledge of both heavy and light forces. This means that there will be a continuing requirement for a full understanding of the doctrine and tactics of both types of forces.<sup>4</sup>

Currently light forces are not integrated into the heavy corps or division force structure. Light infantry divisions must augment the heavy corps to achieve a heavy/light mix when worldwide conflict scenarios are considered. The current heavy/light mix raises a number of questions. Will light infantry forces be immediately available to the heavy corps? If available can they deploy to the theater of war and/or theater of operations quickly enough to be employed at the proper time and place? Will the light forces employment be properly planned and executed considering the lack of integrated training, habitual support, and common understanding usually achieved by forces working together routinely? There are no clear answers to these questions, yet the U.S. Army cannot wait until a conflict occurs to prepare a response. Precluding or at least decreasing the chance of a negative response to these questions must be achieved to prepare for future battle.

The purpose of this paper is to propose a light force structure for integration into the heavy corps. The current corps doctrinal requirements and capabilities will be examined using the tenets of AirLand Battle. Three-dimensional operations throughout the corps area will be emphasized. Key concepts of three-dimensional heavy/light operations will be identified through analysis of historical examples. Current U.S. and Soviet force structure will then be compared to identify elements of three-dimensional warfare incorporated into each army. Several

missions for air assault forces will be examined within the context of the corps close, deep, and rear battle. Finally, a light force structure will be proposed for integration into the heavy corps.

Success on the battlefield will depend on the Army's ability to fight in accordance with four basic tenets: depth, initiative, agility, and synchronization.<sup>5</sup> The corps is the interface between the tactical and operational levels of war where successful tactical operations are used as leverage to achieve operational advantage. What criteria determine the heavy corps current capability to conduct operations in accordance with the AirLand Battle tenets?

First, the heavy corps must conduct simultaneous fire and maneuver operations in three dimensions throughout the depth of the battlefield. The corps must conduct close, deep, and rear battle simultaneously and plan operations at least seventy-two hours into the future.<sup>6</sup> The corps must plan and conduct these operations in three dimensions.

Second, the heavy corps must seize the initiative by massing combat power more quickly than the enemy at the decisive point and time across the corps area of operations.<sup>7</sup> Highly mobile operations are conducted with speed and secrecy so the enemy is forced to conform to our purpose and tempo while maintaining the corps' freedom of action.<sup>8</sup> Surprise of operations is used to unhinge the enemy physically and psychologically to gain and maintain initiative.

Third, the heavy corps must have the agility to act faster than the enemy under all conditions of terrain and weather to concentrate friendly strength against enemy weakness. As Sun Tzu said, "Appear at places to which he must hasten; move swiftly where he does not expect you".<sup>9</sup> The corps must think, act, and react more rapidly than the enemy to changing requirements.<sup>10</sup>

Finally, the heavy corps must contain all combat, combat support, and combat service support resources necessary to conduct synchronized tactical operations for which they are deployed.<sup>11</sup> The corps synchronizes the battle maximizing effective use of all available resources. Forces and fires are concentrated in time, space, and purpose at the decisive point to achieve synchronization by the corps.<sup>12</sup>

The heavy corps meet most criteria established to conduct operations in accordance with AirLand Battle doctrine. The corps' divisions provide mobile, ground gaining forces with significant armor-protected firepower. They can rapidly concentrate combat power using long range direct and indirect fire weapons.<sup>13</sup> The corps and division combat aviation brigades provide aviation forces available to operate in three dimensions. The heavy corps are somewhat limited in exploiting their mobility in restrictive terrain, such as cities, mountains, and heavily forested areas.<sup>14</sup> Also, the corps cannot project ground forces in three dimensions throughout the depth of the battlefield using the combat aviation brigade unless augmented by light infantry units

or by separating infantrymen from their vehicles. These limitations impact upon the corps' capability to synchronize all tactical operations for which it is deployed. What type of light ground force is needed to correct these limitations? An air assault force designed to conduct agile, high-tempo, synchronized tactical operations over extended distances and all types of terrain, capable of rapidly concentrating and dispersing its combat power throughout the depth of the corps area will compliment the corps capabilities and decrease its limitations.<sup>15</sup>

Prior to continuing further it is necessary to understand what the concept of air assault is as well as what it is not.

Air assault operations are those in which assault forces (combat, combat support, and combat service support) using the firepower, mobility, and total integration of helicopter assets, maneuver on the battlefield under the control of the ground or air commander to engage and destroy enemy forces or to seize and hold key terrain. Air assault operations are not merely movements of soldiers, weapons, and materiel by Army aviation units and must not be construed as such. They are deliberate, precisely planned, and vigorously executed combat operations designed to allow friendly forces to strike over extended distances and terrain barriers to attack the enemy when and where he is most vulnerable.<sup>16</sup>

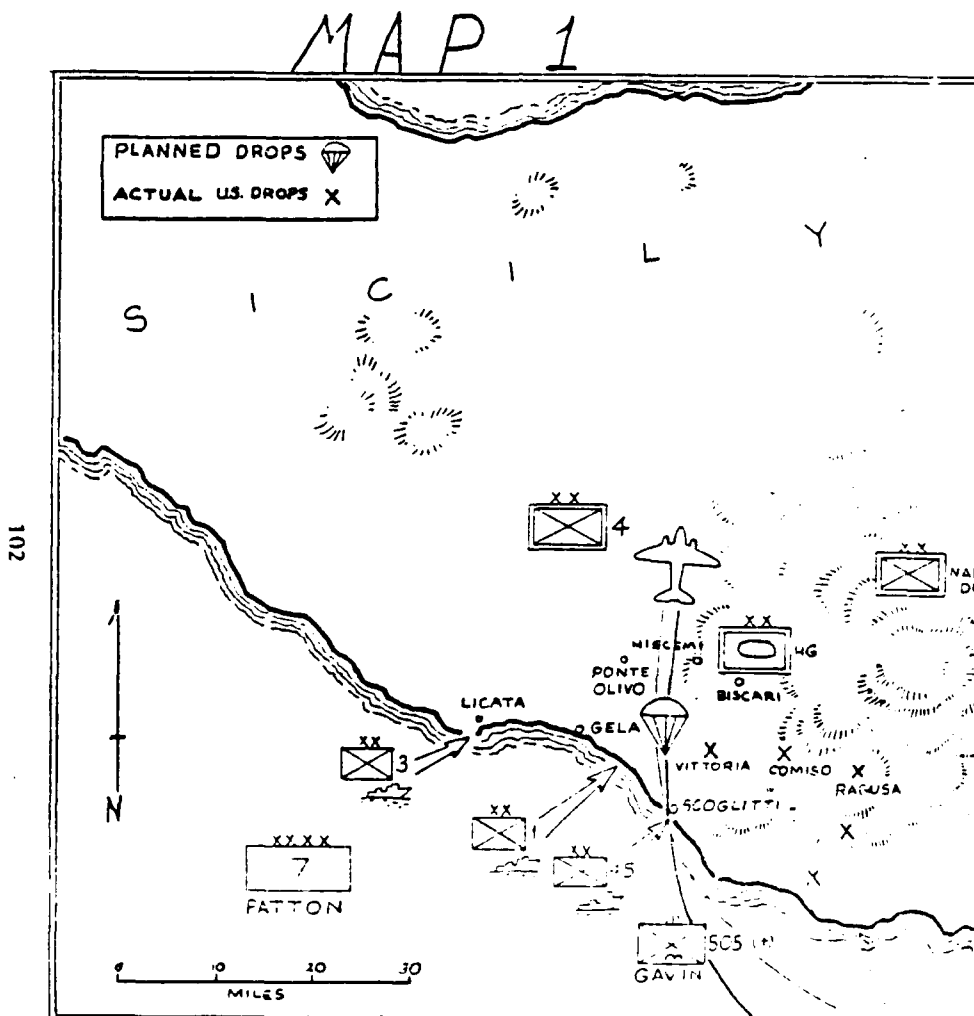
In the historical context the means used to conduct air assault operations was not helicopters but fixed wing aircraft, as still used for most airborne operations. Key air assault concepts will be identified through historical analysis of three air assault operations. They are not to be construed as being the best or all inclusive examples. They are representative of air

assault operations in concept, scope, and type which a heavy corps could be expected to perform. These examples demonstrate how depth, agility, initiative, and synchronization impact upon successful accomplishment of three-dimensional heavy/light operations.

## II. HISTORICAL ANALYSIS - LIGHT/HEAVY AIR ASSAULT OPERATIONS

### SICILY

The United States brigade-size air assault operations during the Allied invasion of Sicily from 9-11 July 1943 will be examined first. This example demonstrates how a lack of integration into the operational plan and synchronization on the battlefield between light and heavy forces can have disastrous results. [Reference Map 1.]



Lieutenant General George S. Patton's Seventh Army conducted an amphibious assault with three divisions in the Gulf of Gela on 10 July 1943, D-Day. The object was to seize the towns of Gela, Licata, and Scoglitti, establish a beachhead, and move inland to secure airfields, key terrain, and destroy enemy forces.<sup>17</sup> The 505th Parachute Infantry Regiment, 82nd Airborne Division conducted a night (9-10 July) airborne assault approximately four miles to the northeast of Gela. The object was to seize high ground, blocking the roads from the north and east, link-up with the 1st Infantry Division after they were ashore and then assist in capturing Ponte Olivo airfield.<sup>18</sup>

The integration of light air assault forces into the plan was faulty from initial planning through execution. A group of ground and air planners from various forces assembled in Cairo and put together a hasty, disorganized plan.<sup>19</sup> The ground forces of the 82nd Airborne Division and the aviators of the 52nd Troop Carrier Wing had trained together only since June. The pilots and navigators had little experience in actual combat operations. They had to contend with bad weather over a complicated flight route as well as heavy dust clouds from preparatory fires. They encountered heavy anti-aircraft fire over the drop zones, most of which were not marked. The result was widely dispersed aircraft scattering jumpers as far as sixty-five miles from the target area instead of the planned mass airborne assault into Gela and Ponte Olivo.<sup>20</sup>

Once on the ground the 505th Regiment lacked coordination and communication with the divisions of the Seventh Army. On D-Day, the 1st Infantry Division could not establish contact with the widely scattered elements of the 505th Regiment. General Matthew Ridgway, commanding general of the 82nd Airborne Division, landed with a group from General Patton's command post on D-Day. He searched the hills of the assigned objective areas only to find a few small groups of paratroopers. There was no contact with the 505th Regiment's headquarters, and assigned objectives were not taken.<sup>21</sup>

This lack of concentration, communication, and coordination between forces almost had disastrous results when two columns of enemy tanks and infantry counterattacked; one against the 1st Division and one against the 45th Division. The attack in the 1st Division sector could not be stopped by the few paratroopers scattered in the hills northeast of Gela. The 1st Division became involved in a fierce battle as the panzer column overran forward positions while the division was still trying to get its armor ashore.<sup>22</sup> In front of the 45th Division Colonel James Gavin, the 505th commander, led a larger, organized element of the regiment. The paratroopers destroyed several tanks, stopped the enemy column, and counterattacked, overrunning a German infantry battalion.<sup>23</sup> The paratroopers demonstrated initiative by accomplishing the assigned missions to their best ability in spite of numerous problems.

On 11 July General Patton committed the 504th Parachute Infantry Regiment to reinforce the beachhead. This operation demonstrated inadequate command, control, and communication among the air, ground, and naval units. The 504th jumped inside friendly lines three miles east of Gela. As the transport planes approached the drop zone at Farello, 7th Army units as well as naval forces offshore engaged the paratroopers with anti-aircraft fire. Twenty-three of the one hundred forty-four aircraft were shot down causing nearly five hundred casualties.<sup>24</sup>

Light airborne forces attacked the enemy in depth. They achieved limited success as they attempted to seize the initiative from the enemy until heavier forces could get ashore. The commitment of 82nd Airborne Division regiments proved unsuccessful because of inadequate synchronization in planning and execution at the Army level. "The unsatisfactory performance of the ad hoc planning group at Cairo showed the need for a headquarters and staff capable of coordinating the operations of a large airborne force..."<sup>25</sup> Three dimensional warfare had to be more carefully integrated into overall planning and execution, especially the areas of command, control, and communications. An effort to put first-rate pilots and navigators flying paratroop transports, better ways to mark drop zones, improved radios and paratrooper assembly techniques were initiated by the Army.<sup>26</sup> Some of these same lessons would be relearned in subsequent operations during World War II because there were not habitual relationships among the light, heavy, and aviation forces.



The 187th commander, Colonel Frank S. Bowen, Jr., and his staff worked with the Far East Air Force staff and I Corps to ensure total integration of all forces. Fortunately the 314th Troop Carrier Group, which would fly the paratroopers into combat, was the same unit the 187th had trained with in the United States.<sup>27</sup> The 187th parachuted north of the capital of Pyongyang, approximately thirty miles behind enemy lines. The 187th blocked the two main roads leading out of Pyongyang at Sukchon and Sunchon and cut off the enemy units trying to retreat north from the attacking I Corps forces.<sup>28</sup>

The airborne assault was well executed and by the end of D-Day the 187th had secured its objectives and trapped the North Korean 239th regiment between itself and the I Corps forces at Pyongyang. The North Koreans unsuccessfully attempted a breakout to the North the night of 20-21 October. The following day an Australian battalion, supported by American tanks, attacked from the South and linked up with the 187th Regiment. This completed the destruction of the North Korean regiment with losses of 1,075 killed and 881 captured. The 187th had a total of 111 casualties.<sup>29</sup>

I Corps attacked the enemy in depth through maneuver in three dimensions. The 187th displayed physical and mental agility, seizing the initiative and rapidly concentrating friendly strength against enemy weakness. The air and ground elements synchronized the operation through close coordination

assisted by habitual relationships. The speed and surprise of the light (airborne) forces in combination with mass, mobility and firepower of the conventional (ground mobile) forces was also well synchronized. The mix of forces attacked in depth, seized the initiative, demonstrated agility and synchronization to achieve tactical success.

The operations in Korea also saw the birth of helicopter tactics. The Marine Corps, not the Army, was the driving force behind helicopter employment during the war. As General Ridgway said, "We must wage a war of maneuver--slashing at the enemy when he withdraws and fighting delaying action when he attacks."<sup>30</sup> This caused General Galvin to comment, "This would have been the heyday of the helicopter, if only enough were available."<sup>31</sup> The U.S. Army would soon get a chance to develop its air assault tactics using the helicopter during the Vietnam War.

#### VIETNAM

The Vietnam War may not be representative of the mid to high intensity operations normally depicted in a future conventional European or Asian war. Yet it does contain certain operations which employed heavy/light forces in three dimensions against a sophisticated enemy. The 1st Cavalry Division's Cambodian operation during May and June 1970 demonstrates the air assault concept in a joint and combined environment.<sup>32</sup>

A Task Force consisting of the 3rd Brigade, 1st Cavalry Division with one mechanized infantry battalion and one tank battalion under operational command, the 11th Armored Cavalry Regiment and the 3d Army of the Republic of Vietnam Airborne Brigade conducted the operation. The task force commander was Brigadier General Robert M. Shoemaker, the 1st Cavalry Division's Assistant Division Commander for maneuver.<sup>33</sup> The airborne brigade air assaulted approximately thirty kilometers inside Cambodia. The brigade moved south while the remainder of the task force attacked by ground and air assault across the Cambodian border moving north. Tactical air attacks, artillery preparations, and attack helicopter strikes were integrated into the air-ground maneuver plan.<sup>34</sup> The attack achieved tactical surprise, disrupted the enemy's command and control apparatus, and captured or destroyed the logistics support for the 7th North Vietnamese Army Division and other units operating in the area.<sup>35</sup>

The operation attacked into the depth of the North Vietnamese Army's support base. The air assault operations seized the initiative from the enemy. The enemy reaction was confused, slow, and disorganized. The task force demonstrated agility and synchronization during the planning and execution of the operation. All aspects of ground and air combat were utilized - air cavalry, armor, infantry, and mechanized infantry as well as U.S. Air Force reconnaissance and tactical air support.<sup>36</sup> This example demonstrates how the proper integration of heavy/light forces can achieve tactical success.

## SUMMARY

There are many more examples of air assault operations which could be analyzed; some larger, some smaller, and some more successful than others. The key concepts of depth, agility, initiative, and synchronization are evident even in this limited historical analysis. Air assault operations can attack the enemy in depth. This can unhinge him physically, by attacking him along the line of least resistance when and where he is not prepared, and psychologically by attacking him along the line of least expectation.<sup>37</sup> Air assault operations can seize the initiative from the enemy through speed, flexibility, and concentration of forces. Agility is achieved over the enemy forces in the conduct of operations. Finally, air assault operations can be planned, organized, and executed as an integral part of other ground force operations.

"Even the simplest air mobile [assault] operations require very careful coordination between pilots, ground troop leaders, and supporting elements. The operations are so fast moving that with the present level of technology it is difficult to achieve this level of teamwork unless all the members belong to the same unit, subject to the orders of a single commander."<sup>38</sup>

The Army level operations in Sicily had no organization to conduct the proper planning for the operation. The corps would provide the planning staff necessary to avoid this situation and ensure synchronized operations. The 187th in Korea synchronized their operations at Corps level to successfully complete the

link-up with the conventional ground forces. They also benefitted from habitual association and training with the air force units. The 1st Cavalry divisions operations in Vietnam demonstrate how synchronized air-ground assault operations by a Task Force composed of highly trained, closely coordinated units under a single commander can exploit the vertical dimension of warfare and achieve great success. Currently, the corps is the tactical headquarters which best achieves the level of command and control necessary to avoid the unsynchronized disaster of Sicily and achieve the tactical success of Korea and Vietnam.

### III. SOVIET DESANT vs. UNITED STATES AIR ASSAULT TACTICAL DOCTRINE AND FORCE STRUCTURE

The Soviet concept of desant is defined in the Soviet Military Encyclopedia Dictionary as

forces, specially prepared and landed or designated for landing on the enemy's territory for the purpose of conducting combat actions."<sup>39</sup>

It includes all types of airborne, air assault, and special operations forces to attack throughout the depth of the battlefield. As recently as the early 1980's these forces were primarily composed of the airborne and naval infantry forces under control of the Supreme Soviet or Theater of Strategic Military Action at the strategic and operational levels, or specially designated mechanized infantry units who received limited training in helicopter operations at the tactical level.<sup>40</sup> Significant changes in Soviet doctrine and force structure have occurred recently as the Soviets attempt to exploit the vertical dimension of tactical desant. This is in keeping with the Soviet desire to conduct massed, high tempo, combined arms operations.

Soviet doctrine and force structure integrates air and ground assault combined arms operations. The Soviets have introduced air assault brigades at the Front level and air assault battalions at the Army level into its force structure. This gives the Front and Army commanders the ability to use organic ground and air forces for "desanto-shturmovaia deistiviiia" (landing-assault actions)

or what we term air assault operations.<sup>41</sup> The 1984 edition of the Soviet manual Taktika [Tactics] by Lieutenant General V. G. Reznichenko describes the tactical desant as an integral part of Soviet operations conducted by specially trained forces.<sup>42</sup>

The tactical desant, like the forward detachment, acts with the goal of developing the uninterrupted offensive to a high tempo and are used during the development of the offensive in the tactical defensive zone of the enemy, in the depth of the defense, for supporting river crossings from the march and during the conduct of offensive battle under special conditions.<sup>43</sup>

Comparing current Soviet and United States Army doctrine and force structure for conducting three-dimensional air-ground tactical operations has serious implications for the heavy corps.

The current U.S. heavy corps does not have an air assault capability as the Soviet Army has at the Front or Army level. The U.S. does have an air assault division and some air assault capability within its light infantry and mechanized infantry divisions. It does not have dedicated air assault units integrated into the heavy corps or organic to the heavy divisions. The heavy corps and divisions are mobile, ground gaining, armor protected maneuver forces with excellent anti-armor capabilities.<sup>44</sup> The air assault division projects significant combat power throughout the depth of the battlefield by conducting rapid tempo tactical operations over extended ranges.<sup>45</sup> Since the heavy corps must simultaneously conduct three-dimensional close, deep, and rear operations, several mission requirements would seem to exist for air assault tactical forces in the planning and execution of these operations.

Air assault force capabilities, limitations, and vulnerabilities will be identified within the context of the corps' deep, close, and rear battle.

#### IV. AIR ASSAULT DEEP, CLOSE AND REAR TACTICAL OPERATIONS

"Using the speed, agility, and firepower of modern rotary-wing aircraft, aviation and infantry units can be fully integrated with other members of the combined arms team to form powerful and flexible air assault task forces that can project combat power throughout the entire depth, width, and breadth of the modern battlefield with little regard for terrain barriers."<sup>46</sup>

##### DEEP -

Air assault forces have the capability to conduct the corps deep battle by dispersing across the battlefield, then rapidly concentrating against the enemy from any direction. The air assault force can overfly or bypass barriers and obstacles to block attacking or withdrawing forces in depth. The air assault forces can seize objectives beyond the line of contact such as crossing sites, airfields, road junctions, or other decisive terrain for link-up with other corps maneuver forces. They can also attack key enemy locations such as command posts and logistic facilities in the enemy rear area to disrupt command and control and delay follow-on forces. Air assault forces have the speed and mobility to react more rapidly than a ground force to tactical opportunities when conducting exploitation and pursuit operations.

Air assault forces also have limitations and vulnerabilities when conducting deep operations. During movement beyond the line of contact air assault forces are vulnerable to enemy aircraft and air defense weapons. Air assault forces have limited mobility

once they are inserted into the enemy area. Air assault forces are vulnerable to enemy artillery, air, or NBC attacks during loading and unloading operations. Air assault forces air lines of communication and support are vulnerable to enemy interdiction and limited flight operations.

Conducting operations at night and during adverse weather to surprise the enemy will reduce friendly vulnerabilities. Air assault forces can then conduct fast-paced hard-hitting operations over extended distances and in depth.

#### CLOSE -

Air assault forces can perform a number of corps close battle requirements. Air assault forces have the mobility and flexibility to reinforce committed units in threatened areas along the line of contact. An air assault task force can rapidly insert forces at tactically decisive points in the battle area. Air assault forces can screen a large area, providing surveillance and disrupting enemy movement. The forces have the flexibility and mobility to conduct economy of force missions in restrictive terrain such as mountain, urban, and heavily forested areas. Air assault forces can bypass enemy strength and attack key enemy forces from an unexpected direction to seize initiative.

Air assault forces have limitations and vulnerabilities during close operations. Air assault forces have limited ground

mobility, protection, and anti-armor firepower to conduct a deliberate defense over an extended period of time against a heavily armored force. Air assault forces need suitable pick-up and landing zones to conduct operations. They are vulnerable to electronic warfare, artillery, obscurants, and air defense fires during loading, movement, and unloading operations.

Air assault forces can mass and shift combat power rapidly to achieve an advantage through surprise, mobility, flexibility, or terrain during the close battle.

#### REAR -

Air assault forces are needed to defeat the many enemy threats to the corps rear area. As stated earlier, Soviet offensive operations, directed throughout the depth of the battlefield, will attempt to exploit the vertical dimension using air assault desant forces integrated with ground maneuver. The corps must be able to act and react at least as quickly as the enemy forces. Corps maneuver forces which do not have the same integrated air-ground capability as the Soviets will be at a serious disadvantage in speed, mobility, and flexibility. Air assault forces can disperse throughout the Corps area then rapidly concentrate combat power at the point of the threat. They can protect friendly high value targets during critical points of the battle. The mobility, flexibility, and speed of air assault forces can be used to support the corps deception operations through false insertions, raids, and demonstrations.

The air assault force could be limited in its ability to react to threats because of adverse weather or other environmental conditions. They are especially susceptible to friendly fire during periods of limited visibility when responding to enemy rear area attacks. Air assault forces have limited anti-armor firepower and protection when responding to an armored rear area threat.

A corps in combat must be capable of simultaneously and continuously executing synchronized close, deep, and rear operations.<sup>47</sup> General Dr. von Senger und Etterlin stated that "within this increased tempo of operations army aviation must plan an even greater part: in the close-in battle, in deeper operations over the extended battlefield against enemy follow-on forces, and in countering hostile armored penetrations or airborne incursions into our own rear area."<sup>48</sup> Air assault forces are needed to fight corps battles as an integral part of armored, mechanized, and other ground forces. However, the proper heavy/light force mix continues to be argued by Army leadership.

#### V. THE AIR ASSAULT BRIGADE - A HEAVY CORPS LIGHT FORCE

The Army's light force structure has increased recently with the deployment of light infantry divisions. Also, combat aviation brigades have been deployed and given a maneuver role. It is time for the heavy/light force mix to be extended to the heavy corps. The capabilities of light infantry and aviation in combination with armored and mechanized infantry forces can then be exploited. As previously argued, air assault forces provide truly unique capabilities to the corps in accomplishing its deep, close, and rear battle.

How should light air assault forces be integrated into the heavy corps structure? Arguments could be made for any number of options but the two most feasible are to add an air assault brigade to the heavy corps or add an air assault battalion to the heavy division.<sup>49</sup> Appendix A outlines a type air assault brigade and appendix B a type air assault battalion for reference in comparing the two options. Additional air assault divisions for integration into heavy corps are not feasible at this time due to cost and mandated limits on the Army force structure. Units below division level do not have adequate organic assets to unilaterally conduct effective air assault operations.<sup>50</sup> That leaves a choice between the two options listed or the adoption of both. Assuming that having both options in conjunction is not realistic, which option should be selected based upon the criteria established to conduct operations in accordance with AirLand Battle doctrine?

## DEPTH

The heavy corps must be capable of simultaneous fire and maneuver operations in three dimensions throughout the depth of the battlefield. FM 100-15, Corps Operations, states "The corps close operations include the deep, close, and rear operations of its committed divisions, separate maneuver brigades, or armored cavalry regiments."<sup>51</sup> If the air assault force is added to the division, then according to doctrine the corps could lack the air assault forces required to conduct corps deep and rear battle. Once the air assault force is added to the division, the corps will not have a light force under its direct control unless it gets it from the division. On the other hand, if an air assault brigade is added to the corps, then the corps can integrate the light air assault force throughout the depth of the battlefield using centralized planning and decentralized execution. The air assault force compliments the traditional missions of the heavy forces by exploiting the vertical dimension.

Air assault brigade forces can be integrated simultaneously into the corps deep, close, and rear battle. For example, one air assault battalion could be placed under the operational control of a division for the close battle's main attack. An air assault company from another battalion could conduct a raid to support the main attack as part of the corps deep battle while the remainder of the battalion is made part of the corps reserve under the aviation brigade's control. The remaining air assault battalion could be given the corps rear battle mission.

Therefore, the air assault brigade at corps level better satisfies the first criteria of simultaneously conducting deep, close, and rear battle.

#### INITIATIVE

The corps must seize the initiative by massing combat power more quickly than the enemy at the decisive point and time across the corps area of operations. The divisional air assault battalion would mass combat power in the division's area more quickly than a corps air assault force. Once again this would be advantageous for the corps close battle but disadvantageous for the corps deep and rear battle. All air assault forces across the corps area could be massed more quickly if they were in an air assault brigade under corps control rather than separate divisions. The command and control structure necessary to seize the initiative by employing the battalions in mass or allocating them to the maneuver divisions, separate brigades, and regiments would be in place.

#### AGILITY

The heavy corps must have the agility to act faster than the enemy under all conditions of terrain and weather to concentrate friendly strength against enemy weakness. The divisional air assault battalion can react more quickly to changing requirements as the heavy division executes the corps close battle. It achieves physical and mental agility by being a smaller force

closely integrated into the division organization. The corps air assault brigade would be less agile to the changing requirements of the close battle but better able to integrate air assault forces into the future battle.

### SYNCHRONIZATION

The arrangement of battlefield activities and concentration of forces and fires in time, space, and purpose at the decisive point to maximize the effective use of all resources is synchronization. The heavy division air assault battalion may not always have a mission during division operations or the corps could have a more critical mission. The corps could synchronize the use of the air assault assets throughout the area of operations if integrated at the corps level. Thus air assault forces would be allocated to the various corps mission requirements rather than to a divisional force.

The corps synchronizes the close, deep, and rear battle simultaneously and plans at least seventy-two hours into the future. The corps can synchronize the air assault forces into future plans using all the resources of the corps in combination. To gain proficiency, individuals and units must habitually conduct combined arms training in air assault operations before being committed to combat.<sup>52</sup> This training must be integrated throughout the corps combat, combat support, and combat service support units for the corps to synchronize the battle. Thus the

corps air assault brigade can be synchronized more quickly into all corps operations than a divisional air assault battalion.

The divisional air assault battalion better satisfies the criteria of agility. The corps air assault brigade better satisfies the criteria of depth, initiative, and synchronization. The historical examples demonstrated that air assault forces must be integrated into all aspects of tactical operations in order to be successful. The major role of the corps is the planning and execution of tactical level battles. Therefore the air assault brigade as part of a heavy corps is currently the best option for employment of a heavy/light combined arms force.

What is the feasibility of doing this in terms of command and control, combat support, and combat service support? The corps has the command and control structure in place to employ an air assault brigade. The brigade would not need to be organized as shown in Appendix A. Initially, assault infantry battalions could be placed under the command and control of the corps combat aviation brigade. The combat aviation brigade augmented by other corps units would have to provide the combat support and combat service support necessary to sustain the air assault infantry battalions in combat.

The corps would accept some risk in not having a separate air assault brigade capable of temporary self-sustainment. For example, the air assault infantry battalions would lack organic artillery fire support and helicopter lift and attack units, within its organization. The combat aviation brigades span of

control could be overly extended with the air assault battalions additional requirements. Although the corps would need to be augmented by additional combat support and combat service support assets to support the air assault brigade, many of the assets are currently in the corps and could be used in forming the brigade. For example, the corps combat aviation brigades assault helicopter assets could be used to form the air assault brigades assault helicopter battalion. Combat service support slices from within the corps current organization could be designated to support the air assault brigade. A corps heavy artillery batttalion could be changed to a light artillery battalion and assigned to the air assault brigade.

These changes are costly in terms of current manpower and resources. They would be necessary to achieve an integrated organic air assault capability within the heavy corps. The question is not whether we can afford to change but whether we can afford not to change? The inherent three-dimensional nature of war requires a heavy/light force mix totally integrated at the tactical level of war. The air assault brigade will compliment the heavy corps ability to achieve the depth, agility, initiative, and synchronization necessary for tactical success.

## VI. CONCLUSION

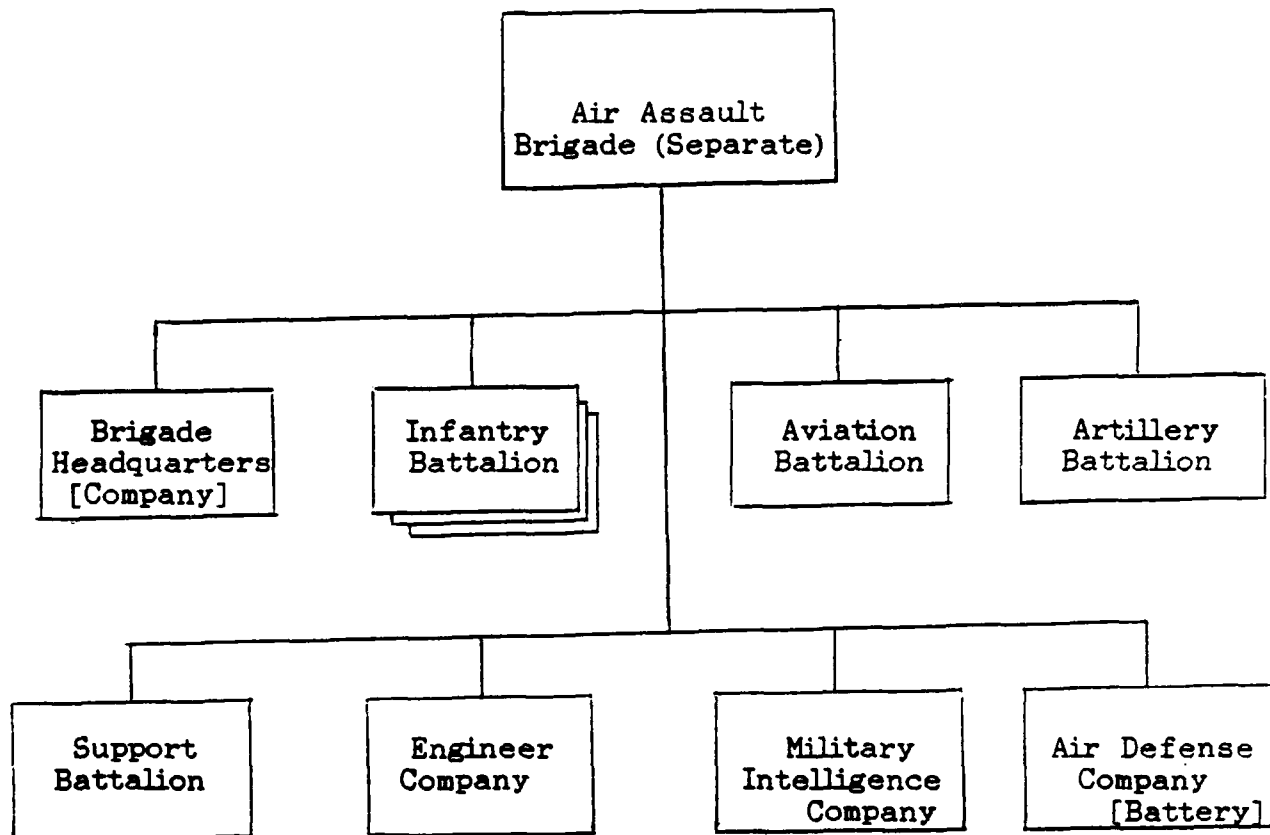
Future battles will be conducted in three dimensions integrating all types of air and ground forces. The forces must be prepared to fight on very short notice. "On the day of the battle soldiers and units will fight as well or as poorly as they were trained in preceding days."<sup>53</sup> The integration of heavy and light forces in air-ground operations requires detailed planning and execution by all members of the combined arms force. The current heavy/light force mix is not integrated properly at corps level to tactically execute AirLand Battle doctrine.

Historical analysis indicates that the concepts of depth, agility, initiative, and synchronization are applicable to air assault heavy/light operations. Air assault forces can attack throughout the depth of the battlefield, and seize the initiative by achieving greater agility than the enemy. It was shown that successful air assault operations must be closely integrated into the overall tactical plan. Habitual relationships and unified command and control achieved a higher degree of synchronization and success.

The Soviets are continuing to integrate air assault forces into their force structure in their effort to exploit the vertical dimension of war. They have added air assault brigades at Front and air assault battalions at Army level. The United States Army has not integrated light air assault forces below division level.

There are several mission requirements for air assault forces in the corps deep, close, and rear battle. Although limited in some respects, air assault forces were shown to have unique features which greatly enhance the heavy corps capability to conduct AirLand Battle. Air assault forces meet the heavy corps criteria of conducting three dimensional warfare in depth, and with initiative, agility, and synchronization. The heavy corps air assault brigade is the light force structure currently needed to execute AirLand Battle doctrine.

Appendix A: Air Assault Brigade - Heavy Corps<sup>54</sup>



Principal Sub-Unit Organizations

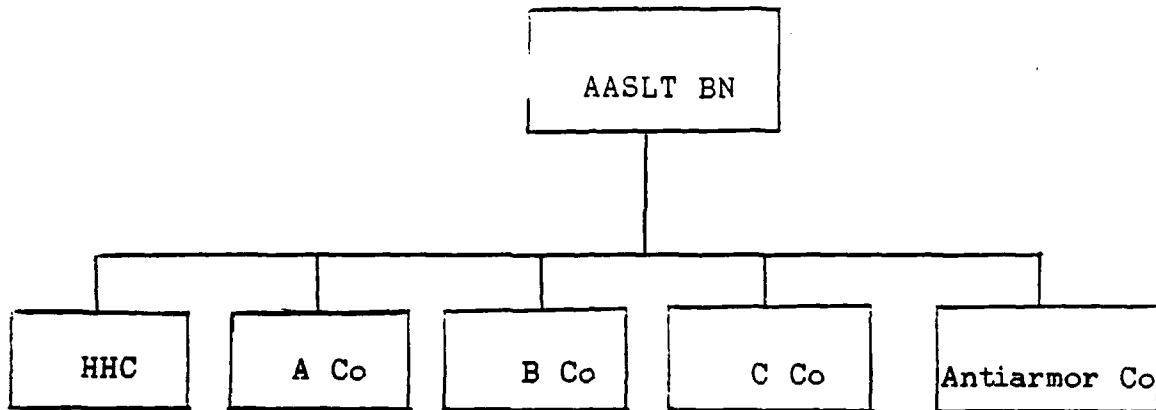
**Brigade Headquarters:** Military Police platoon, Signal platoon, Chemical platoon, 120mm Mortar platoon, and Reconnaissance platoon.

**Infantry Battalion:** Air Assault Infantry company (3), Antiarmor company, Scout platoon, 81mm Mortar platoon, Communications platoon, and Medical platoon.

**Aviation Battalion:** Command and Control section, Combat Support Aviation company (2), Attack Helicopter company, Air Reconnaissance troop, General Support Aviation company.

**Artillery Battalion:** Headquarters and Headquarters battery and M102 (light) Howitzer battery (3).

Appendix B: Air Assault Battalion - Heavy Division<sup>55</sup>



Principal Sub-Unit Organizations

Headquarters and Headquarters Company: Scout platoon, 120mm Mortar platoon, Engineer platoon, Air Defense section, Medical platoon, Communications platoon, and Support platoon.

Infantry Company (3): Company headquarters, Rifle platoon (3), and Weapons platoon.

Antiarmor Company: Antiarmor platoon (3).

## ENDNOTES

1. Department of the Army. Field Manual 100-5, Operations. (Washington, DC, 1986), p. 9.
2. Ibid.
3. U.S. Army Command and General Staff College. Field Manual 100-15, Corps Operations, (Coordinating Draft), (Ft. Leavenworth, KS, January 1988), p. 3-1.
4. John R. Galvin, General, United States Army, "Heavy - Light Forces and the NATO Mission", Infantry, July - August 1984, (Course Readings - Dynamics of Battle, School of Advanced Military Studies, AY 88-89, p. 110).
5. Field Manual 100-5, Operations, p. 15.
6. Field Manual 100-15, Corps Operations, p. 1-5.
7. Baron Henri de Jomini, The Art of War, (Westport, Connecticut, 1977), p. 70.
8. Field Manual 100-5, Operations, p. 15.
9. Sun Tzu, The Art of War, (Oxford, England, 1963), p. 96.
10. Field Manual 100-5, Operations, p. 16.
11. Ibid., p. 185.
12. Field Manual 100-15, Corps Operations, p. 1-2.
13. Ibid., p. 2-6.
14. Ibid.
15. Ibid., p. 2-7.
16. Department of the Army. Field Manual 90-4, Air Assault Operations, (Washington, D.C., 1987), p. 1-1.
17. John R. Galvin, General, United States Army, Air Assault: The Development of Airmobile Warfare, (New York, 1969), p. 98.
18. Maurice Tugwell, Airborne to Battle, (London, 1971), p. 158.
19. Galvin, p. 98.

20. Matthew B. Ridgway, General, United States Army (Ret.), Soldier: The Memoirs of Matthew B. Ridgway, (New York, 1956), p. 69.
21. Ibid., pp. 71-72.
22. Galvin, p. 105.
23. Ibid.
24. Ridgway, p. 73.
25. Galvin, p. 109.
26. Ibid.
27. Ibid., p. 259.
28. Ibid., pp. 258 & 260.
29. Ibid., p. 260.
30. Ibid., p. 261.
31. Ibid.
32. John J. Tolson, Lieutenant General, United States Army, Vietnam Studies Airmobility 1961-1971, (Washington, D.C., 1973), p. 219.
33. Tolson, p. 222.
34. Ibid.
35. Ibid., p. 224.
36. Ibid., p. 232.
37. B.H. Liddell Hart, Strategy, (London, England, 1967), p. 327.
38. Galvin, p. 316.
39. James F. Holcomb, Jr., Major, United States Army and Dr. Graham H. Turbiville, Jr., Exploiting the Vertical Dimension: Continuing Development of the Soviet Desant\* Force Structure, (Fort Leavenworth, Kansas, 1987), p. 1.
40. Department of the Army Field. Manual 100-2-2, The Soviet Army: Specialized Warfare and Rear Area Support, (Washington, D.C., 1984), pp. 2-1 to 3-4.

41. Holcomb and Turbiville, p. 20.
42. Ibid., p. 21.
43. Ibid., p. 22.
44. Field Manual 100-15, p. 2-6.
45. Ibid., p. 2-7.
46. Field Manual 90-4, p. 1-1. [The discussion of air assault deep, close, and rear operations which follows is a synthesis of Chapter 1 of FM 90-4 and Chapter 3 of FM 100-5.]
47. Field Manual 100-15, p. 3-1.
48. General Dr. von Senger und Etterlin, Air Mobile Divisions: Operational Reserves for NATO, (March, 1987), p. 23.
49. James E. Sikes, Major, United States Army, "The Air Dimension and the Heavy Division - The Utility of an Organic Light Infantry Air Assault Battalion in the Heavy Division", (Fort Leavenworth, Kansas, 1987), p. 29. [This monograph discusses various options and supports the addition of an air assault battalion to the heavy division.]
50. Field Manual 90-4, p. 1-2.
51. Field Manual 100-15, p. 3-3.
52. Field Manual 90-4, p. iii.
53. Field Manual 100-5, p. 6.
54. Briley W. Howell, Jr., Lieutenant Colonel (P), United States Army, "Air Assault - Rapid Response at the Operational Level", Individual Study, (Carlisle Barracks, Pennsylvania, 1988), pp. 45-46.
55. Sikes, pp. 44-50.

## BIBLIOGRAPHY

### BOOKS

- Berry, F. Clifton., Sky Soldiers. New York: Bantam Books, 1987.
- Clausewitz, Carl von., On War. Princeton, New Jersey: Princeton University Press, 1976.
- Galvin, John R., Air Assault: The Development of Airmobile Warfare. New York: Hawthorne Books, 1969.
- Gavin, James Maurice., Airborne Warfare. Washington, D.C.: Infantry Journal Press, 1947.
- Hart, B.H. Liddell., Strategy. London, England: Faber & Faber, Ltd., 1967.
- Hickey, Michael., Out of the Sky: A History of Airborne Warfare. New York: Scribner, 1979.
- Holcomb, James F., Jr. and Graham H. Turbiville. Exploiting the Vertical dimension: Continuing Development of the Soviet Desant\* Structure. Ft. Leavenworth, Kansas: Soviet Army Studies Office, 1987.
- Jomini, Baron Henri de., The Art of War. Westport, Connecticut: Greenwood Press, 1977.
- McCrimmon, James M., Writing with a Purpose. Boston: Houghton Mifflin Company, 1967.
- McMichael, Scott R., A Historical Perspective on Light Infantry. Ft. Leavenworth, Kansas: Combat Studies Institute, 1987.
- Montross, Lynn., Cavalry of the Sky: The Story of U.S. Marine Combat Helicopters. New York: Harper, 1954.
- Ridgway, Matthew B., Soldier: The memoirs of Matthew B. Ridgway, New York: Harper, 1956.
- Simpkin, Richard E., Antitank: An Air Mechanized Response to Armored Threats in the 90's. Oxford, England: Brassey's Publishers Limited, 1982.
- Simpkin, Richard E., Race to the Swift. Thoughts on Twenty-first Century Warfare. London, England: Brassey's Publishers Limited, 1985.
- Sun Tzu., The Art of War. Oxford, England: Oxford University Press, 1963.

Tolson, John J., Air Mobility, 1961-1971. Washington, D.C.: U.S. Government Printing Office, 1973.

Tugwell, Maurice., Airborne to Battle: A History of Airborne Warfare, 1918-1971. London, England: Kimber, 1971.

Weeks, John., Assault from the Sky: A History of Airborne Warfare. New York: Putnam, 1978.

#### GOVERNMENT PAMPHLETS and MANUALS

Field Manual 90-4, Air Assault Operations. Washington, D.C.: Headquarters Department of the Army, 1987.

Field Manual 1-100, Combat Aviation Operations. Washington, D.C.: Headquarters Department of the Army, 1984.

Field Manual 1-111, Aviation Brigade. Washington, D.C.: Headquarters Department of the Army, 1986.

Field Manual 100-5, Operations. Washington, D.C.: Headquarters Department of the Army, 1986.

Field Manual 100-15, Corps Operations, Final Draft. Ft. Leavenworth, Kansas: 1988.

Student Text 101-1, Organizational and Tactical Reference Data for the Army in the Field. Ft. Leavenworth, Kansas: U.S. Army Command and General Staff College, 1987.

#### ARTICLES

Dalecky, Lieutenant Colonel William J., United States Army. "Strategy of the Indirect Approach Applied to NATO." Air University Review, XXXVIII (Nov-Dec 1986), pp 52-62.

Easton, Colonel Jack E., United States Army, and Lieutenant Colonel Charles B. Cook, United States Army. "Soviet Air Assault Brigade." Aviation Digest, XXXI, (NOV & Dec 1985), pp 3-8, 41-45.

Galvin, General John R., United States Army. "Heavy-Light Forces and the NATO Mission." Infantry, (Jul-Aug 1984), pp 10-14.

Hartzog, Colonel William W., United States Army, and Colonel John D. Howard, United States Army. "Heavy Light Operations." Military Review, LXVII, (Apr 1987), pp 24-33.

Ostovich, Brigadier General Rudolph III, United States Army. "Air-land Battle - Part 1: Dramatic Changes in Emerging Aviation Doctrine." Aviation Digest, XXXII, (Nov 1986), pp 2-9.

Von Sandrart, GEN Hans Henning, Federal Republic of Germany Army.  
"Considerations of the Battle in Depth." Military Review, LXVII,  
(Oct 1987), pp 8-15.

Von Senger und Etterlin, General Dr., "Airmobile Divisions:  
Operational Reserves for NATO." Journal of the Royal United  
Services Institute for Defense Studies, CXXXII, (Mar 1987),  
pp 23-30.

#### THESES, MONOGRAPHS, and PAPERS

Howell, Lieutenant Colonel (P) Briley W., Jr., United States Army.  
"Air Assault - Rapid Response at the Operational Level."  
Individual Study, Carlisle Barracks, Pennsylvania: U.S. Army War  
College, 21 March 1988.

Lohmann, Major John R., United States Army. "The Tactical Air Assault  
of the Soviet Ground Forces." Student Research Report, Garmisch,  
Germany: U.S. Army Russian Institute, 1981.

McHugh, Major Conrad J., United States Army. "The Role of the Air  
Assault Division on the European Battlefield." Thesis, Fort  
Leavenworth, Kansas: U.S. Army Command and General Staff College,  
1980.

Micol, Colonel Victor E., Jr., United States Army, and Colonel Dan H.  
Campbell, United States Army, and Lieutenant Colonel David A.  
Bramlett, United States Army. "Operational Alternatives for Air  
Assault Forces in the 1990's." Study Project, Carlisle Barracks,  
Pennsylvania: U.S. Army War College, June 1982.

Rampy, Major Michael R., United States Army. "The Joint Tactical Air  
Division (JTAD) Concept: Close Air Support for AirLand Battle."  
Monograph, School of Advanced Military Studies, Fort Leavenworth,  
Kansas: U.S. Army Command and General Staff College,  
7 December 1987.

Shoemaker, Lieutenant Colonel Robert M., United States Army.  
"Airstrac - A Concept for an All Air Supported Strategic Army  
Corps." Student Essay, Carlisle Barracks, Pennsylvania: U.S. Army  
War College, 7 April 1967.

Sikes, Major James E., United States Army. "The Air Dimension and  
the Heavy Division - The Utility of an Organic Light Infantry Air  
Assault Battalion in the Heavy Division." Monograph, School of  
Advanced Military Studies, Fort Leavenworth, Kansas: U.S. Army  
Command and General Staff College, 21 December 1987.