The 82nd Airborne Division in Transformation: Is it Possible to Significantly Increase the Combat Power in the Division Ready Brigade and Reduce Deployment Sorties Using Current, Fielded Technology?

A MONOGRAPH
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Abstract

THE 82ND AIRBORNE DIVISION IN TRANSFORMATION: IS IT POSSIBLE TO SIGNIFICANTLY INCREASE COMBAT POWER AND REDUCE DEPLOYMENT SORTIES WITH CURRENT, FIELDED TECHNOLOGY? by MAJOR Douglas J. DeLancey, USA, 51 pages.

This monograph focuses on how the 82nd Airborne Division fits into the United States Army's efforts to transform. The Army of 2000-2010 must deploy combat power more quickly into a crisis--before aggression starts or before an aggressor achieves initial objectives. With fewer forces stationed outside the United States, the ability to project combat power is more important to modern American security concerns than at any time in recent history. The slow build-up of combat power from secure ports and airfields prior to Operation Desert Storm and Just Cause are probably not suitable models for the next conflict. The National Command Authority must maintain a rapid response, forcible entry capability to set the conditions for follow-on forces. The Division Ready Brigade of the 82nd Airborne Division will likely be that spear, but it must deploy more rapidly and with greater combat power. A Strategic Brigade Airdrop currently requires ninety-six C-17 sorties for just the Division Ready Brigade. This number of sorties can be reduced and the potential combat power of the unit increased—simultaneously. Additionally, it is possible to increase the amount of potential combat power airdropped in the Alpha Echelon and reduce the amount of equipment that must airland later. Replacing the bulky and heavy wheeled vehicles with a newer and proven design will keep the forcible entry capability poised to lead the Interim Brigade Combat Team into a crisis. One such group of vehicles is called the Flyer Family of Vehicles, and a C-17 can transport up to twenty-two Flyers compared to eight High Mobility Multi-Purpose Wheeled Vehicles.

Structurally, this monograph examines the current Army Transformation efforts and the role of the Division Ready Brigade. Next is a description of the Strategic Brigade Airdrop mission of the Division Ready Brigade. The capabilities of the Flyer Family of Vehicles and how they compare to the current set of wheeled vehicles begins a comparison of potential combat power. This monograph concludes that the Flyer Family of Vehicles (or a similar type) can significantly increase the potential combat power in the Division Ready Brigade *and* reduce the amount of sorties required to deploy.

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CHAPTER 1

INTRODUCTION

The United States Army of 2001 is undergoing significant change. The Army Chief of Staff, General Eric Shinseki, pointed out early in his tenure that the current force structure is often inappropriate for the challenges of today's security issues. Heavy forces, those with tanks and armored fighting vehicles, are too slow to deploy into a crisis. Underdeveloped theaters of war may not have the infrastructure to support heavy forces or have suitable terrain that can support movement and resupply. The narrow road networks throughout the treacherous terrain in Kosovo and portions of Korea serve as an example of this challenge.[1] The continuing urbanization of the world also offers a very difficult environment to employ heavy forces since these units lack sufficient numbers of soldiers to conduct operations in built up areas. Also, the relevance of heavy forces in the midst of repetitive Stability and Support Operations (SASO) is a commonly discussed theme. Many peacemaking, peacekeeping, or humanitarian assistance missions do not require, and may be hindered by heavy forces.

At the other end of the force structure spectrum are light forces without armored or fighting vehicles. While they offer quicker strategic deployability, they lack the firepower and protection desired in vague, rapidly developing situations. The 1993

[1] Michael Mehaffey, "Vanguard of the Objective Force," *Military Review* 80, no. 5 (September-October), 6-7.

American experience in Somalia, and the 82nd Airborne Division's "line in the sand" during Operation Desert Shield, serve as recent examples. In both of these situations, greater firepower and protection was desired. Current efforts to bridge this gap include the move toward a medium weight force that offers greater situational combat power.[2]

Situational combat power is the notion that a small force quickly deployed, might be more valuable than a more powerful force that takes weeks or months to deploy and employ. A situation may be contained prior to developing into a crisis. Discussions and articles concerning the Initial Brigade Combat Teams (IBCT) and Army Transformation often overlook the role of forcible-entry. How often will a situation that warrants the commitment of the IBCT offer secure airfields? What will the future crisis response, forced-entry force look like, and how must it change within the framework of current Transformation efforts? Does it need to change at all?

To transform the United States Army with the advantage that the Chief of Staff seeks by development of the IBCTs, our current forcible-entry capability must transform as well. It must also have the ability to build combat power more quickly—such as reducing the number of aircraft needed to deploy the 82nd Airborne Division. The C17 transport aircraft operates all over the world, and a significant amount of time is consumed assembling the airlift force required for a Strategic Brigade Airdrop (SBA).[3] A faster deploying crisis response force would allow a more rapid "follow-up" of an IBCT into the area of operations. Could the potential combat power of the 82nd Airborne

[2] National Defense Research Institute, Lightning Over Water: Sharpening America's Light Forces for Rapid Reaction Missions (Santa Monica, CA: RAND, 2000), 2.
[3] Major David A. Kasberg, "From Paper to Practice: Making Strategic Brigade Airdrop a Credible Force Employment Option," (Air Command and Staff College, Air University, 2001), 12.

Division be increased and the amount of sorties reduced at the same time? This would be a tremendous enhancement to the Army's efforts to transform.

Additionally, the 82nd Airborne Division is currently limited in terms of tactical mobility. This is an area where the potential combat power of the unit could increase significantly.[4] The Division Ready Brigade (DRB) can deploy quickly with combinations of light, medium, and heavy packages. However, only the medium and heavy packages have the aircraft that allow a limited tactical mobility through air assaults. Once the DRB, or the entire Division is on the ground, most assault objectives are attacked through dismounted maneuver. A rapid transition to a defense may be required as the enemy attempts to interdict the deployment of the IBCT into the area of operations. How can the 82nd solve this problem, especially in light of the competing demands for transportation assets in a crisis, and is the technology currently available?

The solution may exist in replacing the vehicles the Division uses. The current fleet includes the bulky and heavy, High Mobility Multi-Purpose Wheeled Vehicle (HMMWV), and larger trucks and trailers. More deployable platforms exist that could significantly reduce the number of aircraft needed to deploy all or part of the 82nd Airborne Division. These vehicles would also tremendously enhance combat power by offering a much greater tactical mobility, thus allowing a far more rapid seizure of assault objectives and a quicker transition to the defense.

An example of this type of platform and capability is the Flyer Family of Trucks. Flyer makes lightweight, space frame vehicles that can be stacked; that is, while loading

[4] Major Stephen M. Sittnick, "Increasing the Ground Tactical Mobility of U.S. Ground Forces—Do We Have the Means Now," (Advanced Military Studies Program Monograph, U.S. Army Command and General Staff College, 1992), 15.

into a transport they drive on top of each other. They can deploy in stacks of two, can be airdropped, slingloaded by helicopters, and are currently fielded around the world. Numerous versions offer commonality: weapons versions, troop transport, command and control, ambulance, generator, reconnaissance and cargo versions. Combinations of these vehicles could be task organized as needed and would give the 82nd Airborne Division added combat power. One family of vehicles could conceivably replace all of the vehicles in the entire Division.

For example, the number of HMMWV's that can be transported in a C-130 transport aircraft is two, and the larger C-17 only carries eight. This bulky, heavy vehicle seriously impedes the build-up of combat power. The Flyer, with similar capabilities to the HMMWV, can be deployed with five in a C-130 and twenty-two in a C-17. That is a very significant difference. Cargo versions similar in capability to the Family of Medium Tactical Vehicles currently fielded are in production. These Flyer versions can also be stacked to deploy, resulting in a further decrease in the number of sorties required to deploy the Division.[5]

The 82nd Airborne Division might significantly benefit from an increased ability to conduct tactical mobility. While the Division has unique strategic and operational mobility, once the Division is on the ground after a parachute assault, maneuver is limited to dismounted means until follow-on aircraft can land and assault aviation put into operation. The Flyer could be configured into general support truck units to task organize and give the 82nd Airborne Division a far greater ability to conduct maneuver. Assault objectives farthest away from the drop zone could be attacked more rapidly, or

[5] Bob Parker, interview by Major Douglas J. DeLancey, 10 January 2001.

security forces emplaced quicker to give the Division Ready Brigade time to assemble and organize.

Considerable Congressional interest exists to fund the Army Transformation. Many Members of Congress seem to recognize and understand that the Army is deployed in many areas around the world conducting operations that are not war, but could rapidly erupt into conflict. The Army stands in the shadows of the experiences in Somalia, attempts to deploy quickly into the Kosovo theater, and the helplessness of the ethnic cleansing in Rwanda. The end of the Cold War has shaped a much smaller force that is less forward deployed to areas near anticipated trouble spots. The Army needs the ability to conduct force projection to thwart emerging threats before a massive build-up like Desert Storm is the only option that remains to the National Command Authority. If the Army waits too long to determine how the forcible-entry capability must transform, Congress may be less apt to fund requested modernization.

CHAPTER 2

THE ARMY TRANSFOMATION

> *In today's strategic environment, we must possess force characteristics that enable us to initiate combat on our terms, to retain the initiative, to build momentum quickly, and to win decisively. The Army must transform in order to develop and field a force that possesses these characteristics more fully today and into the future.*[6]
>
> General Eric K. Shinseki

The United States faces a vague and complicated global environment. Current American and allied interests and policies of engagement ensure that military interventions and crisis response will continue. The uncertain nature of the rapidly changing security environment requires a high level of flexibility as a threat may erupt with little notice. This phenomenon has generated a need to deploy and *employ* forces in hours and days, not weeks and months. The National Defense Research Institute published a study in 2000 called, "Ground Forces for a Rapidly Employable Joint Task Force." This study determined that a high priority for the Department of Defense should be the development of an early-intervention force capable of coordinating long-range fires from aircraft and ships. The goal is to deter without a crisis, or reduce the size of a force needed to reduce a crisis. This force could accomplish many missions if it deployed quickly enough. Some of the possible missions for this force include:

[6] CSA testimony to the Airland Subcommittee of the Committee on Armed Services United States Senate. Second Session, 106th Congress, March 8 2000, p. 5.

- Deter invasions of nations allied with the United States without deploying massive forces.
- Halt an invading army when a regional power attacks an ally that does not have long-range aircraft or missiles.
- Deter or prevent "ethnic cleansing."
- Destroy weapons of mass destruction.
- Compel an invader to withdraw by threat of counter attack or attacking the invader's homeland.[7]

Potential adversaries have an incentive to act aggressively without warning to seize urban areas, transportation nodes, and decisive terrain before American combat power can interdict. Without a rapid response, a potential invader might achieve important objectives before the United States can react. Forward-deployed forces are useful, but stationing combat power forward typically has high political and economic costs. It is likely, therefore, that the United States will continue to rely upon forces deployed from within the United States by air and by the sea that can provide a combat capability in the first week of a crisis. Three of the challenges facing the projection of combat power through strategic mobility are discussed in the summary portion of, "Ground Forces for a Rapidly Employable Joint Task Force."

First, when light forces (those without the protection and mobility of medium or heavy armored vehicles) deploy quickly by transport aircraft into an area of operations, they lack protection and mobility against enemy firepower. Next, while sealift allows the deployment of heavier forces, it is slow. Emerging technology may allow faster sealift, but days are consumed prior to departure with moving vehicles and equipment to ports and slowly uploading. Prepositioning equipment forward is not a panacea, since this has

[7] National Defense Research Institute, *Ground Forces for a Rapidly Employable Joint Task Force* (Santa Monica, CA: RAND, 2000), 1-3.

many of the costs associated with forward-deployed forces. With numerous security interests, the location of prepositioning becomes difficult as well.

The third conclusion addresses the lack of sufficient airlift to deploy forces during the first week of a crisis. Competing demands for airlift include the deployment of airpower and its ground support, missile defenses, and possibly humanitarian assistance. The study recommends the development of "light mobile infantry in brigade-sized task forces."[8]

The Department of Defense is exploring organizational changes based on the operational challenges of the new century. These challenges include the early halt of enemy invasions into Kuwait, Northern Saudi Arabia or South Korea, and less specific needs to conduct early offensive actions without a large build-up of combat power. Lower risk challenges might be interventions into a Bosnia-like crisis or peacemaking in an urban environment.[9] How will the Army transform to meet this operational environment?

In early 1996, the Army faced an ongoing drawdown, a vague security threat, continuing budget reductions, and a looming Quadrennial Defense Review. The Army Chief of Staff at the time, General Dennis J. Reimer, ordered the Training and Doctrine Command to articulate a long-term strategic vision. His instructions were:

> Conduct broad studies of warfare to about the year 2025 to frame issues vital to the US Army after about 2010, and to provide those issues to senior Army leadership in a format suitable for integration into TRADOC development programs.[10]

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[8] Ibid., xiv-xv.
[9] National Defense Research Institute, *Analytical Methods for Studies and Experiments on Transforming the Force* (Santa Monica, CA: RAND, 1999), 13.
[10] David W. Allvin, *Paradigm Lost: Rethinking Theater Airlift to Support Army After Next* (Maxwell Air Force Base, AL: Air University Press), 5.

This was the genesis of the Army After Next (AAN) project and later served as the mission statement for the project. Rapidly expanding, the project had over two hundred members from various areas of the Department of Defense. Concurrently, the Army was conducting the Force XXI project, which originated to refit new technology into existing systems. But systems with this new technology installed will still reach obsolescence by 2010, and the rate at which technology was changing required organizations to adjust with the technology. The changing international security environment suggested the possibility of future threats that required the United States to counter with more modern systems.[11]

Secretary of the Army, Louis Caldera, and United States Army Chief of Staff, Eric K. Shinseki, developed and published a new Army Vision in the fall of 1999. The goal of this vision was, "to build a strategically responsive landpower force capable of dominance across the full spectrum of operations."[12] The Army planned a three-stage transformation effort over the next two decades. The vision points out that traditionally, light forces have lacked the lethality, mobility, and sustainment required for many situations. Heavy mechanized forces are too slow to deploy. The Army will field interim brigade combat teams (IBCTs) as the vanguard that will offer new options for decisive contingency response. These brigades will operate in division organizations and will be a bridge to the future enhanced technology force. The IBCTs will use numerous innovations including:

- Commander- and execution centric command and control environment
- Networked operations
- Multifunctional soldiers, leaders and staffs
- Effects-based planning

[11] Allvin, *Paradigm*, 1-12.
[12] Mehaffey, "Vanguard," 6.

- Execution-focused, distribution-based sustainment
- Flattened hierarchies and integrated headquarters[13]

These innovations will equip the Transformation force to fight by what the Chief of Staff calls his four rules of thumb. General Shinseki wants the Army to initiate combat on its own terms. Next, the Army desires to gain the initiative and never surrender it. The Army will also build momentum quickly and win decisively. These concepts are relevant to the topic of this monograph, and these innovations will give the National Command Authority the strategic flexibility required for today's security environment. This force will deploy quickly—a brigade must deploy anywhere in the world and be on the ground in 96 hours. The Chief of Staff also requires a division on the ground in 120 hours and five divisions in a theater in 30 days.[14] Why is the ability to project combat power rapidly a desired capability for the Army?

It is important that the Army designs and fields a corps with the ability to deploy *and employ* quickly and serve as the ground component of a future Joint Task Force. While the IBCT has drawn great interest, the Army projection goal is greater than a brigade or division. The standard of one division in five days is an important standard, since a division with adequate air and naval support could shape the battlefield for a corps to rapidly close and commence offensive operations. As the Army conducts transformation, an important factor will be maximizing the combat or support potential per ton of equipment. The United States Army forces of 2001 are too heavy and occupy too much space during airlift.

[13] Mehaffey, "Vanguard," 6-8.
[14] CSA testimony, 106th Congress, March 2000, p. 6.

With limited strategic lift assets, quickly placing a capable force in a crisis has several advantages. The capability to attack an enemy in depth using synchronized maneuver combined with operational level fires gives a joint commander greater capability to conduct a quick, decisive campaign using an array of defeat mechanisms. This effort may begin with an early crisis response division (the "one division in five days") that quickly deploys by air—such as the 82nd Airborne Division. This force will begin the shaping operation to deny the enemy complete success of his plan, threaten enemy systems, and hold entry points for the follow-on force.[15]

Strategic level wargames conducted as part of the Army After Next project have yielded insights into likely scenarios the United States may face. Future situations modeled with anticipated force structures typically unfolded in three phases. An enemy of the United States attacks to seize objectives rapidly before a response is possible, making a maximum effort to delay a response. Surprise is critical to the enemy, as the United States must project combat power over immense distances. The enemy then causes as much damage and casualties as possible. Then, using future technology quickly emplaces a formidable defense and waits for the response. Lastly, the enemy fights a defensive campaign in hopes that the United States will lose commitment and agree to a cease-fire. The enemy hopes to maintain all or part of the area seized in the initial stages of the conflict. A new type of crisis response force might deploy and employ quickly enough to defeat this strategy.

A new type of crisis response force could deny the enemy the initial objectives and prevent an effective defense. These forces would conduct offensive operations and

[15] Huba Wass de Czege and Jacob B. Biever, "Power Projection! A Fighting Corps in 30 Days," 1-7.

maintain the initiative until the enemy's center of gravity is threatened.[16] A recent RAND study's findings discussed what capabilities could avert a crisis or end it quickly in the future:

> When they resort to force, regional adversaries typically seek short, cheap wars. Therefore, the most impressive U.S. military forces would be those that could deny a quick, decisive victory. In other words, forces that are in the region or that can deploy there quickly will have the greatest deterrent impact. Slower-arriving conventional forces can be very effective at rolling back an adversary, but an aggressor may not believe they will actually be deployed in response to a fait accompli.[17]

Some costly improvements to the crisis response capability suggested in a RAND study titled, "Lightning Over Water: Sharpening America's Light Forces for Rapid Reaction Mission," include:

- Replacing indirect- and direct-fire weapon systems
- Augmenting these forces with sensors, both air and ground
- "Streamlining" command and control[18]

Transformation and Transportation

As the amount of forward-deployed forces has decreased, reliance on airlift to transport stateside forces has increased. The goal of using technology to accomplish missions with fewer forces remains important as the services compete for airlift. Currently, the United States Air Force strategic mobility assets, to include the C-17, are designed around Cold War concepts and requirements. The average time of a weapon procurement program from initial funding to fielding has been fifteen years.[19] Therefore,

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[16] _____, "Six Compelling Ideas on the Road to a Future Army," *Army Magazine*, (February 2001), 44-45.
[17] RAND, "U.S. Regional Deterrence Strategies," p. 2; available from http://www.rand.org.publications/RB/RB25/rb25.html; Internet; accessed 1/8/01.
[18] National Defense Research Institute, "Lightning," 62.
[19] Allvin, *Paradigm*, 2.

since Army Transformation is scheduled to occur quicker than this cycle, then the Army needs to use the current transport capability.

Transport assets remain scarce relative to demand. Much of the available airlift during a crisis supports early-deploying Air Expeditionary Forces. It is difficult to estimate what airlift will be available during any given crisis. Quantities vary between scenarios and theaters; but in general, the quantity of available airlift is built to support a forward-deployed Army that no longer exists. Projected increases in airlift are barely sufficient to transport the forces needed during a rapid build-up.[20] These factors combine to create an environment where the Army must be sensitive to the availability of strategic airlift. The near-term challenge will be to tailor forces that simultaneously deploy and employ the maximum amount of combat power in a crisis.

[20] Wass de Czege, *Power,* 3.

CHAPTER 3

FORCIBLE ENTRY AND THE EMPLOYMENT OF AIRBORNE FORCES

To understand the environment of this monograph, one must understand the fundamentals of forcible entry and airborne operations. This chapter discusses airborne forcible entry, contains a review of the current doctrine associated with the employment of airborne forces, and is followed by a look at the 82nd Airborne Division.

> Airborne forces of the US Army have often demonstrated their ability to conduct decisive, short notice, forced entry operations deep into enemy territory. They seize and maintain the initiative until follow-on forces are committed to the fight and then move to hit the enemy where he is the most vulnerable. The ability to rapidly deploy, land, and sustain a powerful combat force is vital to US interests and worldwide commitments.[21]

A unique aspect of airborne forces is the rapid, strategic deployment capability to anywhere on the globe as a deterrent or combat force. The most obvious advantages of a force of this nature are quick response, surprise, and the ability to rapidly mass combat power while bypassing all natural obstacles. Airborne forces conduct parachute assaults to seize assault objectives and destroy enemy forces until a link-up can occur. Missions can be of a strategic, operational, or tactical nature.

[21] Department of the Army, *FM 90-26 Airborne Operations* (Washington D.C., U.S. Government Printing Office, 1990), 1-1.

Alerting airborne forces for employment in a situation or a crisis is a politically significant event. A potential enemy knows that the United States has the capability to strike suddenly anywhere in the world with airborne forces. No other current American ground forces have the ability to place such a large amount of combat power on the ground so quickly into a hostile environment. This surprise is strategically significant, as is the use of airborne forces as a show of force. In the fall of 1994, the imminent assault by the 82nd Airborne Division convinced Lieutenant General Raoul Cedras in Haiti to submit to the United States. At the operational level of war, airborne forces can operate virtually anywhere in a theater of war to attack key terrain such as bridges, airfields, or logistical units in the enemy's rear. These objectives can be approached by parachute assault or air assault with organic and attached aviation assets. Smaller airborne units can assault tactical objectives to the flank and rear of the enemy. An example of a small tactical level operation is the company size parachute assault by United States Army Rangers in World War II against a prisoner of war camp in Cabanatuen, Phillipines.[22]

Forcible Entry

Joint Doctrine shows the importance of airborne forces. Joint Publication 1, Joint Warfare of the Armed Forces, illustrates this point.

> The capability of the Armed Forces for **forcible entry** is an important weapon in the arsenal of the joint force commander. The primary modes for such entry are amphibious, airborne, and air assault operations, which provide commanders with great potential to achieve strategic and operational leverage. As shown in the Gulf War, even the threat of a powerful and flexible forcible entry capability can exert a compelling influence upon the plans and operations of an opponent.[23]

[22] Ibid., 1-3, 1-4.
[23] Joint Staff, *Joint Warfare of the Armed Forces of the United States* (Washington, D.C.: United States Government Printing Office, 1995), 49.

As the United States decreases its military forward presence throughout the world, the likelihood of conflict in regions where we have secure airfields and ports will continue to decrease. In the Panama invasion, forces were stationed in the country and Howard Air Force Base was available to fly in combat power. During the Gulf War, the United States was able to bring in combat power to Dhahran. In the future, adversaries might make concerted efforts to prevent the United States from establishing lodgments that allow the build-up of combat power. The only way to put combat power on the ground might be through forcible entry, and this could be part of a coup de main in some situations.[24]

Forcible entry is defined in the Joint Doctrine Encyclopedia as the seizure and holding of a military lodgment while facing armed opposition. Sometimes this is the only way to enter decisive forces in an area of operations. These forces give the joint force commander a force that can seize the initiative during the initial stages of an operation, and can strike directly at the enemy center of gravity or critical vulnerability.

Forcible entry is inherently complicated and typically risky. Detailed synchronization and intelligence is necessary. Forces must simultaneously deploy and employ, ready to fight upon arrival. Operations security and deception combine to achieve the surprise needed for success. Logistically, forcible entry requires the joint force commander to make difficult decisions about how to balance the need for combat

[24] Major William D. Wunderle, "Forced In, Left Out: The Airborne Division in Future Forcible Entry Operation," (Advanced Military Studies Program Monograph, U.S. Army Command and General Staff College, 1997), 9.

power to mass quickly and fight, with providing adequate logistical support early in an operation.[25]

The 82nd Airborne Division

The 82nd Airborne Division has the ability to rapidly project combat power anywhere in the world. It can seize initially, and then secure and defend critical objectives. Missions include capturing initial lodgments for follow-on forces, large tactical raids, and securing areas for other forces to stage and build combat power. The Division can also assist with rescuing besieged United States citizens abroad. The strategic and operational mobility makes the 82nd Airborne Division a suitable reserve or reinforcement for engaged forces. Airborne forces are also known for the ability to assault into the enemy's rear area to disrupt supply and routes of withdrawal. This type of division is capable of conducting any mission normally assigned to a light infantry division.

Since an airborne division lacks heavier firepower and protection, operations conducted against mechanized forces require special planning and consideration. While the 82nd Airborne Division has a robust anti-tank capability, it still does not have enough protection to withstand an attack by armored formations.[26] This illustration shows the structure of the major subordinate units in the 82nd Airborne Division. Note that the IRC shown below is the Initial Ready Company from the 3rd Infantry Division and will be addressed later.

[25] Joint Staff, *Joint Doctrine Encyclopedia*, (Washington D.C.: United States Government Printing Office, 1997), 296-297.
[26] Department of the Army, *FM 71-100 Division Operations* (Washington D.C.: U.S. Government Printing Office, 1996), 1-6, 1-7.

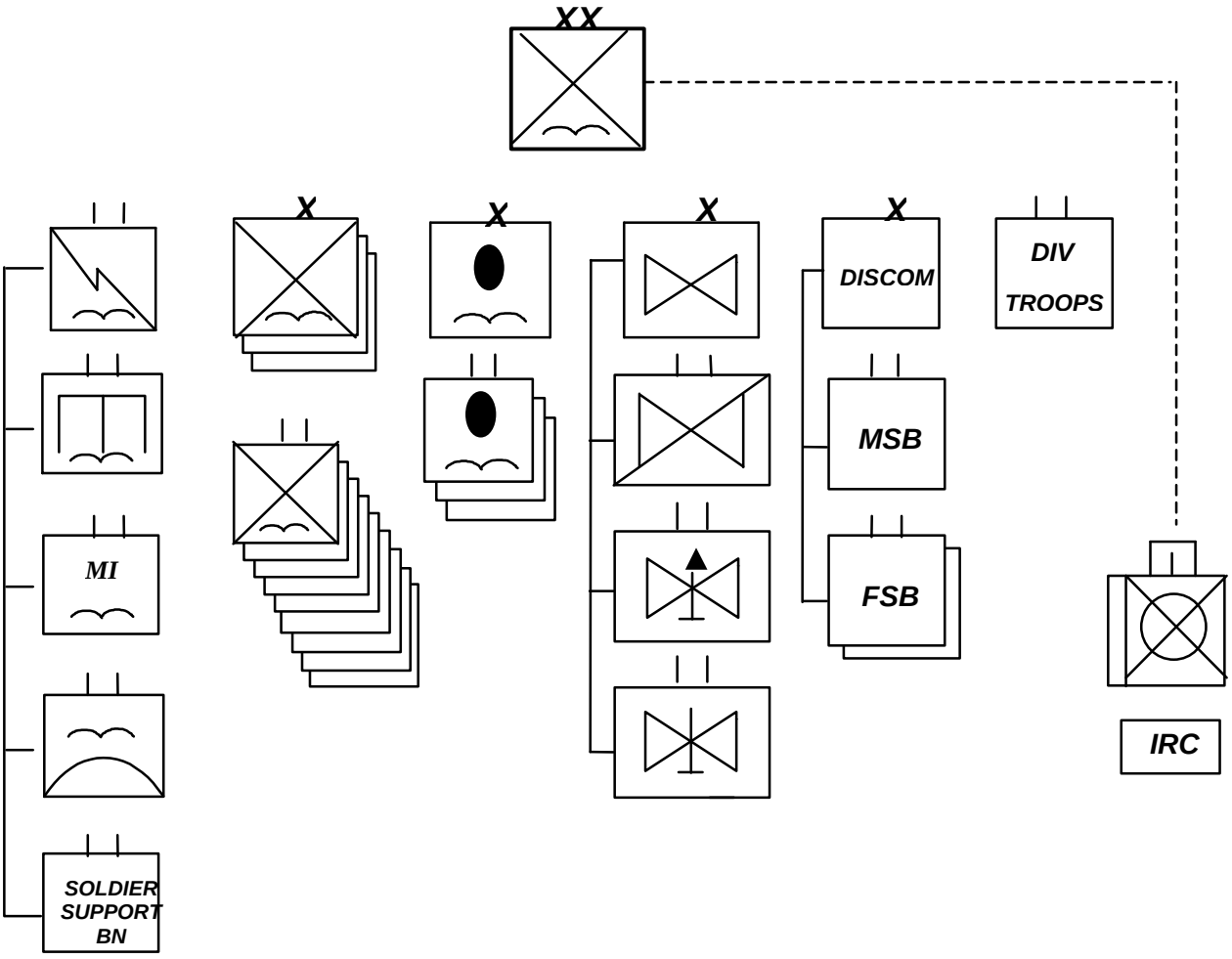

Figure 1. Current 82nd Airborne Division

The Division consists of over 14,341 paratroopers, and is configured as shown above. The major combat systems in the infantry brigades include 188 Tube Launched, Optically Tracked, Wire-Guided (TOW) missile systems mounted on HMMWVs, and 174 man-packed Javelin anti-tank systems. This provides the unit a limited anti-armor capability. The Division employs fifty-four 105mm howitzers towed by HMMWVs. Other organic indirect fire weapons include thirty-six 81mm mortars at the infantry battalion level and fifty-four 60mm mortars assigned to the infantry companies. Air defense coverage comes from forty-eight Avenger systems. The Division also has 225

Mark 19 automatic grenade launcher systems. Aviation assets include forty-eight Kiowa Warriors and forty-one UH-60L Blackhawk helicopters used for air assault operations, medical evacuation, command and control, and resupply within the division.

While the 82nd Airborne Division can deploy rapidly as a division, the nucleus of the unit is the brigade that serves as the Division Ready Brigade on a rotational basis. This force, ready within 37 hours of notification serves as the nucleus for the Strategic Brigade Airdrop. It is configured as shown:

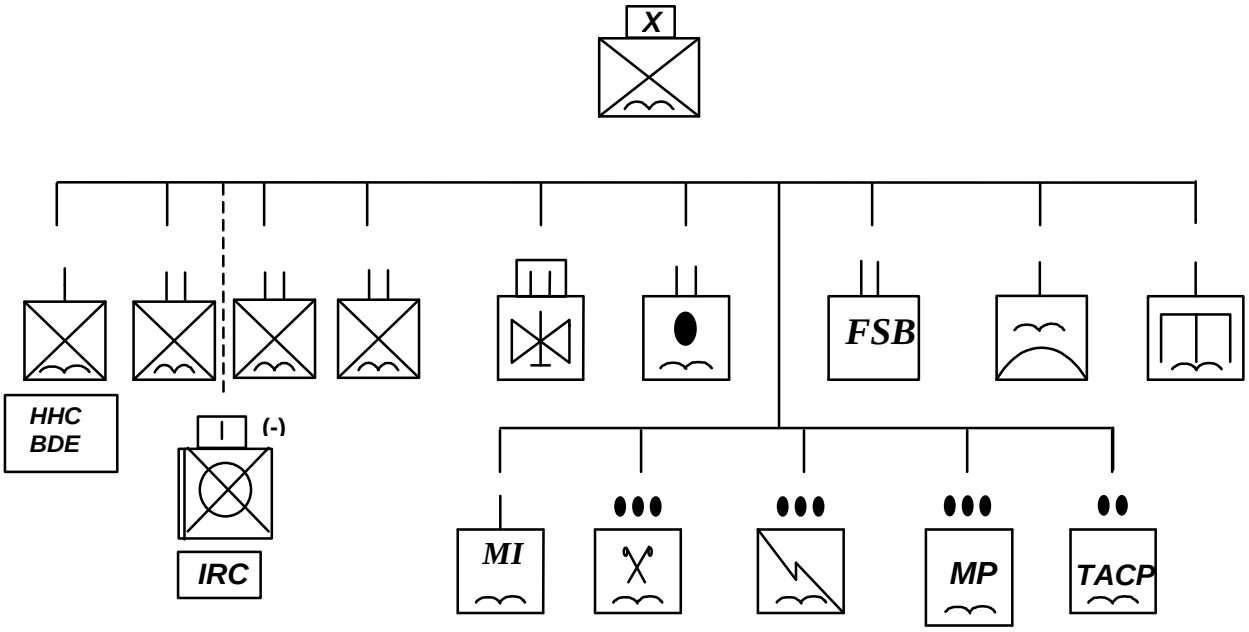

Figure 2. Division Ready Brigade

The Division Ready Brigade is a task-organized team built around a brigade headquarters and the three infantry battalions that are organic to the brigade. Additional units attached include an aviation task force that airlands in the Bravo Echelon, a direct support artillery battalion, a forward support battalion, an air defense battery, engineer company, military intelligence company, and platoons of chemical, signal, and military police. Each of the three infantry battalions consists of about forty-two officers and 630 men, but is organized into a larger task force, or Division Ready Force (DRF).

This force, like the brigade, contains the attachments required for combat. One infantry battalion is designated as the DRF One, and this battalion is the first to deploy in a crisis. Obviously, the other two battalions in the DRB are designated the DRF Two and DRF Three. Upon notification, they can very quickly recall paratroopers, issue equipment, conduct rapid troop leading procedures, and move to the airfield for deployment. Within the 82nd Airborne Division, the battalion that would be last to deploy is designated as the DRF Nine. This battalion assists the Division Ready Brigade during an alert. The DRF One is prepared to take-off within eighteen hours of notification, and this is routinely practiced within the 82nd Airborne Division. The DRF One's equipment is prepared to deploy before the unit assumes the responsibility for DRF. An infantry battalion headquarters serves as the command and control for the task force, and the typical attachments are depicted below:

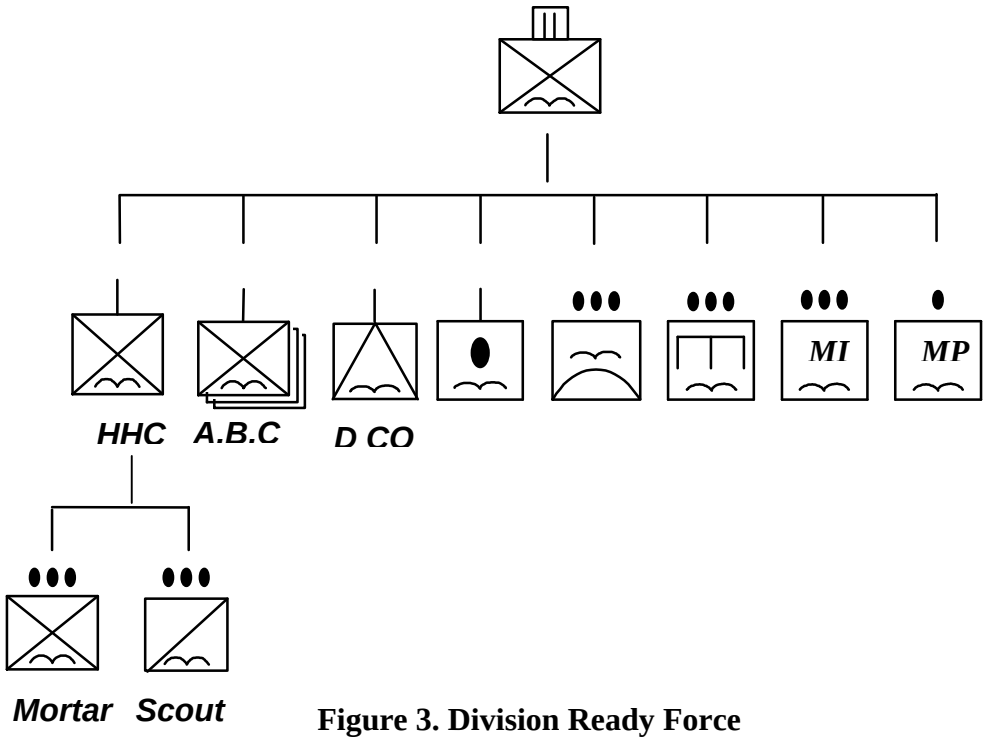

Figure 3. Division Ready Force

A closer look at a Division Ready Brigade as it currently exists, will be the foundation from which improvements can decrease the number of deployment aircraft. The DRB consists of 3,140 paratroopers from a brigade headquarters, three infantry battalions, and the attachments required for combat. This standard package includes an aviation task force of one UH-60L Blackhawk helicopter for command and control and twelve more for air assaults, medical evacuation, and resupply. Sixteen OH-58D Kiowa Warrior helicopters provide helicopter close air support. The anit-armor companies in each battalion each have twenty TOW systems mounted on HMMWVs. The DRB fields fifty-eight Javelin anti-armor missiles, twelve Avenger air defense systems, eight Stinger ground-to-air missiles and fifty-one Mark 19 automatic grenade launchers. Indirect fire support consists of two 60mm mortars in each infantry company (for a total of eighteen), four 81mm mortars in each infantry battalion (12 total), and eighteen M119 Howitzers from a direct support artillery battalion. In addition to these combat multipliers, the DRB has the attached units mentioned above.[27]

The 82nd Airborne Division lists the following Mission Essential Tasks (METL) in the last Quarterly Training Guidance memorandum:

- Alert, Marshal and Deploy Within 18 Hours Notice
- Conduct an Airborne Assault to Seize an Airfield
- Secure a Lodgment
- Conduct Offensive Operations
- Sustain the Division
- Command and Control the Division
- Protect the Force

[27] Eighty Second Airborne Division, "Organization and Capabilities Guide," *Fifth Edition* (April 1999), II, 11, 12.

To gain a better understanding of how the Commanding General envisions his mission, the following statement is published in the Quarterly Training Guidance:

> Expect short notice, rapid deployment into a forcible entry parachute assault and subsequent operations in an immature theater of operations. Based on this, 24 hours a day, 365 days a year we must be capable of:
>
> Rapid and organized marshalling, outload, and deployment,
>
> Parachute assault to seize an airfield and/or key facilities and secure a lodgment,
>
> Rapid assault of objectives in a night, MOUT environment under varying rules of engagement and with the presence of numerous noncombatants,
>
> Movement from the airhead to subsequent objectives by foot, helicopter, or vehicle to perform follow-on missions,
>
> Subsequent establishment of organized and protected bases from which longer term operations in theater can be developed and launched.[28]

Clearly, the Commanding General sees a Strategic Brigade Airdrop mission, with little or no notice to be of primary importance. The topic of this monograph is linked with most of the missions listed in the METL. How does the DRB deploy, and why are so many sorties required to conduct a Strategic Brigade Airdrop?

Moving Airborne Forces with Strategic Airlift

United States Army airborne forces, namely the 82nd Airborne Division, require a considerable amount of airlift to deploy. The large quantity of vehicles and the space they require in aircraft is the primary reason. The Logistics Handbook for Strategic Mobility Planning contains two models for estimated strategic airlift to deploy the unit. A mix of C-141s and C-17s would require 1,010 C-141s and another seventy-nine C-17s.

[28] Eighty Second Airborne Division, Assistant Chief of Staff, G3, "Quarterly Training Guidance, 2nd QTR FY 01," 1,2.

This quantity would move the equipment and 4,430 of the paratroopers. An additional 8,719 paratroopers would still require transportation. A total of 1,009 C-141s and forty-seven C-5s move the unit's equipment and 4,516 paratroopers, leaving another 8,633 to deploy. This is a huge amount of airlift, mostly because of the bulk of wheeled vehicles.[29]

Obviously, the DRB is configured based on the mission at hand, but for the sake of discussion, the DRB-Medium will be used. The DRB-Medium is the standard package upon which the Strategic Brigade Airdrop is planned, and requires ninety-six C-17s to deploy. The first echelon, called Alpha, is entirely airdropped and consists of forty-eight C-17s. Twenty-four C-17s contain paratroopers and the other twenty-four have vehicles and equipment. The second echelon, Bravo, airlands forty-eight C-17s with additional vehicles, helicopters, supply pallets, more paratroopers and the Initial Ready Company from the 3rd Infantry Division.[30]

The Initial Ready Company is part of this force. The IRC consists of four M1 tanks, four M2 Bradley Fighting Vehicles, and two M113 Armored Personnel Carriers. Supporting this force are three HEMTT trucks, three HMMWVs, a forklift, and an M88 recovery vehicle.[31] Unfortunately, none of these vehicles are airdrop-capable. Therefore, the Alpha Echelon is without any mechanized support until the Bravo Echelon can safely airland, unload, and deploy.[32] The IRC fills a void left by the deactivation of a light armor battalion that provided a limited capability against heavy forces.

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[29] Military Traffic Management Command Transportation Engineering Agency, *Logistics Handbook for Strategic Mobility Planning* (Newport News, VA: MTMCTEA, 1994), 80-81.
[30] Kasberg, "Strategic Brigade Airdrop," 7.
[31] Division, *Capabilities*, B-5.
[32] Wunderle, "Forced In," 2.

Vehicles in the 82nd Airborne Division

According to the Military Traffic Management Command Transportation Agency's Deployment Planning Guide, an airborne division contains 4,792 total vehicles. This figure includes towed items, or trailers. Of the total number of vehicles, 2,861 are self-propelled, with the greatest density in the support command--583. By comparison, an armored division has 3,752 wheeled vehicles, so an airborne division as currently configured is really not very "light."[33] The following chart shows the quantity of HMMWVs and FMTVs in each of the units that are part of the Division Ready Brigade. This data was compiled from the 82nd Airborne Division Unit Equipment List:

	BDE HHC	IN BNs	ARTY BN	MI CO	CHEM PLT	SIG PLT	MP PLT	ADA CO	FSB	ENG CO	AVN
HMMWVs	18	63	54	24	7	25	7	23	65	20	10
FMTV	4	16	10	1	4			3	30	2	9

Figure 4. Vehicle Quantities Within DRB Units[34]

Major David A. Kasberg, United States Air Force, recently completed a research project for the Air Command and Staff College that critiques the current ability to conduct a Strategic Brigade Airdrop. His paper, "From Paper to Practice: Making Strategic Brigade Airdrop a Credible Force Option," explores what support is required to conduct a Strategic Brigade Airdrop. His paper uses the following planning factors to show the major items of equipment and personnel breakdown between the Alpha and Bravo Echelons:

[33] Military Traffic Management Command Transportation Engineering Agency, *Deployment Planning Guide: Transportation Assets Required for Deployment* (Newport News, VA: MTMCTEA, 1997), A-2, A-4.
[34] Eighty-Second Airborne Division, "AUEL Report: Unit Equipment List," (January 2001), 1-231.

Alpha Echelon	Bravo Echelon
2448 Troops	843 Troops
108 Wheeled Vehicles	179 Wheeled Vehicles
26 CDS Bundles	23 Pallets
18 Howitzers	16 OH5D Scout Helos
12 Engineer Repair Packages	12 UH60L Blackhawks Helos
6 Supply Platforms	4 M1A1 Abrams Tanks
	4 M2 Bradley Fighting Vehicles
	2 M113 Armored Personnel Carriers

Figure 5. The Echelons of a Strategic Brigade Airdrop

The delivery of the combat power shown above during the conduct of a Strategic Brigade is fraught with significant challenges. Reducing the number of sorties required to deploy the Division Ready Brigade would mitigate these challenges. The C-17 was designed and built to replace the aging C-141 undergoing retirement. Concerns about the reliability of the C-5 and the limited range of the C-130 required the Air Force to design a new aircraft. The C-17 can airdrop all Army requirements, refuel in the air, and operate on semi-prepared runways. A semi-prepared runway has a dirt, gravel, or cement-stabilized surface.[35]

Assembling the required number of C-17s is a complex operation. Major Kasberg points out:

> Allowing time for required command and control actions (dissemination of the strategic warning order, Presidential Reserve Call-Up (PRC), recall personnel from leave, contact of crews in the system, identification of augmented airdrop crews) and maintenance/weather/air traffic control/loading delays, AMC should be able to launch a full SBA from either coast within 72 hours of strategic warning.[36]

[35] Kasberg, "Strategic Brigade Airdrop," 6.
[36] Ibid., 12.

On a typical day, around twenty-four C-17s in three locations are available in the contiguous United States. Upon warning, these aircraft fly to Pope Air Force Base, NC and pick-up the vehicles and equipment from the Alpha Echelon. These aircraft then reposition to the East or West Coast to make room for more aircraft. The elapsed time for this phase is twenty-five to thirty hours. The next twenty-four C-17s arrive at Pope Air Force Base and load paratroopers from the Division Ready Brigade. These aircraft would most likely launch from Pope Air Force Base and fly directly to the drop zone. At this point, up to forty-six hours may have elapsed since warning.

The Bravo Echelon includes eleven aircraft that fly to either Lawson Army Airfield or Hunter Army Airfield to pick-up the Initial Ready Company. The remainder of aircraft for the Bravo Echelon must wait for the aircraft with paratroopers to depart Pope Air Force Base so room is available for them to land and upload the Bravo Echelon. Many of the crews also need crew rest after deploying to the United States from all over the world. These aircraft then land at Pope Air Force Base on twenty-five minute intervals, depart for the objective or reposition, and wait. The realistic time for all of this is seventy-two hours.[37]

An obvious threat to the success of a Strategic Brigade Airdrop is enemy air defense systems. Transportation aircraft are very vulnerable to surface- and air-to-air weapons. These airplanes fly slowly to begin with, and must reduce airspeed further over the drop zone so paratroopers can safely exit the aircraft. Since likely drop zones are on key terrain or near key terrain, the air defense efforts in these areas are likely to be extensive. The design of transportation aircraft and the loads they carry, drastically

[37] Ibid., 13.

reduce their ability to conduct maneuver when acquired or engaged by air defense systems. A Strategic Brigade Airdrop faces three phases of air defense threat. The first phase is the long deployment from the United States to the borders of the country that contains the objective drop zone. Next, the formation must pass through the country to the location of the airdrop. Finally the formation of empty and more maneuverable aircraft deploys home along the safest route. Fortunately, few nations have the capability to mount a significant long-range air defense. Therefore, the greatest threat is from the border into the objective during the second phase, and perhaps the initial leg of the redeployment.

One unclassified study of the C-17's ability to fly through these phases determined that the C-17 could routinely operate in a "category one threat environment." A category one-threat environment is defined as small arms fire, optically aimed anti-aircraft artillery (.50 caliber equivalent), and a limited number of man-portable surface-to-air missiles (SAMS). Category two threats include the category one threats and add early-generation surface-to-air missiles, radar-directed anti-aircraft artillery and aircraft without advanced all-weather and offensive capability. A C-17 is rated as likely to be "occasionally" successful in an environment that contains these types of threats. A C-17 will infrequently be successful against a category three threat, which is defined as consisting of the following:

- Category one threats
- Category two threats
- Advanced generation surface-to-air missiles
- Aircraft with look down-shoot down capability
- Air-to-air weapons employed by helicopters

- Directed energy weapons[38]

Deploying the Division Ready Brigade with fewer aircraft would reduce the signature created by a huge formation of aircraft. It remains very difficult to reduce signature by any other means, since enhancements to survivability typically degrade the operational airlift capability of the aircraft. Transport aircraft engines must generate remarkable amounts of thrust to lift the heavy loads inside the cargo bay and still maintain fuel efficiency. The majority of thrust is created through the large intake fans in the engines, and these engines require time to "spool up," or increase thrust quickly to respond to an air defense threat.[39]

[38] Major Rowayne A. Schatz, "Airborne Forcible Entry Operations: USAF Airlift Requirements," (Master of Military Science Thesis, U.S. Army Command and General Staff College, 1994), 83-86.
[39] Alvin, *Paradigm, 28.*

CHAPTER 4

FINDING A BETTER SOLUTION

It is better to be on hand with ten men, than absent with ten thousand.

—Tamerlane

The 82nd Airborne Division would benefit significantly if fewer sorties were required to deploy to a crisis. The key, however, is to reduce sorties while keeping the same amount of combat power or significantly increasing combat power while keeping the sortie count the same. One possible solution is to replace the HMMWV with a vehicle that can "stack;" a vehicle built in such a manner as to allow another vehicle to drive on top:

Figure 6. The Flyer "Stacks."

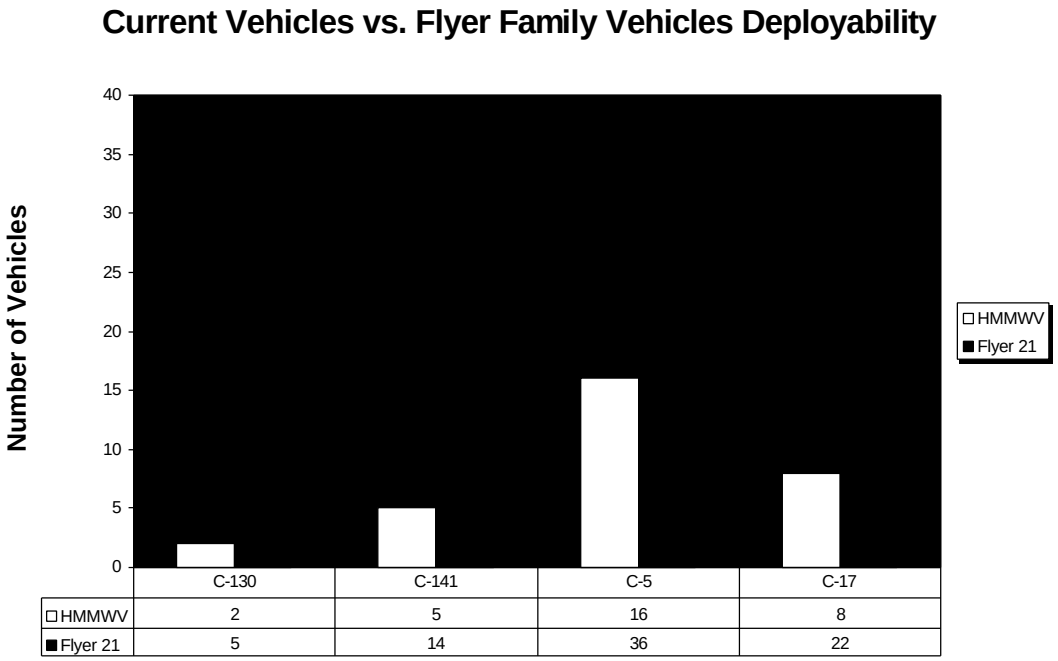
One such vehicle is called the Flyer. It has similar specifications to the HMMWV, but the roll cage folds down, which allows another Flyer to drive on top. This vehicle is currently used or tested by Israel, Singapore, and United States Air Force Special Operations Forces and Marine Corps. A Flyer can transport an entire infantry squad.[40]

One of the key design features of this vehicle is the triangulated tubular space frame that creates a very low profile, and contributes to the 3:1 deployment advantage over the HMMWV. While some vehicles rely on the roll cage to provide needed structural support, the Flyer is designed with the structural members below the floor. This feature improves access to the vehicle for personnel and equipment, and lowers the overall weight of the vehicle. This structural soundness gives the Flyer the highest payload-to-weight of any comparable vehicle, and does not lower the mobility or performance of the vehicle.[41]

The greatest advantage that the Flyer can offer the 82nd Airborne Division is the ability to maximize space. Current United States Army vehicles were designed around the "Cold War." They are heavy and bulky—certainly not optimized for modern force projection needs in which fewer personnel and less equipment is forward deployed. The result is limited strategic and operational deployability--and maneuver at the tactical level. Additionally, the current fleet of wheeled vehicles consists of dissimilar systems.[42] The Flyer has common components and comes in several sizes and configurations with similar specifications to wheeled vehicles currently in use, at a fraction of the weight and bulk. For instance, the HMMWV has a curb weight of 6,000 pounds, and the comparable

[40] Parker, interview by DeLancey, January 2001.
[41] Flyer Technologies, *Flyer ITV: Ultimate Tactical Mobility* (Marina Del Ray, CA: Flyer Group, 2000), 7.
[42] Flyer Technologies, *A "New" Approach to Wheeled Vehicle Systems for Rapid Deployment Forces (RDF) for the 21st Century* (Marina Del Ray, CA: Flyer Group, 1998), 8.

Flyer system is only 3,000 pounds. The weight savings among light tactical trucks is even more dramatic. For instance, the 2½ ton payload LMTV has a curb weight of 16,000 pounds compared to the Flyer version that is only 5,000 pounds. Similarly, the five ton payload MTV has a curb weight of 19,000 to the Flyer version that is only 6,000 pounds. Both the reduced weight from the space frame design and the ability to stack these vehicles inside aircraft dramatically increases the utility of strategic airlift per sortie.[43]



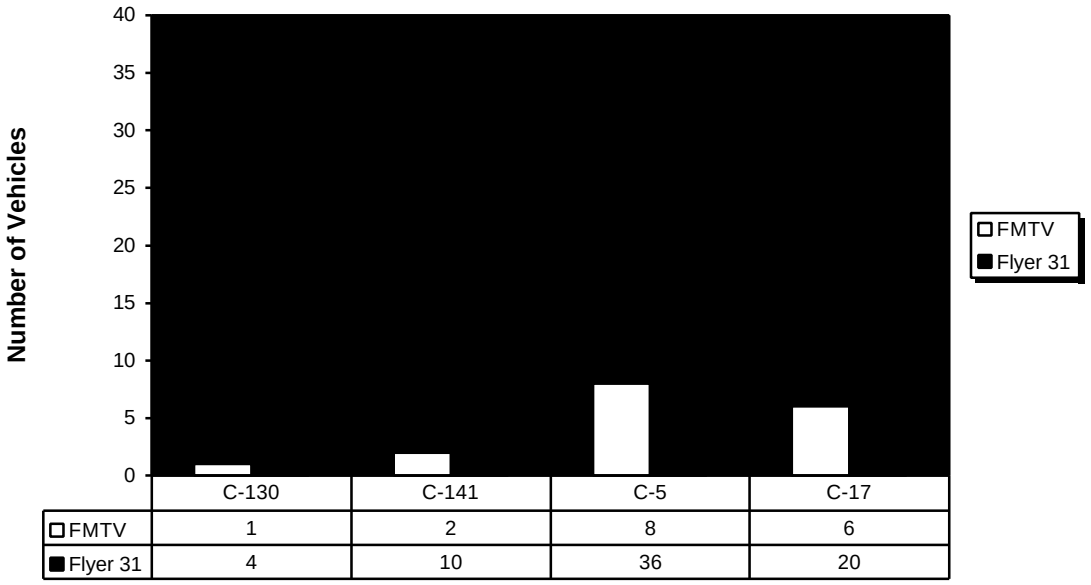
	C-130	C-141	C-5	C-17
HMMWV	2	5	16	8
Flyer 21	5	14	36	22

Table 1. Increased Strategic Deployability of the HMMWV Replacement

[43] Ibid,., 26.

As shown above, the Flyer's compact design and light weight offer a tremendous advantage over the HMMWV. A C-130 or C-5 can carry over twice as many Flyers. A greater advantage is gained in the C-141 and C-17 aircraft, which transport nearly three times as many Flyers.

Current Vehicles vs. Flyer Family Vehicles Deployability



	C-130	C-141	C-5	C-17
FMTV	1	2	8	6
Flyer 31	4	10	36	20

Table 2. Increased Strategic Deployability of the FMTV Replacement

Notice that the Flyer 31, designed to replace both the FMTV and the LMT, offers an even greater capability to deploy with fewer sorties. This comparison is difficult however, since detailed information on the bulks of individual loads would be needed to determine how many of the Flyer 31s would have loads small enough to still "stack." [44]

[44] Personal email correspondence with Bob Parker, dated 3/18/01.

An interesting potential of the Flyer is the ability transport large quantities with civilian aircraft. Some situations may offer a large, nearby secure airfield to land civilian transport aircraft. Up to forty-four Flyers can be stacked and loaded into a cargo-configured 747 aircraft. Special loading and unloading equipment might be needed for this type of transport. The large demand for airlift during a crisis makes the ability to utilize civilian transport aircraft lucrative. Once in theater, whether airdropped or airlanded, the Flyer would give the 82nd Airborne Division a significantly enhanced tactical mobility that can contribute to a greater combat power potential.

Tactical Mobility

The lower weight of the Flyer compared to the HMMWV makes the Flyer much more practical to slingload underneath Army helicopters. For instance, up to four Flyers could be transported by CH-47 Chinook helicopter.[45] The following chart compares the internal and external deployability of the Flyer. The ability to transport the Flyer compared to the HMMWV is greater than a factor of two. This has significant consequences in terms of potential combat power. Once the Alpha and Bravo Echelons are on the ground, air assault operations can rapidly expand a lodgment. The UH-60Ls that airland with the Bravo Echelon could conduct rapid air assault operations by slingloading the Flyers with the crews inside the helicopter. The Navy and Marine helicopters listed in the table could contribute to such an operation if within range to support. See below:

[45] Personal email correspondence with Bob Parker, dated 1/9/01.

Internal Payload	UH-60L	CH-47D	CH-46E	CH-53E
Flyer	N/A	2	1	2
HMMWV	N/A	1	0	1

Table 3. Internal Helicopter Load Comparison

External Payload	UH-60L	CH-47D	CH-46E	CH-53E
Flyer	2 or 3	3	1	3
HMMWV	1	2	0	1

Table 4. External Helicopter Load Comparison[46]

Doctrinally, a reconnaissance and security line is immediately established four to six kilometers from the drop zone that provides security for forces on the drop zone as they assemble and organize. This force initially screens, and then conducts a cover or guard mission. The Flyer could greatly assist in this mission. Field Manual 90-26 *Airborne Operations* states that, "Security in all directions is an overriding consideration early in any airborne operation, since an airhead is essentially a perimeter defense." Flyers airdropped in the Alpha Echelon could be allocated to reconnaissance and security forces

[46] Flyer, *Flyer*, 6.

for this mission.[47] Additionally, the flyer, which can be configured to carry an entire infantry squad, could be used to transport paratroopers to the most distant assault objectives during an airborne operation. These objectives, such as key intersections or surveillance locations, might be occupied twenty times more quickly than if the paratroopers conducted dismounted movement to these objectives.

[47] Department of the Army, *FM 90-26*, 3-7.

CHAPTER 5

INCREASED COMBAT POWER

> *Victory smiles upon those who anticipate the changes in the character of war, not upon those who wait to adapt themselves after the changes occur.*
>
> —Giulio Douhet

It is difficult to measure how substituting the Flyer for the current wheeled vehicles in the 82nd Airborne Division magnifies potential combat power. The increased combat power has a quantitative and qualitative nature. One analytical model to quantify combat power is from a paper titled, "Understanding and Developing Combat Power," written by Brigadier General (Retired) Huba Wass de Czege:

> Many of the key variables on the battlefield are unquantifiable and thus mathematical modes run the risk of biasing results in favor of the purely mathematical aspects of warfare. The author develops an analytical framework for understanding combat power and the process of generating it to win battles which borrows methodology from the social sciences.[48]

The goal in this chapter is to examine how substituting the Flyer equivalents to the HMMWV, the FMTV, and the LMT enhances the potential combat power of the 82nd Airborne Division. Wass de Czege defines combat power as, "that property of combat action which influences the outcome of the battle." His thought and study led him to the conclusion that the essence of combat power is maneuver, firepower, protection, and

[48] Huba Wass de Czege, "Understanding and Developing Combat Power," i.

leadership. Substitution of the Flyer increases each of these components, and one by an order of magnitude.

Wass de Czege considers maneuver as the dynamic element of combat. A force achieves a favorable maneuver effect through surprise, shock, positional advantage and momentum. The Flyer would significantly increase the maneuver effect of the Division Ready Brigade during a Strategic Brigade Airdrop in several ways. First, the reduction of sorties required to deploy might reduce the time needed to deploy the Division Ready Brigade by one or two days. This calculation becomes very complex, but replacing the 287 wheeled vehicles in the Division Ready Brigade-Medium with Flyer equivalents would cut the number of aircraft needed for vehicles by over half. With the same number of C-17s allocated for the Alpha Echelon (forty-eight), much more combat power could be shifted to the Alpha Echelon from the Bravo Echelon.

The Flyer also has the ability to influence the operational and tactical maneuver potential for the 82nd Airborne Division. The Division would have a much greater capability to conduct air assault operations with more combat power. By continuing to plan for ninety-six C-17s in a Strategic Brigade Airdrop, up to a battalion at a time could have the ability to move mounted to more distant assault objectives.

Firepower is the destructive force needed to realize the effects of maneuver.[49] The Flyer is fitted with a hydraulic mast that serves as a retractable (so the vehicle can stack) base for mounting weapon systems. All mounted weapon systems in the 82nd Airborne Division seem compatible with the Flyer, to include the caliber .50 machine gun, the 40mm grenade launcher and many weapons in stages of development. The Flyer seems

[49] Wass de Czege, "Combat Power," 8.

to offer about the same in terms of firepower than currently fielded vehicles in the 82nd Airborne Division.

Figure 7. The Flyer Weapon Mast[50]

General Wass de Czege defines protection as, "the shielding of the fighting potential of the force so that it can be applied at the decisive time and place."[51] The Flyer offers little in the way of ballistic protection. However, the HMMWVs as configured for the 82nd Airborne Division do not either. Ballistic "add-on" kits are possible, but would reduce the payload and probably could not be installed prior to transport. The Flyer has a greater capacity for protection than the HMMWV in the ability to move over difficult terrain quickly. Since it is smaller and has a lower profile than the HMMWV, it is more difficult to engage.[52]

Leadership, the most important component of combat power is defined by Wass de Czege as, "the component upon which all others depend. Leadership provides purpose, direction, and motivation in combat." Wass de Czege's paper points out that leaders

[50] Flyer, *Rapid Deployment*, 43.
[51] Wass de Czege, "Combat Power," 9.
[52] Personal email correspondence with Bob Parker, dated 1/9/01.

function though personal interaction with their soldiers and command and control systems.[53] The Flyer offers a distinct advantage in terms of this component. Since so many more Flyers can be transported with the same amount of lift than the HMMWV, leaders down to platoon might utilize the Flyer as a command and control platform.

These factors combine to significantly increase the potential combat power of the Division Ready Brigade. Depending on the type of mission, either the current amount of sortie allocation could deliver a much more potent DRB, or the same amount of potential DRB combat power could use far fewer aircraft to deploy.

[53] Wass de Czege, "Combat Power," 10.

CHAPTER 6

CONCLUSION

The Army is transforming without the 82nd Airborne Division. The 82nd Airborne Division must retain the forcible entry capability that can meet tomorrow's challenges of strategic deployability. By substituting a vehicle that is currently in use around the world, the 82nd can be ready to conduct a forcible entry with the IBCT following closely behind. Fewer sorties and significantly more combat power potential are possible, and critical to the United State's ability to conduct force projection. The HMMWV is not suited to the strategic deployability needs of the forcible entry requirements, and should be replaced by a different vehicle—perhaps the Flyer, or a vehicle with similar characteristics. The Flyer may have application in the IBCT as well.

Significant Congressional interest currently backs the Army efforts to "Transform." This interest will eventually fade, and funding for initiatives such as a new set of vehicles for the 82nd Airborne Division will be increasingly difficult. Now is the time to consider this important upgrade to the capability of America's Guard of Honor—the 82nd Airborne Division.

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