

# **Army Aviation as a Branch, Eighteen Years After the Decision**

**A MONOGRAPH  
BY**

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## *Preface*

Army aviation became a separate branch of the United States Army on 12 April 1983. The decision to create a separate branch was a significant one with dramatic implications on the development of Army aviation and the United States Army. As an Aviation officer, I was interested in the reasons for creating the separated branch. What was the history of Army aviation? Why did the Department of the Army determine that a branch was warranted? What were the arguments in favor of a branch? Against? Has the decision to create a branch proven to be a good one over the last 18 years? These questions were the genesis and foundation of this monograph. I hope that the monograph will be useful to anyone interested in the road that Army aviation has traveled to get to this point and the road that it will follow in the future.

I would like to give special thanks to Dr. James W. Williams, the Aviation Branch Historian at Fort Rucker, AL. He provided incite, advice, documents, and points of contact that were instrumental to my study. Without his tireless efforts I would have been left with very little information upon which to base this monograph. I would also like to thank the librarian staff of the Combined Arms Research Library (CARL) at Fort Leavenworth. They are consummate professionals that gave me all the assistance within their power.

Any mistakes or inaccuracies in this monograph are entirely my fault and exist in spite of the assistance rendered by the personnel listed above.

## *Abstract*

### **ARMY AVIATION AS A BRANCH, EIGHTEEN YEARS AFTER THE DECISION by Maj Frank W. Tate, USA, 53 Pages.**

This monograph gives the historical background to the creation of Army aviation as a separate branch of the U.S. Army. The branch was created in April of 1983 after a series of exhaustive studies and numerous general officer debates. Ultimately, the decision to create the branch was made on the basis of training, doctrine, and organizational shortcomings that were systematically created by the absence of a branch. This decision was not without controversy and detractors.

Many senior officers feared that pure aviation officers would lose touch with the demands of the ground fight and move away from the close fight to pursue other missions as the Army Air Corps had done. There was also a fear that an aviation branch would make a nice neat package for takeover by the Air Force.

A review of the past eighteen years of Army aviation reveals that both proponents and opponents of the branch were correct. Army aviation has largely fixed or at least improved all of the systematic problems that lead to its creation. Conversely, Army aviation has in fact moved away from the close fight in the past 20 years in pursuit of deep battle glories and status as a maneuver branch on par with Infantry and Armor. Aviation officers have lost some of their understanding of the ground fight and therefore are often reluctant to participate in it directly as a member of the combined arms team.

Army aviation as a branch has largely been a success story but after eighteen years it is time for another detailed study of the branch to determine shortcomings and make changes to correct them. Dramatic changes such as assessing officers into aviation only after they have served four years in another combat arms branch (similar to Special Forces) should be considered. Aviation officers must regain their understanding and appreciation of the ground fight. They must be soldiers first and aviators second.

## **Disclaimer**

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# Part 1

## Introduction

*An Aviation Branch is fundamental if the esprit, professional management, and cohesion necessary for a combat arm is to materialize.*

—Army Aviation Development Plan, Sep 82<sup>1</sup>

As the Army enters a period of massive transformation to face the strategic challenges of the future it is important to review the decisions that led to the current branch structure in order to determine the best structure for the objective force.

The history of Army aviation is a long and twisted road from a humble beginning with balloon based artillery spotting, through the Second World War and the creation of the Air Force, to the airmobile divisions of Vietnam, and ultimately to the creation of a helicopter based aviation branch in 1983. Through all its changes, Army aviation has sought to meet the institutional, operational, and tactical needs of the United States Army. The decision to create a separate branch for aviation in 1983 was based on the growing importance of attack helicopters in United States Army doctrine and a realization that the growing complexity of modern aircraft would require officers to devote their attention more fully to the mastery of aerial combat. The promises of the new aviation branch included improved doctrine, training, combat skills, organization, leader development and career opportunity. Opponents of the decision argued that commissioned officers would lose touch with their ground maneuver counterparts and become nothing more than a separate Air Force that pursued its

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<sup>1</sup> U.S. Army Aviation Center, "Army Aviation Development Plan (AADP)," (Fort Rucker, AL, Army Aviation Center, Sept, 1982), 4-28

own agenda rather than focusing on support of the ground fight. Nearly 20 years have passed since the creation of Army aviation as a branch and very little critical analysis has been done to evaluate the effectiveness and wisdom of the decision.

The United States Army is struggling to transform itself to meet the strategic challenges of the modern world. This struggle is a catalyst for thought and review of the most fundamental organizations and equipment in the Army. As part of that review it is critically important to reaffirm or change the role of Army aviation in the objective force of the future. The best place to begin that review is with the 1983 creation of the Army aviation branch. What is the history of Army aviation and how did it come to be a branch?



## Part 2

### Early History of Army Aviation

June 6, 1942, the day the War Department authorized light airplanes to artillery battalions, is the official birthday of Army aviation.<sup>2</sup> United States Army aviation heritage, however, dates back to the 1860s and Professor Thaddeus S.C. Lowe, a balloon enthusiast that convinced President Lincoln that balloons could be an effective means of reconnaissance on the battlefield. Near the end of the American Civil War, Secretary of War, Edwin M. Stanton directed the formation of the Balloon Corps and Army aviation was modestly born.<sup>3</sup> The next significant advance came on December 17, 1903 when the Wright brothers flew their airplane at Kitty Hawk on the outer banks of North Carolina. It did not take long for the Army to take notice of this promising new machine. In August 1907 Brig Gen James Allen, Chief of Signal Corps established the Aeronautical division of the Signal Corps.<sup>4</sup> Airplane technologies advanced very quickly and by the First World War airplanes were playing a significant role in combat operations.

The first rotary wing flight took place in 1907 when Paul Cornu, a Frenchman, managed to get his "flying bicycle" off the ground for a short but notable flight. Cornu had an imperfect understanding of the aerodynamic and physical forces affecting rotary winged flight. He failed to compensate for rotor induced torque which rendered the craft virtually uncontrollable.<sup>5</sup> For many years to come the helicopter would lag behind the airplane in advancement because of extreme technical difficulties and the required design complexity.

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<sup>2</sup> S.B. Sightlen, memorandum for record (Fort McPherson, Ga.: Department of the Army, Office of the Chief of Military History, 3 Jan, 1957), Copy of this memorandum found on Aviation history CD prepared by Aviation Branch Historian's office.

<sup>3</sup> Richard P. Jr. Weinert, *A History of Army Aviation - 1950-1962*, ED. Canedy, Susan (Fort Monroe, Va.: Office of the Command Historian, United States Training and Doctrine Command, 1991). 1.

<sup>4</sup> William E. Butterworth, *Flying Army: The Modern Air Arm of the U.S. Army* (Garden City, New York: Doubleday & Company, 1971). 19.

In 1919 aircraft designer Igor Sikorsky arrived in the United States after fleeing Marxist Russia. He founded the Sikorsky Aero Engineering Corporation and began to tackle the problems of rotary wing flight. The Army first noticed his work in the 1920s, however, it was not until he flew his V-300 in 1941 that the Army showed serious interest. By the summer of 1942 Sikorsky's design had mastered most of the complex problems of rotary wing flight.<sup>6</sup> Sikorsky himself said, "It would be right to state that in the summer of 1942, the helicopter became a reality in the United States. From then on, it became a question of improving the details."<sup>7</sup> Improving the details would prove to be a long process. Sikorski personally delivered the Army's first helicopter, an XR-4, in April of 1942.

During World War II (WW II) the helicopter was considered an unreliable and unproven technology and ultimately, the United States Army purchased only 300.<sup>8</sup> The Japanese, Germans, and the British also experimented with helicopters but none of these aircraft saw extensive combat duty. The progress of helicopters had been painfully slow compared to the advancement of fixed wing considering that the first rotary wing flight was only four years after the Wright brothers' flight.<sup>9</sup>

The airplane had emerged as one of the most significant military platforms on the modern battlefield. The Second World War saw airplanes used for everything from Strategic bombing and aerial attack to aerial reconnaissance and fleet protection. At the outset of WWII American airmen were in agreement with the Italian Giulio Douhet and the British airpower theorists of the day.<sup>10</sup> Douhet argued that the air arm was revolutionary in nature not evolutionary. He saw aircraft as the ultimate offensive weapon and he believed airpower was the most significant

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<sup>5</sup> James W. Bradin, *From Hot Air to Hellfire: Army Attack Aviation* (Presidio: Presidio Press, 1994), 57.

<sup>6</sup> Butterworth, *Flying Army*, 29.

<sup>7</sup> Butterworth, *Flying Army*, 49.

<sup>8</sup> Bradin, *From Hot Air to Hellfire*, 57, 58.

<sup>9</sup> John Everett-Heath, *Helicopters in Combat: The First Fifty Years* (New York: Arms and Armour, 1992), 14.

element of modern warfare.<sup>11</sup> The British further emphasized the importance of strategic bombing over everything else.<sup>12</sup> By the end of the Second World War it was clear that the third dimension of conflict, the air, was at least equally important to the land and sea. It was increasingly difficult, if not impossible, to win on the land or sea if one did not at least maintain air parity.

Throughout WWII, control of air assets remained with air commanders. This was unpopular with ground commanders such as General Patton in North Africa who felt he was not getting the support he needed. These commanders felt that the Army was being “orphaned” by the Air Force.<sup>13</sup> This was the beginning of a struggle over close air support that eventually would result in the Army developing attack helicopters.

The Army did maintain control of a small number of light fixed wing aircraft as an organic asset in the field artillery. The Army had demonstrated great success with the use of small spotter aircraft during the Tennessee Maneuvers in June of 1941. In June of 1942 the War department authorized the Field artillery to maintain a small fleet of spotter planes separate from the Army Air Corps.<sup>14</sup> These planes and the men who flew them would build the foundation for what would eventually become the Army aviation branch.

### ***From WWII Through Korea***

The end of WW II brought significant changes in the structure of the United States military. The advent of nuclear weapons and the emergence of airpower resulted in a significant shift in American defense priorities. In 1947 Congress passed the National Defense Act creating a separate Air Force with equal status to the Army and Navy.<sup>15</sup> The National Defense Act gave

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<sup>10</sup> Bradin, *From Hot Air to Hellfire*, 67-70.

<sup>11</sup> Giulio Douhet, *The Command of the Air* (1921), 32.

<sup>12</sup> Bradin, *From Hot Air to Hellfire*, 67-70.

<sup>13</sup> Bradin, *From Hot Air to Hellfire*, 67-70.

<sup>14</sup> Lepore, *Above the Best*.

<sup>15</sup> Everett-Heath, *Helicopters in Combat*, 16.

primary responsibility for the air to the newly created Air Force. The Army lost most of its dedicated air assets and the struggle for air support took on a new significance. The Army was allowed to maintain its rotary wing fleet and a few fixed wing aircraft with certain restrictions. Helicopters were not to exceed 4000lbs and their roles were restricted to observation, route recon, liaison, aerial photography and limited resupply within the combat zone.<sup>16</sup>

The National Defense Act of 1947 and the subsequent Key West Agreement signed on April 21, 1948 set forth clear obligations for both the Army and the Air Force regarding aircraft. For the Air Force the mandate was to, "furnish close combat and logistical air support to the Army, to include airlift, support, and resupply of airborne operations, aerial photography, tactical reconnaissance, and interdiction of enemy land power and communications." Army aviation 's role was spelled out as, "expediting and facilitating the conduct of operations on land; improving mobility, command, control, and logistics support of Army Forces; and facilitating greater battlefield dispersion and maneuverability under conditions of atomic warfare." Army leaders saw the Key West agreement as providing a loophole that allowed them to fill the voids created by a lack of Air Force support.<sup>17</sup>

From WWII through the Korean War and on into the 1960s the Air Force leadership considered itself exclusively responsible for the close air support of Army troops. Air Force control of all Close Air Support (CAS) weapons was sanctioned by high-level civilian policy makers and accepted by much of the Army leadership as well. After gaining its autonomy, the Air Force continually stressed bigger, higher flying, longer range, faster aircraft. This passion for speed is significant in that it focused the attention of the Air Force away from helicopters and other low/slow aircraft in favor of big bombers and fast air superiority fighters. This pushed the

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<sup>16</sup> Everett-Heath, *Helicopters in Combat*, 16.

<sup>17</sup> Bradin, *From Hot Air to Hellfire*, 75.

Air Force further away from the close fight and the Army.<sup>18</sup> The organizational struggle for control of CAS was fueled by the distrust some Army officers had of the Air Force's intentions to actually provide the support needed.<sup>19</sup> The Air Force was "above it all" in the eyes of the Army. They had abandoned the battlefield in favor of the "wild blue yonder," leaving the Army naked and unsupported.<sup>20</sup>

Throughout the Korean War, there was disagreement as to the effectiveness of Air Force support of the Army. The Army accused the Air Force of deserting it while the Air Force contended that the Army was encroaching on Air Force autonomy over air power.<sup>21</sup> Whatever the truth, the Army exited Korea more determined than ever to secure its own means of providing aviation support. This was a clear violation of existing agreements but the Army was not willing to sacrifice air support simply because the Air Force did not see supporting the Army as a priority.

While the National Defense Act of 1947 stripped the Army of most of its fixed winged aircraft, it proved to be a windfall for helicopter development. As the Air Force pursued its love of anything fast and/or nuclear, the Army stepped up its research in rotary wing and small aircraft.<sup>22</sup> During the Korean Conflict the Army made significant advancements in its helicopter fleet and helicopter became an essential piece of military hardware. The success of the helicopter in the casualty evacuation role tended to obscure its potential as an attack platform. With 600 helicopters deployed, more than 23,000 casualties were evacuated.<sup>23</sup> The Army wanted to significantly expand its helicopter fleet but the Air Force (acting as purchasing agent for the

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<sup>18</sup> Fredric A. Bergerson, *The Army Gets an Air Force: Tactics of Insurgent Bureaucratic Politics* (Baltimore: The Johns Hopkins University Press, 1980), 63.

<sup>19</sup> Bergerson, *The Army Gets an Air Force*, 5.

<sup>20</sup> Bergerson, *The Army Gets an Air Force*, 63.

<sup>21</sup> Bergerson, *The Army Gets an Air Force*, 53.

<sup>22</sup> Bradin, *From Hot Air to Hellfire*, 61.

<sup>23</sup> Everett-Heath, *Helicopters in Combat*, 18.

Army) stubbornly resisted.<sup>24</sup> By 1953 when the truce in Korea was signed the Army fully realized the potential of the helicopter and they broke free from the Air Force and began buying their own helicopters. This helicopter force would be the basis for the United States fight in Vietnam.<sup>25</sup>

After the Korean War, President Eisenhower subscribed to the doctrine of massive retaliation to deal with nuclear age warfare. He believed that the roles of military organizations, especially the Army, had been irrevocably changed. He believed that air power, strategic air power in particular, was the key to deterrence. The bombers of Strategic Air Command (SAC) were the preeminent arm of the American military.<sup>26</sup> Eisenhower did not believe that major military operations such as seen in WWII were likely to occur again in the future. Thus, the role and the prestige of the Army were in question. The Air Force did not focus its attention on CAS systems because support of the Army was not important.<sup>27</sup>

In an effort to remain relevant, the Army spent billions on developing a nuclear arsenal. Ironically, after building these weapons, thinking officers began to realize that they could serve no purpose other than to deter Soviet use of their own tactical nuclear capability. This led to the realization that the Army would have to be ready to fight in conventional ways. Such ideas put the Army in direct conflict with the administration's policies that relied on nuclear weapons as an absolute deterrent to war. The Pentomic organization of the Army was not at all well suited for the conventional war that was destined to come.<sup>28</sup> The Army abandoned the Pentomic design and began experimenting with new structures that would better prepare the force for a conventional land war. American involvement in Vietnam would soon illustrate that the Army had been right to reform.

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<sup>24</sup> Bradin, *From Hot Air to Hellfire*, 77.

<sup>25</sup> Weinert, *A History of Army Aviation - 1950-1962*, 39-41.

<sup>26</sup> A.J. Bacevich, *The Pentomic Era, The U.S. Army between Korea and Vietnam* (Washington, D.C.: National Defence University Press, 1986), 15.

<sup>27</sup> Bacevich, *The Pentomic Era*, 16.

<sup>28</sup> Bacevich, *The Pentomic Era*, 140.

## ***The Birth of Army Attack Aviation***

In 1942 the Army planned the first test of firing a 20 MM cannon from the nose of a helicopter. The experiment died due to limited success and lack of enthusiasm. Three years later a similar test with a 70mm recoilless rifle was conducted at Fort Bragg. The resulting damage to the helicopter was disheartening to supporters of armed helicopters.<sup>29</sup> Helicopter technology had not advanced enough to support weapons systems. After the Korean War the Army again attempted to arm their helicopters. Army aviation proponents argued with conviction that since the Air Force was disinterested, the Army would have to develop its own close air support.<sup>30</sup>

In the mid 1950s, Maj. Gen. James M. Gavin led a concerted American effort to develop doctrine, tactics techniques and procedures (TTPs) and theory on the employment of helicopters in warfare. He wrote an article in the April 1954 edition of Harper's Magazine entitled, "Cavalry, and I don't Mean Horses!" in which he analyzed some aspects of the Korean War. He wrote, 'Where was the cavalry? ... And I don't mean horses. I mean helicopters and light aircraft, to lift soldiers armed with automatic weapons and hand carried light anti-tank weapons, and also lightweight recon vehicles, mounting anti-tank weapons the equal or better to the Russian T-34s...If ever in the history of our armed forces there was a need for the cavalry arm - airlifted in light planes, helicopters and assault aircraft - this was it.'<sup>31</sup>

In 1953 the United States Army started its first aviation school at Fort Sill, Oklahoma. It cited the failure of the Air Force to train pilots and maintainers on the skills needed to live and operate in the field near Army troops as the reason for running an Army school. The school moved to Camp Rucker, Alabama in 1954 because Fort Sill was too small for the artillery and aviation schools. Camp Rucker would serve as the home and focal point of Army aviation

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<sup>29</sup> Bradin, *From Hot Air to Hellfire*, 60.

<sup>30</sup> Bradin, *From Hot Air to Hellfire*, 93, 94.

<sup>31</sup> Everett-Heath, *Helicopters in Combat*, 23.

throughout the rest of its tumultuous development.<sup>32</sup> Brig. General Carl I. Hutton, commander of the new aviation school, would come to be known as the “Father of attack helicopters.”<sup>33</sup> He was dissatisfied with the slow development of Army aviation. He appreciated aviation’s strength in mobility, but he felt firepower was equally important and wanted helicopters that could provide both.

Using a 1956 training directive to develop concepts and organizations for mobile task force operations as an excuse, Gen. Hutton championed the development of aerial fighting platforms. Aware of the growing Warsaw Pact tank threat, he felt that attack helicopters could provide the best counter. General Hutton believed that attack helicopters could fill the void in close air support while avoiding the prohibition placed on the Army from arming airplanes. In addition to close support, the Army needed immediate support that the Air Force was often not prepared to give.<sup>34</sup> Once again, the helicopter seemed the ideal platform to fill the Army’s needs.

In 1957 Col Jay Vanderpool, Chief Combat Developments for the Aviation School, formed a small team that conducted numerous tests in arming helicopters. They enlisted the help of helicopter manufacturers for the first time. They faced resistance from inside and outside the Army. An unexpected boost to the development came when President John F. Kennedy and Secretary of Defense Robert S. McNamara witnessed one of Vanderpool's demonstrations. The president praised the Army's innovations and said they ought to have more "gunships." This comment ended all opposition.<sup>35</sup> In March 1957, as the result of work accomplished by Vanderpool's team, the Chief of Ordnance was ordered to develop machine gun installation kits for H-13, H-21, and H-34 helicopters. American industry took this as a cue to put their minds to the task of arming helicopters.<sup>36</sup> In 1958 the United States Army experimented with French SS-

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<sup>32</sup> Lepore, *Above the Best*.

<sup>33</sup> Bradin, *From Hot Air to Hellfire*, 94

<sup>34</sup> Bradin, *From Hot Air to Hellfire*, 94, 94.

<sup>35</sup> Bradin, *From Hot Air to Hellfire*, 97-98.

<sup>36</sup> Weinert, *A History of Army Aviation - 1950-1962*. 164-165.



10 anti-tank missiles on the OH-13 helicopter. The experiment was not successful, but it did serve to drive the Army towards the development of a larger, more powerful helicopters for the anti-tank role.<sup>37</sup>

### ***Army Aviation in Vietnam – Coming of Age***

The election of John F. Kennedy in 1960 ended the era of “massive retaliation.” The growing involvement of United States military, political, and economic actors in Southeast Asia contributed to this. It was clear to the Pentagon that “brushfire” wars involving counterinsurgency tactics against an illusive enemy were likely in the short term. As the United States Army began sending military advisors and helicopters to South Vietnam the Chief of Staff ordered two studies that would have profound impact on the development and advancement of Army aviation.<sup>38</sup>

The Army Aircraft Requirements Board, chaired by LT. Gen. Gordon B. Rogers, convened in January of 1960. The “Rogers Board” was tasked to recommend a course of action for the development of Army aviation from 1960 to 1970. Rogers made the fortuitous recommendation that the Army should purchase the Bell UH-1 “Huey” helicopter and the Ch-47 Chinook. The UH-1 would change the Army and is arguably the most important aircraft the Army ever procured with many still flying today. The Rogers Board also recommended to the Chief of Staff that a study should be conducted to determine the feasibility of airmobile units.<sup>39</sup>

In April 1962, Secretary Robert McNamara ordered the Army to take a bold new look at maneuver warfare. He wanted experiments designed to test new ideas using scientifically objective methods. To comply, the Army created the United States Army Tactical Mobility Requirements Board headed by Lt. Gen. Hamilton H. Howze, Commander of XVIII Airborne

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<sup>37</sup> Weinert, *A History of Army Aviation - 1950-1962*. 167-168.

<sup>38</sup> Lepore, *Above the Best*.

<sup>39</sup> Lepore, *Above the Best*.

Corps. The Howze board was given only five months to make recommendations for equipment and organization of Army units in the years 1963-1975.<sup>40</sup>

After soliciting ideas from across the Army, the Howze Board ultimately recommended that the United States Army should arm the OV-1 Mohawk (twin-engine airplane) to fill the void in close air support (CAS). This was in direct violation of the Army's agreement with the Air Force not to arm fixed wing aircraft and did not garner support. The Howze board suggestion did, however, finally force the Air Force to give some attention to the CAS problem. They began development of the A-10 Warthog close air support aircraft.<sup>41</sup>

The Howze Board further recommended the replacement of some conventional forces with airmobile forces. Specifically, they wanted to create five air assault divisions, three air cavalry combat brigades, and five air transport brigades over a period of six years. The air assault division would include 144 attack helicopters to be used for reconnaissance and to fight rear guard missions to delay an enemy advance. During the 1963-64 trials, it was apparent that air mobility had the potential to radically influence the conduct of land battle. Airmobile units offered the added benefit that, under the threat of nuclear engagement, they could disperse widely and concentrate quickly.

The Howze board trials had focused on the European fight against Soviets.<sup>42</sup> By early 1965 it was clear that the immediate threats in Vietnam would have to take precedence. The Howze board's crowning achievement would prove to be the establishment of the 11<sup>th</sup> Air Assault Brigade (Later reflagged as the 1<sup>st</sup> Cavalry Division (Airmobile)) at Fort Benning, Georgia. The 11<sup>th</sup> Air Assault Brigade would develop and test the tactics techniques and procedures that the United States Army would use as the foundation for the fighting of the Vietnam War.<sup>43</sup> These

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<sup>40</sup> Bradin, *From Hot Air to Hellfire*, 108.

<sup>41</sup> Butterworth, *Flying Army*. 95-97

<sup>42</sup> Everett-Heath, *Helicopters in Combat*, 158, 158

<sup>43</sup> Lepore, *Above the Best*.

tactics would make the helicopter and Army aviation ubiquitous in Army operations throughout the war and begin the rise to prominence that would ultimately make aviation a branch.

During the early days of American involvement in the Vietnam War, the vastness of South Vietnam and the shortage of artillery and tactical air support proved to be a serious shortcoming for the new airmobile operations. When TAC air support was available it was often ineffective due to the lack of joint training. Likewise, fighter aircraft, even the slower WWII aircraft, lacked the accuracy needed for landing zone suppression. The need for heavily armed escort helicopters to protect the troop carrying helicopters soon became apparent.<sup>44</sup>

On July 25, 1962, the Army activated its first armed helicopter company in Okinawa. Other units had armed themselves, but this was the first unit designed from the start as an armed helicopter company. Known as the Utility Tactical Transport Company (UTT), they were equipped with the UH-1B version of the Huey. They had the M6 quad machine gun kits and they developed seven shot rocket launchers for 2.75 inch folding fin aerial rockets (FFAR).<sup>45</sup> By October of 1962 these helicopters were engaging the enemy in Vietnam. The UH-1B's were underpowered for the loads they had to carry. They had difficulty keeping up with the UH-1C utility lift helicopters, which could fly 10 knots faster. The Army quickly realized that they needed an attack helicopter that was fast enough and packed enough punch to serve as a fire support platform for airmobile operations.<sup>46</sup>

In June 1963 the Army announced its intent to build the Advanced Aerial Fire Support System (AAFSS), later named Cheyenne. The concept was bold and complex. The complexity of the design made it expensive and difficult to perfect. The program was bogged down with technical and bureaucratic problems from its earliest days.<sup>47</sup>

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<sup>44</sup> Bradin, *From Hot Air to Hellfire*, 113.

<sup>45</sup> Bradin, *From Hot Air to Hellfire*, 113, 113.

<sup>46</sup> Bradin, *From Hot Air to Hellfire*, 113, 114.

<sup>47</sup> Bradin, *From Hot Air to Hellfire*, 115, 116-117.

While the Cheyenne program stalled, the war in Vietnam raged on and the need for an attack helicopter to perform close air support for airmobile operations was increasingly clear. Believing that the Cheyenne program would not produce the solution that the Army needed in a timely manner, Bell helicopter moved forward at their own expense to develop their own gunship, the AH-1 Cobra.<sup>48</sup>

In March 1965 after weapons testing at Fort Sill the Army announced its decision to procure the Cobra. The first straight line production Cobra rolled out in October of 1966 and entered combat in Vietnam on October 9, 1967. The Cobra had no tank killing capability. The fielding of the Cobra met the immediate needs of the Army and dealt the final blow to the Cheyenne program.<sup>49</sup> On August 9, 1972 the Cheyenne lost a funding war to the A-10 since the Army already had the Cobra. The decision to cancel the Cheyenne program was fortuitous in the long run for the Army. With the war in Vietnam drawing down, the Army's focus would soon return to Europe. The Cheyenne, designed for "diving fire" engagements at close range in a low air defense threat environment, was not the right aircraft for the European battlefield. The attack helicopter of the future would have to fly low, nap of the earth (NOE), to avoid the increased threat from surface to air missiles.<sup>50</sup>

Attack helicopters in Vietnam existed for the primary purpose of close air support. The forerunner of the attack helicopter battalion was in fact known as aerial rocket artillery. Three batteries of twelve aircraft each made up the aerial rocket artillery battalion organic to the divisional artillery of an airmobile division. According to an Army study on air mobility in Vietnam, "aerial rocket artillery was so effective in the 1st Cavalry Division that the artillery commanders had to constantly remind the infantry to use tube artillery when appropriate rather

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<sup>48</sup> Bradin, *From Hot Air to Hellfire*, 119.

<sup>49</sup> Bradin, *From Hot Air to Hellfire*, 122.

<sup>50</sup> Bergerson, *The Army Gets an Air Force*. 122-123.

than call automatically for aerial rocket artillery support."<sup>51</sup> Throughout the war a close bond was formed between infantry units and the air units that provided them fire support. Ground and air units developed and refined standard operating procedures (SOPs) and coordination measures to improve command and control between the two elements, improve support, and reduce potential fratricides.<sup>52</sup> Units with assigned attack helicopters, such as the 1st Cavalry Division (Airmobile) had average response times of twelve minutes with more than fifty percent of the response times averaging ten minutes or less.<sup>53</sup> Some accounts indicate that crews aimed to put their rocket fire within 65 meters of their own troops and within 35 meters in emergencies.<sup>54</sup> This kind of responsiveness and accurate close-in fire could not be matched by the Air Force. This kind of responsiveness built the reputation of Army aviation and was a characteristic that senior Army leaders would remember years later when the question of a branch garnered serious consideration. Infantry and armor leaders felt that Army aviation's responsiveness in Vietnam was in part because many of their officers came from other combat arms. Aviators were soldiers first and they understood what was happening on the ground.

Vietnam proved that helicopters were survivable and effective in the close fight. Survivability statistics indicate that with a max of 2600 helicopters in country, one helicopter was hit by enemy fire for every 1,147 sorties flown. One helicopter was shot down per 13,461 sorties flown, and one aircraft was actually lost every 21,194 sorties. The helicopter was not as frail as many had believed.<sup>55</sup> Army aviation had proven once again that it was a vital component of the combined arms team. Technological advancements had expanded the capabilities and thus the roles of Army aviation. Airmobility and the newly developed attack helicopters would have a

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<sup>51</sup> John J. Tolson, *Airmobility, 1961-1971* (Washington D.C.: Department of the Army, 1973), 122.

<sup>52</sup> Tolson, *Airmobility*, 122.

<sup>53</sup> Bergerson, *The Army Gets an Air Force*, 126.

<sup>54</sup> Everett-Heath, *Helicopters in Combat*, Photo Page.

<sup>55</sup> Everett-Heath, *Helicopters in Combat*, 85, 87.

profound influence on the future development of United States Army doctrine, training, and employment.

### ***Post Vietnam – The Army’s Focus Shifts to Europe***

The 1970s were a difficult time of change and critical challenges for the United States Army.<sup>56</sup> Although a triumphant coming of age for Army aviation, the Vietnam War had been a traumatic experience for the United States Army. When the war ended in 1973 many officers and soldiers were anxious to put it all behind them. Racial tensions, drug abuse, and declining discipline made the Army the subject of constant criticism. The Seventh Army in Europe, the Army's highest priority unit, was at the lowest state of readiness in its history due to the individual replacement system which had taken soldiers out of Europe to fill positions in Vietnam.<sup>57</sup>

One of the great visionaries that put the United States Army back on the road to recovery from the Vietnam War was the first commander of the Training and Doctrine Command (TRADOC), Gen. William E. DePuy. He pointed the Army toward a structure designed to meet the challenges presented by the ever strengthening Warsaw Pact. Gen. DePuy took command in July of 1973 and immediately began focusing on tactics and training reforms in line with the lessons of the Arab-Israeli War of October 1973. He directed the pace, shape, and direction of doctrinal change in the 1970s. It was Gen DePuy’s focus on positive reform that guided the Army out of the Vietnam War and toward a brighter future.<sup>58</sup>

In the wake of the Arab Israeli War of Oct 1973, the United States conducted a major reassessment of strategic policy with profound implications for the Army. The strategic focus was back to the defense of Europe. The Soviets had made huge strides in improving conventional and nuclear forces. They had added five tank divisions to their forces facing NATO since 1965

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<sup>56</sup> Romjue, *From Active Defense to AirLand Battle*, 1.

<sup>57</sup> Herbert, "Deciding What Has to Be Done", 5.

and they had increased the number of tanks in their motorized rifle divisions. They had replaced the old T-54 and T-55 tanks with significantly improved T-63 tanks and the modern T-72 tank. They rounded out their force with significantly better armored personnel carriers and self propelled artillery. More threatening than the equipment itself was the forward deployment of these forces along NATO borders. This indicated that the Soviets were preparing for a preemptive, nonnuclear strategy of conventional attacks that could overwhelm NATO forces.<sup>59</sup>

To many observers, inside and outside the Department of Defense (DOD), the United States Army was in no condition to challenge this revitalized threat. The Army suffered morale, discipline, equipment, doctrine, and structure problems. Training had been based on the infantry intensive counter insurgency war fought in Vietnam. Combat experience the Army had gained in Vietnam would likely be irrelevant to war in Europe where United States forces would not have the overwhelming advantages of firepower and air power that they had enjoyed in Vietnam. Even the Army's significant developments in air mobility had occurred in the absence of a significant enemy air defense capability. Soviet advances in air defense missiles, radars, and guns brought into question the feasibility of large-scale airmobile tactics. The Army's combat development efforts (including attack helicopters) had been driven by the Vietnam War and were only coincidentally relevant to war in Europe.<sup>60</sup>

The Arab Israeli War was a wake-up call for the United States Army. It served as a potent example for those in the Army who were trying to change the way the Army thought about modern warfare.<sup>61</sup> The Arab Israeli War demonstrated to TRADOC's analysts that advances in the weapons lethality, use of suppressive fire, terrain, and camouflage, and effective combined arms coordination had changed the modern battlefield. The tank seemed the dominant force on

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<sup>58</sup> Romjue, *From Active Defense to AirLand Battle*, 2

<sup>59</sup> Herbert, "Deciding What Has to Be Done", 5-7.

<sup>60</sup> Herbert, "Deciding What Has to Be Done", 5-7.

<sup>61</sup> Herbert, "Deciding What Has to Be Done", 46.

the battlefield, but the importance of anti-tank and air defense missiles was also highlighted.<sup>62</sup>

TRADOC concluded that in a high intensity war characterized by highly lethal anti-tank and anti aircraft weapons certain things will be critical:

- Detecting enemy forces at maximum range
- Firing first and firing accurately
- Effective fire control/distribution to conserve ammunition
- Delivering suppressive fires from overwatch
- Flying Army aircraft at nap of earth (NOE) altitudes or as close to the ground as possible to use terrain and vegetation as cover and concealment without limiting mobility (due to improved ADA)
- Destroying enemy ADA
- Fighting with skill at night
- Highly reliable tactical communications
- Flexible, responsive and self-sufficient logistical support<sup>63</sup>

These ideas would drive the Army's development from that point forward. Although attack helicopters were not used in the October War of 1973, Gen. DePuy was saw it as an example of how the Army could apply the lessons of air mobility learned in Vietnam with the emerging technologies of anti-tank helicopters. He said, "the tank killing helicopter... adds a new capability for attack, defense, and delay."<sup>64</sup>

Army aviation conducted several exercises to develop and evaluate the capability of helicopters to operate on the modern European battlefield. The Ansbach Test at Ansbach West Germany in 1973 demonstrated the tremendous capability of scout/attack helicopter teams in a midintensity tactical environment. Scout/attack helicopter teams maintained an average loss

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<sup>62</sup> Romjue, *From Active Defense to AirLand Battle*,3.

<sup>63</sup> Herbert, "Deciding What Has to Be Done", 44.



exchange ratio (enemy killed: friendly killed) of 18:1. In some breakthrough scenarios the exchange ratio exceeded 30:1. The REFORGER exercise of 1975 demonstrated that Army aviation was most effective when employed as an integrated member of the combined arms team using the same tactical control measures and battle planning.<sup>65</sup> These exercises proved to senior Army leadership that Army aviation was a vital combat arm that must be further developed.

Gen. DePuy was among the first to realize that we had a problem with the separation of doctrine development and weapons procurement. To Gen. DePuy, linkage of doctrine and procurement was critical in bureaucratic disputes over the budget. By linking a system to the successful employment of a winning doctrine one could significantly strengthen the argument for that weapon system.<sup>66</sup> The cancellation of the Cheyenne program presented the Army with an opportunity to apply this theory of procurement to its next attack helicopter. Neither the Cobra or the Cheyenne had been designed with the anti-tank role in mind. With the post Vietnam shift in threat the Army still had the problem of procuring an aerial tank killer to maximize the potential of Army aviation.<sup>67</sup>

In April of 1973 the Army named Brig. Gen. Samuel G. Cockerham as the first program manager for the new Advanced Attack Helicopter program.<sup>68</sup> This helicopter, which would eventually come to be known as the Apache, would be designed specifically to capitalize on the lessons of the Arab Israeli war and the doctrinal concepts championed by Gen DePuy and his followers. The Apache would be a long-range tank killer, not strictly a close air support system like its predecessors in Vietnam. The Apache would be capable of flying and fighting at night, engaging from a hover at nap of the earth (NOE) altitudes (increasing survivability) and firing

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<sup>64</sup> Herbert, "Deciding What Has to Be Done", 46.

<sup>65</sup> Army Aviation Agency Fort Rucker (Center), "Army Aviation Mission Area Analysis (AAMAA)," Vol II (Fort Rucker, AL: Army Aviation Center, Jan, 1982). 11-6.

<sup>66</sup> Herbert, "Deciding What Has to Be Done", 78.

<sup>67</sup> Bergerson, *The Army Gets an Air Force*.140.

<sup>68</sup> Bradin, *From Hot Air to Hellfire*., 139-156, 142.

first with precision accuracy. Unfortunately, it would take the Army ten years of design and testing before they could field the first Apache.<sup>69</sup>

In 1976 the Army published Gen. William E. DePuy's version of FM 100-5, *Operations*. This was an attempt to change the thinking of the entire United States Army. "The United States Army must be prepared to fight outnumbered and win and win the first battle." FM 100-5's emphasis on armored warfare, Soviet Weapons systems, emerging technology, and United States numerical inferiority all reflected its deliberate focus on the defense of NATO Europe.<sup>70</sup> The manual immediately spurred great debate within the officer corps. While some praised its clarity and direct style others questioned the wisdom of its content. The defensive focus of the manual and the heavy emphasis on Europe drew the most criticism. The concept of active defense, which eliminated operational reserves and focused on lateral mobility, was troublesome to many officers.<sup>71</sup> Radical change is rarely met with open arms in any large organization and this is certainly true of the United States Army.

The 1976 "DePuy" edition of FM 100-5, *Operations*, spelled out the role of Army aviation in both the offense and defense. In neither case are attack helicopters considered a close air support system.<sup>72</sup> It is important to note, however, that this version of FM 100-5 states, "Attack helicopters should operate under the control of engaged brigade or battalion commanders and be committed in relays on a sustained and concentrated basis."<sup>73</sup> This indicates an affinity for the Vietnam concept that attack helicopters exist to support the ground commander in contact. This concept would change in future editions of FM 100-5 as the role of Attack helicopters increased in importance. This change would signal the emergence of a new branch, Army aviation, which would step out from under the wings of its big brothers, armor, and infantry.

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<sup>69</sup> Bradin, *From Hot Air to Hellfire*, 142, 155.

<sup>70</sup> Herbert, "Deciding What Has to Be Done", 7.

<sup>71</sup> Romjue, *From Active Defense to AirLand Battle*, 13-15.

<sup>72</sup> Department of the Army, *Field Manual 100-5, Operations* (Washington D.C.: U.S. Government Printing Office, 1976), 4-8, 5-9.

## ***AirLand Battle – Army Aviation and the Deep Fight***

Gen Donn A. Starry replaced Gen. DePuy as the TRADOC commander in July 1977. He had been closely involved with Gen. DePuy and the development of the 1976 version of FM 100-5 while serving as the commander of the Armor Center at Fort Knox, KY from 1973 to early 1976.<sup>74</sup> Gen. Starry had been a strong supporter of the 1976 initiatives. From 1976 through 1977 he served as the V Corps commander in Germany. During this time he tested the active defense concepts and other ideas in the new doctrine. He found some significant problems. Although the doctrine was helpful for organizing battalions, brigades, and even divisions for the initial defensive battle, it did not help Starry defeat enemy follow on echelons. Starry said later, "We tackled the tactical problem forward [but] we kind of brushed aside the operational level considerations, the theater level considerations... what gelled it for me was being a corps commander."<sup>75</sup> He felt that the active defense was adequate for defeating the first echelon but that inadequate combat power was left to stop the Soviet second echelon.<sup>76</sup>

Gen. Starry tasked his combat developers to solve the problem of fighting in depth and dealing with the second echelon. In 1977 Starry and his planners come up with a new battlefield framework that was much deeper in its physical dimensions. The concern for the second echelon led to the deep battle concept.<sup>77</sup> The emphasis of corps interdiction plans needed to be on attacking deep echelons early in order to delay, disrupt, or destroy them while simultaneously fighting the assaulting forces of the first echelon. The corps operated against the deep defensive echelons, reserves, reinforcing forces, and interdicted second echelon divisions of first echelon armies.<sup>78</sup>

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<sup>73</sup> Department of the Army, *Field Manual 100-5, 1976 edition*, 5-5.

<sup>74</sup> Romjue, *From Active Defense to AirLand Battle*, 23.

<sup>75</sup> Herbert, "Deciding What Has to Be Done", 97.

<sup>76</sup> Romjue, *From Active Defense to AirLand Battle*, 23.

<sup>77</sup> Romjue, *From Active Defense to AirLand Battle*, 25-27.

<sup>78</sup> Romjue, *From Active Defense to AirLand Battle*, 41.

In 1982 TRADOC published a new version of FM 100-5, *Operations*. The new version adapted the ideas began in Gen. DePuy's edition based on the realities of Gen. Starry's and other officers' experiences. The new doctrine developed the concept of AirLand Battle, introduced in 1976, into the basis for how the United States Army would organize and fight in the future. AirLand Battle was based on the concept of striking the enemy throughout the depth of the battlefield, not just his lead echelons. The United States Army wanted to throw the enemy off balance by striking from unexpected directions.<sup>79</sup> Deep attack was not a luxury, but rather a necessity for success on the modern battlefield. The goal of deep attack was to create opportunities for commanders to seize. These opportunities included not only reconstituting the defense, but attack and counterattack as well.<sup>80</sup> In the 1982 version of FM 100-5 it is stated that, "Deep attack is neither a sideshow nor an unimportant optional activity. It is an inseparable part of a unified plan of operation."<sup>81</sup>

Although the new doctrine stressed the importance of fighting throughout the depth of the battlefield, it also recognized that the Army had very limited assets capable of engaging the enemy in depth. The 1982 operations manual noted, "Our primary strike assets for the deep attack are air (meaning Air Force) and artillery."<sup>82</sup> AirLand battle emphasized unified air and ground operations throughout the theater.<sup>83</sup> The attack helicopter was seen as critical to the success of this doctrine. In 1982, however, the AH-64 Apache was not ready for production and military planners could only speculate about the new helicopter's impact.

A palpable change in attitude towards Army aviation had begun throughout the Army during the post Vietnam years. For the first time Army aviation was being accepted as a legitimate member of the combined arms team. The advent of the antiarmor mission for scout

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<sup>79</sup> Department of the Army, *Field Manual 100-5, Operations* (Washington D.C.: U.S. Government Printing Office, 20 August 1982), 2-1.

<sup>80</sup> Romjue, *From Active Defense to AirLand Battle*, 44.

<sup>81</sup> Department of the Army, *Field Manual 100-5*, 1982 edition, 7-2.

<sup>82</sup> Department of the Army, *Field Manual 100-5*, 1982 edition, 7-13.

and attack helicopters, the recognized potential for attack helicopters as a deep asset, and the combat proven airmobility and logistical capabilities of utility and medium lift helicopters had earned Army aviation respect and recognition.<sup>84</sup> The time had come for Army aviation to capitalize on its hard earned respect to reform many of the shortcomings that existed within the aviation community. It was time to form a branch.

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<sup>83</sup> Department of the Army, *Field Manual 100-5*, 1982 edition, 7-1.

<sup>84</sup> Army Aviation Agency Fort Rucker (Center), "Army Aviation Mission Area Analysis (AAMAA)," Vol I (Fort Rucker, AL: Army Aviation Center, Jan, 1982). 1-7.

## Part 3

### The Branch Debate

*Unity of Command* — One of the nine principles of war. All forces operate under one responsible commander who possesses requisite authority to direct forces in pursuit of a common unified purpose.

FM 101-5-1<sup>85</sup>

*Army aviation will not develop to its fullest potential until it is functionally removed from the other branches and made responsible for itself.*

Army Aviation Development Plan<sup>86</sup>

The idea of creating an aviation branch was not a new one. Gen (R) James H. Merryman, former commander of the United States Army aviation Center (USAAVNC), attended flight school in 1952 and spent a career building Army aviation. He recalls that when he arrived in Europe for his first assignment there were aviators already talking about the need for a branch. The first issues of Aviation Magazine in 1953 included articles on the subject. The idea was not given any serious consideration in those early days by “anyone who mattered.” The Air Force had only recently broken away from the Army and there was little support within the Army for creating an aviation branch that might be vulnerable to Air Force take over.<sup>87</sup>

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<sup>85</sup> Department of the Army, *Field Manual 101-5-1, Operational Terms and Graphics* (Washington D.C: U.S. Government Printing Office, Sep 1997).

<sup>86</sup> Army Aviation Center, "Army Aviation Development Plan (AADP)". 4-29.

<sup>87</sup> James H. Merryman, email, "Subject: Aviation Branch,": Forwarded to Army Aviation Historian's Office, 5 Feb, 2001.

In 1978 and 1979 the idea of an aviation branch was given serious consideration by senior Army leaders for the first time. Then Chief of Staff of the Army, Gen. Bernard Rogers seriously investigated the idea. He sent back channel messages to all of his four star generals to get their opinions of the concept. Not a single four star officer supported the idea. Two generals including the Vice Chief of Staff, Gen John W. Vessey Jr., acknowledged that a day may eventually come when a branch would be necessary. The rest of the four stars were strongly opposed.<sup>88</sup>

Despite the vehement opposition of so many senior leaders the branch idea continued to gain momentum. Aviation was rapidly becoming a critical component of the combined arms team and an essential element of the Army's operational doctrine for the destruction of Soviet forces in Europe. Problems in Army aviation could potentially have a significant impact on the combat effectiveness of the entire Army. This was a concern because there was reason to believe that significant problems existed within Army aviation. In 1981 TRADOC decided that it was time to determine the status of Army aviation.

### ***Army Aviation Mission Area Analysis***

The Army Aviation Mission Area Analysis (AAMAA) was prepared in response to a TRADOC directive dated 27 Feb, 1981 mandating a comprehensive review of Army aviation. The Directorate of Combat Developments at the Army Aviation Center at Fort Rucker, AL conducted the study. It was a comprehensive "Front to Rear" analysis of Army aviation. The purpose was to identify Army aviation deficiencies and recommend doctrine, organization, training, and materiel actions to correct deficiencies.<sup>89</sup>

Final report consisted of two volumes, an executive summary and a supporting science and tech annex. The report was broken into thirteen chapters, each addressing a functional

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<sup>88</sup> Ibid

portion of the full spectrum of Army aviation operations. In total the AAMAA identified 77 problem areas for Army aviation. Each of these was explained in detail with recommended solutions. Solutions ranged from minor operational changes to significant restructuring (such as creation of a branch) that would have far reaching effects on the whole Army.

The preface letter justifiably bragged that, "Never before has a single document contained the amount of distilled information on Army aviation requirements that is so broad in scope and yet detailed enough to trigger practical solutions." <sup>90</sup> Problems identified in two of the focus areas, doctrine and training, resulted in recommendations for a separate aviation branch.

## **Doctrine**

The AAMAA determined that aviation doctrine development was a serious problem because there was no one single body responsible for it. Aviation doctrine was split between numerous different branch schools. Specific tactics, doctrine, organization, and unit training were the responsibility of the following mission proponents:

- Attack/light observation/ and scout helicopters - The United States Army Armor Center (USAARC) at Fort Knox, Kentucky
- Utility Helicopters - The United States Army Infantry Center (USAIC) at Fort Benning, Georgia
- Medium/Heavy Cargo - The United States Army Transportation Center (USATC) at Fort Eustis, Virginia
- Surveillance ELINT/SIGINT - The United States Army Intel Center (USAINC) at Fort Huachuca, Arizona
- Utility Airplanes - Unites States Army Aviation Center, Ft. Rucker, Alabama<sup>91</sup>

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<sup>89</sup> Army Aviation Agency Fort Rucker (Center), "Army Aviation Mission Area Analysis (AAMAA)" Vol I. viii

<sup>90</sup> Ibid. vi.

<sup>91</sup> Ibid, 2-59.



At the time of the study the only doctrinal publications produced at the Aviation Center were FM 101, Aircraft Battlefield Countermeasures and Survivability, and FM 1-103, Airspace Management and ATC in a Combat Zone. Neither of these were "how to fight" documents.<sup>92</sup> All of the warfighting documents were split among the various other schoolhouses. The AAMAA report noted that, "The authority vested in varying mission proponents for the production of Army aviation concepts, doctrine, tactics, and techniques has often lead to contradiction and confusion which have ultimately produced nonstandard documents."<sup>93</sup>

## **Training**

Training, particularly of aviation commissioned officers, more than any other issue, drove the AAMAA report to recommend the creation of a separate aviation branch.<sup>94</sup> The report boldly declared, "Aviation officers are not adequately trained in the employment and management of aviation assets."<sup>95</sup> Aviation qualified officers attending armor, infantry, or other branch schools were not getting the necessary training on aviation employment. No program of instruction (POI) existed for aviation training at these schools. The report argued that the Army needed separate aviation officer basic and advanced courses to ensure adequate aviation tactical and management training. The Initial Entry Rotary Wing Course (IERW) was designed to produce technically, not tactically proficient aviators. Aviation officers would need better training in order to effectively employ more than one aircraft and to participate as part of the combined arms team.<sup>96</sup>

This problem was aggravated by the increasing sophistication of aviation systems. The AAMAA noted that "Army aviation's philosophy of countering threat numerical superiority with technically superior aircraft systems has caused these systems to become increasingly complex.

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<sup>92</sup> Ibid, 2-60.

<sup>93</sup> Ibid, 2-61.

<sup>94</sup> Ibid, 2-149.

<sup>95</sup> Army Aviation Agency Fort Rucker (Center), "Army Aviation Mission Area Analysis (AAMAA)" VOL II, 12-11.

This trend is expected to continue and will probably accelerate throughout the 1980's. Therefore, the training community has a critical responsibility to provide personnel capable of operation and maintaining these highly sophisticated aviation systems."<sup>97</sup>

The argument follows that commissioned aviators who did not spend all of their time in aviation branch would not have the requisite expertise to effectively employ aviation assets on the modern battlefield. By creating a separate branch from which officers never depart, the level of training expertise could be expected to rise significantly.

Training officers that were not full time aviators was also problematic for the Army because of limited resources. The oil embargos of the early 1970s served notice to Army aviation leaders that they must learn to operate in a resource constrained world. Throughout the 1970's training costs were driven up exponentially due to rising costs of fuel and ammunition. This occurred at a time when the Army was reducing in size and budget. It was imperative that training costs be reduced to the minimum amount possible. This put serious constraints on aviation training, which was (and is) one of the most expensive assets in the United States Army.<sup>98</sup> This economic factor would ultimately prove one of the most persuasive arguments for the creation of the aviation branch.<sup>99</sup>

### ***Aviation Systems Program Review***

The results of the AAMAA were forwarded to Army Aviation Systems Program Review (AASPR). The AASPR was held in March of 1982 and it was the key event in the Army aviation review process because of the number of high-ranking officers involved. The AASPR began with four general officer panels, which divided and analyzed the AAMAA report, identified

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<sup>96</sup> Army Aviation Agency Fort Rucker (Center), "Army Aviation Mission Area Analysis (AAMAA)", 12-11

<sup>97</sup> Ibid, 12-5

<sup>98</sup> Ibid, 12-5

<sup>99</sup> James H. Merryman, email, "Subject: Aviation Branch."

deficiencies in aviation concepts, doctrine, and tactics; organization and force structure; and training and materiel.

The General officer panels then presented their findings and recommendations to the Vice Chief of Staff of the Army, the Commander, TRADOC; Commander, United States Army Forces Command (FORSCOM); Commander, United States Army Materiel Development and Readiness Command (DARCOM); and approximately 50 additional general officers representing all arms of service.

The AASPR highlighted significant issues and provided guidance for corrective action that would be spelled out in more detail in the Army Aviation Development Plan (AADP).<sup>100</sup> The AASPR focused in on the problems Army aviation had with lack of unity of command and effort. Their report noted that, "Responsibility for aviation concepts, doctrine, tactics, training, organization, systems, and personnel is fragmented among branches of the Army. The lack of a cohesive doctrinal base impedes the full use of Army aviation 's contribution to the combined arms team."<sup>101</sup>

The doctrine panel was chaired by Gen. John R. Galvin, then a major general commanding the 24th infantry Division (Mechanized). Gen Galvin reported to the Army Vice Chief of Staff, Gen Vessey, that aviation doctrine and the training that came from that doctrine was in such a state of disarray that action had to be taken. To the chagrin of some of the general officers present, Gen Galvin suggested that the only sensible solution was to make aviation a branch with a real branch school with complete responsibility for all aviation doctrine, training, and materiel development responsibilities normally associated with a combat arms branch school.<sup>102</sup> Establishment of a branch includes designation of a branch chief responsible to focus

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<sup>100</sup> U.S. Army Aviation Center, "Army Aviation Development Plan (AADP)," (Fort Rucker, AL, Army Aviation Center, Sept, 1982), 1-5

<sup>101</sup> Army Aviation Center, "Army Aviation Development Plan (AADP)", 1-32

<sup>102</sup> Benjamin L. Harrison, "Aviation: A Branch Decision Revisited," *Army Magazine* (Association of the U.S. Army) Vol 41, No. 1 (Jan 1991), 23

the energies and develop the potential of that particular unique arm of the service. All other combat arms branches had a central focus and institutional base at a single center/school, headed by a commandant who was chief of that branch. Failure to apply the branch model to aviation had resulted in fragmentation of aviation responsibility and function.<sup>103</sup>

Gen Starry, (then commander, TRADOC) wrote a letter on 21 Aug 1978, Subject: Aviation Proponency and Integration Functions. This letter sought to spell out responsibilities for aviation related topics but served more to complicate matters rather than clear them up. Paragraph four reads in part, "The commander, USAAVNC is the primary advisor to the commander, TRADOC, on aviation matters. Providing advice on specific, tactics, doctrine, organizations, and unit training, however, remains the responsibility of the mission proponent." This places the commander, USAAVNC, in the awkward position of having the responsibility to advise but not the authority to implement aviation related issues. It resulted in a splintering of effort and lack of efficiency. The USAAVNC served as an integrator with seven different branch schools. This violated the principle of unity of command and ensured there would be no unity of effort.<sup>104</sup>

The AASPR committees recognized that the Aviation Center's role as defined in the 21 Aug, 1978 TRADOC memorandum was not sufficient to meld Army aviation concepts, doctrine, tactics, training, organization, systems, and personnel in a manner which other combat arms branches were able to address these issues.<sup>105</sup> This significant problem, a violation of the principle of war, unity of command, could be solved by creating an aviation branch and consolidating responsibility and authority for aviation issues under the chief of that branch.

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<sup>103</sup> Army Aviation Center, "Army Aviation Development Plan (AADP)", 1-32

<sup>104</sup> Army Aviation Center, "Army Aviation Development Plan (AADP)", 2-38

<sup>105</sup> Army Aviation Center, "Army Aviation Development Plan (AADP)", 1-32

## ***Army Aviation Development Plan***

The Army Aviation Development plan published in Sept of 1982 further developed the recommended solutions to problems identified in the AAMAA and AASPR.<sup>106</sup> Maj. Gen Carl H. McNair, Commanding General of Fort Rucker said in a memorandum preceding the report that the AADP "Translates the general corrective actions of the AAMAA into specific projects with scheduled milestones to facilitate input into programming and budgeting documents."<sup>107</sup>

The AADP boiled down the results of the previous studies and argued that the creation of an aviation branch would solve three systematic problems that were plaguing Army aviation. Those problems were; poor tactical and management training for aviation officers, the decentralized approach to proponent responsibility for Army aviation, and the dispersal of aviation specialist throughout the other branches of the Army. These three systematic weaknesses were "interrelated and impact everything aviation related."<sup>108</sup>

These problems were termed systematic because they were in fact the product of the existing Army system that did not allow an aviation branch. The other combat arms did not suffer similar problems because they had a branch. The branch provided an institutional base, a chief spokesman, and a centralized methodology through which they write doctrine, develop training, organize units, motivate and develop soldiers, and prepare to fight as a member of the combined arms team. "Army aviation should be structured in a way analogous to the other combat arms and assigned full responsibility for the aviation function on and off the battlefield" was the conclusion of the AADP.<sup>109</sup>

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<sup>106</sup> Army Aviation Agency Fort Rucker (Center), "Army Aviation Mission Area Analysis (AAMAA)," Vol I

<sup>107</sup> Army Aviation Center, "Army Aviation Development Plan (AADP)", Preface.

<sup>108</sup> Army Aviation Center, "Army Aviation Development Plan (AADP)".4-27.

<sup>109</sup> Army Aviation Center, "Army Aviation Development Plan (AADP)".4-29.

## ***TRADOC Review of Army Aviation***

The AAMAA identified a broad spectrum of aviation issues. The major issues were discussed by senior Army leaders at the AASPR. The consensus of the AASPR was that action was required to resolve the most significant deficiencies. There was not consensus on what action should be taken. The TRADOC commander convened a review group at Fort Hood, Texas to assess Army aviation as an evolving combat arm. The group was tasked to specifically address the key questions of Officer/Warrant Officer mix, internal TRADOC responsibilities, pronency, and the issue of a separate aviation branch.<sup>110</sup> The TROAA review group used the following resources for their analysis:

- Literature search (AAMAA, AASPR, and 21 other pertinent studies).
- Visits to FORSCOM divisions and corps, TRADOC centers, and DARCOM aviation commands
- Individual and group interviews
- Survey questionnaires (given to 603 individuals, both aviators and ground soldiers)
- Information briefings by HQDA Staff
- Discussions with the senior General Officer Advisory group<sup>111</sup>

Analysis of responses during the individual and group interviews, command visits, and surveys yielded the following predominant opinions about Army aviation:

- Doctrine and training in Army aviation were deficient
- Better integration of aviation in combat arms was needed in school curricula, field and joint exercises, Army Training and Evaluation Program (ARTEP), and National Training Center (NTC)

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<sup>110</sup> Review Group for the Commanding General U.S. Army Training and Doctrine Command, "TRADOC Review of Army Aviation (TROAA)," *Executive Summary* (Fort Monroe, VA, TRADOC, 8 Sep, 1982), 1

- Better management of Army aviation and aviation resources was needed
- Aviators needed to have more experience and better understanding of combat arms and combined arms team
- Doctrine/tactics/techniques for aviation were not adequately recorded in the past, nor were they being developed to fit the AirLand Battle (ALB) 2000 concept
- Ground commanders lacked knowledge of aviation capabilities or employment concepts
- Schools were inadequately staffed to provide aviation expertise
- Aviation had become too sophisticated for part time aviators but the need for broad combat arms experience remained strong
- New aviation officers had an identity problem with great uncertainty about career development.
- There was a climate for change (frustration was high)<sup>112</sup>

The issue of career patterns for aviation officers was a source of great dissatisfaction among young aviators and a serious problem within Army aviation. Aviators were given mixed messages by the Army as to what was important and what they should do to best serve the Army and have a successful career. Aviators at this time had a ground basic branch and an aviation specialty. They competed for promotion against other members of their basic branch.<sup>113</sup> This meant that they needed command and high-level staff positions within their basic branches but they were often denied those positions because they were aviators. Congress had mandated strict limits on the amount of time aviation qualified officers could spend away from aviation

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<sup>111</sup> Review Group for the Commanding General Army Training and Doctrine Command, "TRADOC Review of Army Aviation (TROAA)", 2

<sup>112</sup> Ibid, 4

<sup>113</sup> James H. Merryman, email, "Subject: Aviation Branch."

assignments because of costs. This indicated that service in aviation jobs was important yet, for promotion they needed jobs in their basic branch.<sup>114</sup>

Gen (R) Benjamin L. Harrison relayed a typical story from this period in an article for *Army Magazine*. A field artillery captain is talking to his assignments officer at branch. Branch asks him where he wants to go for the advanced course. The captain replies, "Ft. Sill of course, I need the branch training." The assignments officer tells him not to waste his time because he would never get a good assignment in artillery as a captain or field grade officer so he may as well go somewhere he would enjoy.<sup>115</sup> Of course without meaningful command and staff assignments within their basic "carrier" branches aviators would have little to no chance of continued advancement in the military. What kind of message is was the Army sending aviation officers with stories like this?

Warrant officers were also frustrated with the treatment of their commissioned officers. They felt that the result of the assignment practices for aviators that many officers in aviation were not focused on their roles as aviation leaders. They seemed to be "marking time" while they waited for an assignment back to their basic branch that would help their careers. The warrant officers were demanding dedicated, tactically and technically proficient aviation officers.<sup>116</sup> The AADP noted, "aviators need to manage their careers and, more importantly, take leadership of and responsibility for a large aviation warrant officer corps and a large enlisted group which, owing to lack of an aviation branch, is dispersed and made the responsibility of other branches."<sup>117</sup>

Given the increased importance of Army aviation in AirLand Battle doctrine the opinions and issues expressed above were of great concern to the review committee. Army aviation

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<sup>114</sup> Benjamin L. Harrison, "Aviation: A Branch Decision Revisited," *Army Magazine* (Association of the U.S. Army) Vol 41, No. 1 (Jan 1991), 24

<sup>115</sup> Harrison, "Aviation", 24

<sup>116</sup> Review Group for the Commanding General Army Training and Doctrine Command, "TRADOC Review of Army Aviation (TROAA)", 4



seemed to be suffering from extreme neglect at a time when the Army needed it most. Although solutions to the problems listed above would not be easy, it seemed clear that they would only get fixed if the preponderance of aviation issues were consolidated under the USAAVNC at Fort Rucker and aviation was made a branch of the Army. Echoing the findings of the studies conducted by the Aviation Center, the TROAA Committee made the following arguments for the creation of a branch:

- Doctrine and "how to" manuals are inadequate; there are voids and disconnects. Aviation has not received adequate emphasis at the other branch schools.
- Sophisticated modern aviation systems requiring dedicated effort. Ground systems also becoming more sophisticated. Impossible to master both.
- Consolidation of necessary expertise at Fort Rucker could add focus with clear lines of responsibility. Unity of command and effort
- Commissioned aviators need a reliable and predictable career track.
- Warrant officers demanding RLOs (Real Live Officers) that are tactically and technically proficient and dedicated to Army aviation.<sup>118</sup>

### ***Arguments Against the Branch***

Gen Otis briefed the results of the TROAA at the Army Commander's conference in October of 1982. There was strong opposition to the branch recommendation led by Gens. Fredrick J. Kroesen and Richard E. Cavazos. These officers felt that it was of critical importance that aviators continue to maintain dual qualification in their branch and in aviation. Surprisingly, there was strong opposition to the branch idea from the retired general officer community including Gen Hamilton H. Howze, one of Army aviation's great pioneers. All of these officers recognized that it would be difficult for aviators to maintain proficiency in both specialties given

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<sup>117</sup> Army Aviation Center, "Army Aviation Development Plan (AADP)".4-28.

the complexity of modern systems (air and ground), but they felt it was absolutely essential that aviators have a complete understanding of the ground fight if they were to provide the kind of support the Army would need.<sup>119</sup>

The arguments against creation of a branch boiled down into four basic areas; soldiers first, the unique aviation needs of basic branches, vulnerability to Air Force takeover, and force structure concerns. For each of these arguments proponents of an aviation branch were able to make persuasive counter arguments that ultimately won the day.<sup>120</sup>

### **Soldiers First**

The most strongly held position against creating an aviation branch was that officers must have ground experience if they are to create and lead the kind of aviation force that the Army needed. This was the big issue. Aviation leaders must be dual (ground & air) qualified with an especially firm foundation in the principles of ground warfare. Opponents of the branch from inside and outside Army aviation believed that to be an effective aviator required "seasoning" in the ground environment.<sup>121</sup>

Before making the decision to create an aviation branch, Army Chief of Staff, Gen. Meyer, met with his four star generals in a manner similar to the way former Chief of Staff, Gen. Rodgers, had done in 1979 to gain their input. Of all the officers present not one of them was aggressively in favor of the branch. Two, Gen. Starry from TRADOC and Gen. Kroesen from EUROPE were very opposed to the idea. These officers argued that an officer aviator that was not ground branch qualified would likely become nothing more than a "flyboy." It followed that

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<sup>118</sup> Review Group for the Commanding General Army Training and Doctrine Command, "TRADOC Review of Army Aviation (TROAA)", 5

<sup>119</sup> Harrison, "Aviation", 24

<sup>120</sup> James H. Merryman, email, "Subject: RE. Aviation Branch,": Forwarded to Army Aviation Historian's Office for filing, 7 Feb, 2001.

<sup>121</sup> Victor Hugo, "Subject: Army Aviation Action Memorandum," *Memo for Chief of Staff of the Army*: Director of Management U.S. Army, 1982.

aviators without ground experience would be less responsive to the field commander.<sup>122</sup> Recall that the general officers involved in this decision had all served in Vietnam where helicopter close air support had been so responsive that it was often preferred over field artillery. These officers did not want to lose this tremendous combat multiplier.

In response to these arguments proponents of the branch cited the recent TROAA and AAMAA studies that had concluded that the expanded role of aviation coupled with the constrained time and dollars makes it nearly impossible to adequately train and provide experience to aviators to meet this expectation. "Seasoning" in ground operations would have to be accomplished through combined arms training. The bottom line was that the Army could not afford to fully train and develop aviation officers in both the ground and air environment. As for responsiveness, they argued that other branches are adequately responsive to field commanders. With proper integration into the combined arms team and training there was no reason to believe that Army aviation would be any less responsive to field commanders than field artillery or engineers.<sup>123</sup>

### **Aviation Needs of Basic Branches**

Another argument against the branch was that there were distinct differences in requirements for aviation support for infantry, armor, intelligence, signal, and other branches. Opponents feared that these differences would not be adequately addressed by the Aviation Center if all aviation authority and responsibility for aviation doctrine and training was transferred to Fort Rucker.<sup>124</sup> Remember that responsibility for aviation doctrine and training had been divided amongst the ground branches with each of the major schools having the ability to write aviation doctrine as they saw fit. They were reluctant to give up this authority and control.

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<sup>122</sup> Merryman, "Subject: Re".

<sup>123</sup> Hugo, "Subject. Army Aviation Action Memorandum."

<sup>124</sup> Hugo, "Subject. Army Aviation Action Memorandum."

Proponents of the branch conceded that there were unique aviation concerns for individual ground branches. Of course, they argued, any branch that provides support to multiple other branches must be mindful of the needs of the supported arms. This should not be an argument against aviation branch any more than it is an argument against an engineer or field artillery branch. Unique branch requirements for aviation could be accommodated with similar cooperation and coordination that other support branches employ.

### **Air Force Takeover**

There was a fear within the Army that a separate aviation branch would potentially be attractive to the Air Force, and the Army could lose control of the air aspect of its tactical operations.<sup>125</sup> Recall that the Army had been in a constant struggle with the Air Force since the early 50s over the missions and capabilities of Army aviation. Air Force control of all things air was something feared by Army officers that still felt ignored and abandoned by the Air Force. They did not want to risk losing the aviation asset that had been born by necessity out of the Air Force's neglect of the ground fight.

Branch proponents argued that the Air Force would not want to take over Army aviation. Army aviation involved primarily rotary wing aircraft, which were forwardly deployed in non-fixed sites with only tactical missions. The Air Force preferred to operate from rear area, fixed and protected sites with both tactical and strategic missions. The Air Force would not likely want to take on the role that Army aviation played in the combined arms team.<sup>126</sup> The existence of Army aviation was useful to the Air Force at this time because it reduced some of the pressure for the Air Force to provide close air support.

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<sup>125</sup> Merryman, "Subject: Aviation Branch".

<sup>126</sup> Hugo, "Subject. Army Aviation Action Memorandum."

## Force Structure Problems

Within Army aviation the largest concern with creating a branch stemmed from force structure. There simply were not enough command opportunities within the aviation community alone to support a branch full of full time aviation commissioned officers. Army aviation had only one battalion in each division or corps. This means that there was only one lieutenant colonel command in each division. The situation was even worse for colonel commands with only about seven existing in the entire Army. In order for aviation officers to compete for promotion they had to demonstrate the ability to command just like officers from other branches. With so few commands available within aviation Army aviators were forced to turn to their basic branch for command opportunities. If the basic branches were taken away from aviators then where would they command? They wouldn't. How would they get promoted? They wouldn't.<sup>127</sup>

The AAMAA pointed out this problem noting, "Historical analysis reveals that Army aviation force structure has been accomplished without recognition of the mutually dependent and reciprocal actions that exist between training and personnel management and the implications of these on individual retention and unit effectiveness."<sup>128</sup>

This problem was eliminated by the Army's new division design structure known as Army 86. The Army 86 initiative was an attempt to redesign and modernize the army's division structure to reflect changes in threat and technology. One of the most significant aspects of this new division structure was the creation of an Air Cavalry Attack Brigade (ACAB) as the fourth brigade in the division. This concept was developed at the Armor School as a method of commanding and controlling the combat power that Army aviation brought to the battlefield. The ACAB was a precursor to the modern aviation brigade and was an early sign of the importance Army aviation would play in the "Army of Excellence." The ACAB consisted of 1, 336 men

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<sup>127</sup> Merryman, "Subject: Aviation Branch".

<sup>128</sup> Army Aviation Agency Fort Rucker (Center), "Army Aviation Mission Area Analysis (AAMAA)", Vol II. 13-120

with a total of 134 helicopters including 48 attack and 44 scout helicopters. The brigade was organized into two air cavalry squadrons, one combat support aviation battalion, and a maintenance battalion.<sup>129</sup> This is very similar to today's organization with one colonel command and four lieutenant colonel commands. With this structure in place there were adequate command positions to make an aviation branch a viable career option for aviators.

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<sup>129</sup> John L. Romjue, *A History of Army 86*, Vol I. (Fort Monroe, Va.: Historical Office, United States Army Training and Doctrine Command, June, 1982), 111

## Part 4

### Analysis of the First Eighteen Years

The decision was made on 12 April 1983 when Secretary of the Army, John O. Marsh Jr., approved General Order number 6 establishing Army aviation as a branch.<sup>130</sup> The decision was made but the debate was far from over. In the years to come aviation branch would face tremendous challenges to prove that the branch decision had been the correct one.

The United States Army Aviation Center, now a branch home, moved with blinding speed to implement the changes outlined in the AADP. The implementation of the branch began on 6 June 1983, the forty-first anniversary of organic Army aviation. Maj. Gen. Bobby J. Maddox, commanding general of Fort Rucker when the branch was approved, expedited the establishment of aviation officer basic and advanced courses as a first priority.<sup>131</sup>

The next commander, Maj. Gen. Ellis D. Parker, overhauled doctrinal and training publications and revamped the Aviation Combat Developments Directive making it a TRADOC standard bearer.<sup>132</sup> The fledgling branch was off to a great start.

The first 315 AH-64 Apaches were delivered to the Army in January 1984<sup>133</sup> As technology increased the ability to see deep and fight in depth, the United States Army revised its AirLand Battle doctrine in the 1986 version of FM 100-5, which emphasized operational art.<sup>134</sup> The 1986 version further defined the deep, close, and rear, aspects of the battlefield framework

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<sup>130</sup> Wickham, "Army Aviation Branch".

<sup>131</sup> Harrison, "Aviation", 24

<sup>132</sup> Harrison, "Aviation", 24

<sup>133</sup> James Williams, "Aviation Chronology 1971-1984," (Fort Rucker, AL, Army Aviation Center, Aviation Historian's Office, Jan, 2001)

<sup>134</sup> Department of the Army, *Field Manual 100-5, Operations* (Washington D.C.: U.S. Government Printing Office, June, 1993), v.

and continued to stress the importance of deep attacks to disrupt enemy momentum and destroy his assets prior to them entering the close fight.<sup>135</sup>

Significantly for Army aviation, the 1986 operations manual clearly listed Aviation as a separate maneuver arm on the battlefield.<sup>136</sup> The manual's authors pointed out that, "In today's Army, while aviation is relegated largely to support of ground maneuver, it increasingly offers opportunities for actual maneuver by air."<sup>137</sup> This simple quote was all a fledgling branch seeking increased responsibility and importance on the battlefield needed to make the final leap away from the close fight and toward the deep battle where aviation could serve independently as a "maneuver" branch. Army aviation, like the Air Force before it, was slowly moving away from the close fight for another priority. This was the greatest fear of branch opponents and it was coming true.

Throughout the rest of the Cold War and into Operation Desert Storm, United States Army attack aviation would develop the tactics, techniques, and procedures required to conduct highly effective deep attacks into high threat environments. That training would pay off at 02:38 on January 17, 1991 When Task Force Normandy began its attack on two Iraqi missile sites. TF Normandy, under the command of LTC Richard A. "Dick" "Commander" Cody, consisted of nine AH-64 Apaches, one UH-60 Black Hawk and four Air Force MH-53J Pave Low helicopters.<sup>138</sup> The purpose of this mission was to create a safe corridor through the Iraqi air defense system. The attack was a huge success and cleared the way for the beginning of the Allied bombing campaign.<sup>139</sup> Unfortunately for the Iraqi Army, they presented exactly the type of threat that the United States Army had trained to fight throughout the Cold War. With a six-week air campaign and a seventy-two hour ground war the United States led coalition military

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<sup>135</sup> Department of the Army, *Field Manual 100-5, Operations* (Washington D.C.: U.S. Government Printing Office, 05 May 1986), 145.

<sup>136</sup> Department of the Army, *Field Manual 100-5, 1986 edition*, 145.

<sup>137</sup> Department of the Army, *Field Manual 100-5, 1886 edition*, 42.

<sup>138</sup> Bradin, *From Hot Air to Hellfire*, 31.



brought the fourth largest army in the world to its knees. Fourteen Apache battalions participated in Desert Storm. Some played decisive roles. Apaches left in their wakes hundreds of burning craters where T-72 tanks had once been.<sup>140</sup>

The operational visions of Gen DePuy and Gen. Starry had been realized in one of the United States Army's finest hours. Army aviation as a branch had proven that they could develop effective doctrine and training. They had performed with distinction on the greatest testing ground in the world, the battlefield. This brilliant performance was achieved with aviation battalion commanders that had all served in ground branches early in their career. The true test of the branch could not come until aviation commanders were pure aviators with no ground experience.

Since Desert Storm the United States Army has been actively engaged all over the world. Wherever the United States Army has gone Army aviation has been there as a vital member of the combined arms team. Army aviation served with distinction in the dusty streets of Mogadishu, Somalia.<sup>141</sup> Army aviation operated from United States Navy warships off the coast of Haiti supporting the U.S embargo as part of Operation Uphold Democracy. It was Army aviation that moved the 10<sup>th</sup> Mountain division from the decks of the USS America to Port Au Prince international airport to begin Operation Support Democracy.<sup>142</sup> Throughout the United States' involvement in peacekeeping operation in Bosnia and Kosovo Army aviation has performed with distinction in a wide variety of roles. The one "black eye" that Army aviation has suffered since creating the branch came in support of the United States air war in Kosovo. Task Force Hawk, an attack aviation heavy task force was deployed to Albania with the intent of

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<sup>139</sup> Bradin, *From Hot Air to Hellfire*, 3.

<sup>140</sup> Bradin, *From Hot Air to Hellfire*, 21, 23.

<sup>141</sup> Mark Bowden, *Blackhawk Down* (Philadelphia: Philadelphia Enquirer, 1997). This book gives a gripping account of the bloody battle in the streets of Mogadishu. Army aviation plays a major role in the story.

<sup>142</sup> Author commanded Air Cavalry Troop participating in Operations Uphold and Support Democracy.

employing the AH-64s against Serbian armor units operating in Kosovo. The deployment took much longer than expected and during mission rehearsal exercises two Apache's crashed killing their crews. Task Force Hawk was never employed against enemy forces.

Now that 18 years have passed since the branch decision and aviation battalion commanders have grown up as aviators their entire careers it is time to relook the arguments that lead to the branch creation. Who was right, proponents, or opponents of the branch? Is the United States Army better off because of the decision?

### **Doctrine and Needs of Ground Branches**

The concern over the disjointed development of aviation doctrine was addressed early under the direction of Maj. Gen. Ellis D. Parker. The Aviation Center now creates comprehensive doctrine for all aspects of aviation operations. Appendix A lists all of the doctrinal manuals written at the Aviation Center today. It is significant to note that the list includes warfighting as well as technical manuals. The Directorate of Training, Doctrine, and Simulation (DOTDS) at Fort Rucker is the proponent for all of these publications.<sup>143</sup> These manuals are not created in a vacuum, however. The Aviation Center participates in the doctrine review process with the other branch centers under the direction of the Combined Arms Center at Fort Leavenworth. This system is designed to ensure integration and consistency of doctrinal terms.

Clearly aviation branch has been successful in consolidating responsibility for and producing aviation doctrine. What is open for debate is whether the content of that doctrine is still responsive to the needs of the other branches. Aviation branch has removed any reference of using Army aviation assets as a close air support system from aviation and Army doctrine. The close air support mission was the catalyst for developing attack helicopters during the Vietnam

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<sup>143</sup> DOTDS, "Doctrinal Manuals".

War yet now there is no mention of this mission in aviation doctrine.<sup>144</sup> Army aviation has done exactly as feared and moved away from the close fight in pursuit of sexier deep missions and independent missions.

### **Training and Officer Development (Soldiers First)**

Training and officer development gets a mixed report card for the first 18 years. The Aviation Center has fulfilled its charter to create an Aviation Commanders Guide and Aircrew Training Manuals for all types of Army Aircraft.<sup>145</sup> Additionally, they produced and maintain Army Training and Evaluation Programs (ARTEPs) for aviation units. These ARTEPs have been the foundation for aviation training across the Army. The production of these products was part of the promise of the new branch and the Aviation Center has succeeded in this endeavor.

The failure in aviation training lies in the execution. Aviation officers are showing signs that they are ignorant when it comes to ground doctrine and operations. A senior field commander with numerous National Training Center (NTC) rotations was quoted as saying, 'The aviator must be more at ease talking with battalion and brigade S3s than he is talking with air traffic controllers.' The implication was that this was not the case.<sup>146</sup>

Army aviation's quest for independent missions has done more than push them away from the close fight. It has had a negative impact on ground officers' perceptions of their combat capability. In October of 1999 the OPFOR commander at the NTC was quoted as saying, 'Army aviation, specifically Kiowa Warrior and Apache crews, have not influenced the outcome of any force-on-force battle at the NTC in the 16 months I've commanded the regiment.'<sup>147</sup> Army aviation has proven in combat that it can significantly influence the outcome of any battle but at

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<sup>144</sup> A review of all manuals listed in Appendix A yields no references to close air support as an Army aviation mission. Even FM 101-5-1, Operational terms and graphics includes rotary wing aircraft as a CAS platform because it is also a Marine manual. Marines routinely use helicopters for CAS.

<sup>145</sup> DOTDS, "Training Publications," *DOTDS*, [ONLINE], <http://155.147.98.10/dotds/dotds.htm> Accessed 20 April 2001. Listed in Appendix A.

<sup>146</sup> Harrison, "Aviation", 25

the NTC they are failing to demonstrate this. This is in part due to the fact that attack aviation assets are focused on deep attacks that frequently yield little results due to the difficulty of finding deep targets given limited intelligence.

Gen (R) Benjamin Harrison argued in an Army Magazine article that the best and easiest way to solve the problem of aviation understanding of the ground fight is to involve them in it more often. The United States Army should train the way they claim they intend to fight, as a combined arms team. Aviation units, and thus their officers, must be integrated into the close fight. Aviation brigades, as the fourth maneuver headquarters in the division should be given covering force and guard missions task organized with ground maneuver battalions. Of course aviation commanders and staff will have some difficulty commanding and controlling these types of mission at first because they are unaccustomed to it. With time and training aviation officers can learn to command and control combined arms task forces and brigade combat teams effectively. They simply need the chance to train.<sup>148</sup>

There are no conscious and comprehensive combined arms training programs for aviation units to train with armor, infantry, and artillery at home station and then deploy with them to combat training centers. Infantry and armor commanders must insist that aviation elements are always included in home station training and combat training center rotations. They should insist on this just as they would not think of training without artillery. It is important to remember that Army aviation is in the "land" part of AirLand Battle. It is called Army aviation for a reason. Army aviators must be included in all aspects of the land fight.<sup>149</sup>

At the 2000 aviation symposium sponsored by the Association of the United States Army (AUSA) and the Army Aviation Association of America (AAAA), Lt. Gen. Johnny M. Riggs expressed his concern that Army aviation branch is "in a crisis." This statement was based on his

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<sup>147</sup> Harrison, "The Army Has Failed to Fully Develop", 15

<sup>148</sup> Harrison, "Aviation", 25

<sup>149</sup> Harrison, "The Army Has Failed to Fully Develop", 15

belief that aviation officers were not well thought of as combined arms officers among other combat arms branches.<sup>150</sup> If this is true then it is the Army that is in a crisis, not simply Army aviation as a branch. The Army is not training its officers, ground or air, to fight as combined arms officers in all three dimensions.

### **Career Viability and Force Structure**

This is an area of absolute success for the branch. With the adoption of a new aviation force structure based on the Army 86 model, there is an aviation brigade in each division and corps. This has afforded aviation officers with sufficient command opportunities to ensure career viability. There was a transition period of approximately ten years when aviators under performed other branches at promotion boards.

In those early years articles in *Army Magazine* and *Aviation Digest* in the early 1990s expressed concern with this promotion trend. One article noted with disappointment, "the recently released list of colonels selected for brigadier general included only one colonel of aviation; the earlier list for major general contained only one aviation brigadier."<sup>151</sup> This article spawned an anonymous letter to the editor that railed about the failure of aviators to gain promotions at a rate commensurate with other combat arms officers.<sup>152</sup> There was some doubt amongst aviators as to whether the branch had proven to be a good idea. Those fears have since been alleviated.

Today, Army aviators perform as well or better than other officers. The branch recently broke another significant barrier with the selection of Maj. Gen. Dick "Commander" Cody as the commander of the 101st Air Assault division. He is the first aviation branch officer to command

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<sup>150</sup> Harrison, "The Army Has Failed to Fully Develop", 14. Author attended this symposium and heard the presentation of several retired and active general officers who expressed concern with the development of aviation officers.

<sup>151</sup> Harrison, "Aviation", 23

<sup>152</sup> Anonymous, "Army Aviation," *Army Magazine* (Association of the U.S. Army) Vol 41, No. 2 (Feb 1991), 13. This was a letter to the editor in response to Harrison article in Jan 1991.

a division. Although it is doubtful that aviation will ever rival armor, infantry, and field artillery for general officer selections, it is clear that success is obtainable. The branch structure has provided aviation officers with ample opportunities for success at very high levels. This will always be a ground Army first and foremost and aviators should not be surprised when general officer selection rates reflect accordingly.

### **Air Force Takeover**

The fear of an Air Force takeover proved to be completely unfounded. It seems this fear was based more on hard feeling over past struggles with the Air Force than on realistic analysis of likely Air Force reaction. As argued in the early 1980s, the Air Force showed no interest in seizing Army aviation. With Army aviation would have come a significantly increased responsibility for close air support. This was not a responsibility or a cost that the Air Force was anxious to accept when they could leave it under the control (and budget) of the Army.

### **Added benefits**

Recalling the AADP assertion that solving the systematic problems with Army aviation would have a positive impact on all things aviation, it stands to reason that there are second order effects on Army aviation issues that were not specifically covered in any of the studies conducted in the 1980s.<sup>153</sup> Two areas that appear to have benefited significantly from the creation of the branch are safety and aircraft maintenance.

Appendix B shows the aviation accident rates from 1972 until present as recorded the United States Army Safety Center, at Fort Rucker Alabama. A cursory look at the statistics will show that aviation safety has improved dramatically since the creation of the branch. The overall accident rates for all classes of accident have decreased by at least three hundred percent.<sup>154</sup> Of

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<sup>153</sup> Army Aviation Center, "Army Aviation Development Plan (AADP)".4-27.

<sup>154</sup> Official Statistics provided via Email from the United States Army Safety Center located at the Home of Army Aviation, Fort Rucker Alabama, on 20 Feb, 2001.

course there are a great many factors that influence the aviation safety rates. Night vision system/goggle training has improved dramatically as has the quality of night systems. Aircraft are newer and better designed with safety in mind. Conversely, Army aviators are flying less hours in training and have less overall hours than at any time in the post Vietnam history. While it may not be fair to give all the credit for improved safety to the branch creation, the correlation between improved safety rates and branch creation is too close to be ignored.

Similarly, aviation maintenance statistics are far better than they were in the pre branch days. It is particularly difficult to make an honest comparison between maintenance rates of modern aviation aircraft and the Vietnam era aircraft of pre branch Army aviation. There are countless factors that contribute to improved maintenance statistics. One factor that intuitively has improved aviation is the fact that officers, warrant officers, and enlisted aviators remain in their branch with a single focus and under the direction of a single schoolhouse.

## Part 5

### Conclusions and Recommendations

Was the decision to create an aviation branch a good one? It seems from the results of the Army Aviation Mission Analysis and the TRADOC Review of Army aviation that the decision to create a branch was virtually inevitable. Problems with aviation doctrine, training, and officer development dictated the creation of the branch. Within a few years of establishing the aviation branch the Army Aviation Center had achieved most of the promises that they had argued a branch would deliver. They produced doctrine and training products in an efficient manner for the first time in aviation history. They had established a home for the branch at Fort Rucker with all of the authority and responsibility of other combat arms branches. They provided a predictable and reliable career track for aviation officers and they had improved aviation safety and maintenance. The proponents of the branch had been correct.

Unfortunately, the opponents of the branch were also correct. The fear that pure aviation officers would lose touch with the ground fight has come true in the opinion of many officers in and out of aviation branch. Although this fear was the most significant argument against the branch in 1982, surprisingly nothing was done to mitigate the possibility. Once the decision to create the branch was made the detractors were forgotten as the Aviation Center went about the monumental task of building the foundation for the branch.

The original TROAA recommendation for an aviation branch recognized the need for aviators to have ground foundations. The report recommended that all officers accepted for flight training be commissioned in aviation branch and detailed to the infantry or armor for 12 to 24 months ground duty to validate MQS II skills prior to flight training. Aviators would then attend IERW followed by a 6 to 8 week course in aviation tactics in combined arms/joint operations. Following a three year aviation utilization tour in their primary aircraft aviators would attend the



aviation advanced course with combined arms training provided by a combined arms faculty.<sup>155</sup> This recommendation garnered great support among the general officer community. Those that did not support the branch were consoled by the idea of branch detailing young aviators to armor and infantry. The idea was eventually a casualty of limited resources and did not survive into the final Aviation Implementation Plan. In the absence of branch detailing there was no other plan to keep aviation officers “grounded” in land warfare principles. Aviation commanders were simply urged to watch out for aviation centric thinking in young officers.<sup>156</sup> It is difficult for modern aviation commanders to guard against aviation centric thinking when they themselves are career long aviators.

After eighteen years it is time to conduct another Army Aviation Mission Area Analysis or TRADOC Review of Army Aviation to determine what adjustments are necessary to improve the branch. There is little doubt that the branch is necessary but there is some doubt as to whether or not the current branch structure and policies are the best possible for maximizing the combat effectiveness of the United States Army. The modern review of Army aviation should focus on solving the problem that was identified but ignored in 1983.

There are several ideas that the new review committee should explore. In the short term army aviation should resume accepting branch transfers from other combat arms branches. In accordance with the DCSPER policy letter dated June 1995, branch transfers to aviation are no longer being approved. The Director, OPMD, PERSCOM is the waiver approval authority for this policy, but Aviation Branch will not recommend approval on any requests due to the large backlog of currently serving aviators who require modernized aircraft transitions (AQC). If aviation branch accepts branch transfers, the new accessions would either not receive AQC (and

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<sup>155</sup> Review Group for the Commanding General Army Training and Doctrine Command, "TRADOC Review of Army Aviation (TROAA)", 15

<sup>156</sup> Merryman, "Subject: Aviation Branch".

increase the backlog) or take an AQC from currently serving aviation officers.<sup>157</sup> The backlog in advanced aircraft transitions would be well worth the infusion of ground tactical and operational expertise into the branch. Even a few officers with ground experience in an aviation battalion could have a dramatic impact on the rest of the officers in that battalion.

Aviation units must be included in home station combined arms training and all Combat Training Center rotations. This is essential for the training of both ground and air officers. There has been a disturbing trend over the last few years to eliminate attack aviation from NTC rotations as a cost saving measure. This is an unacceptable means of lowering costs at a time when a critical training deficiency is evident. Aviation officers will learn a great deal more about ground tactical operations if they participate in them on a routine basis.

Aviation liaison officers should be incorporated down to battalion level in ground maneuver units much the same way the field artillery operates. These positions could be filled in part with warrant officers, as they need to develop tactical expertise and understanding of the combined arms fight as well. One reason aviators are reluctant to operate in close as a member of the combined arms team is the perception that ground officers do not understand the intricacies of aviation employment. Liaison officers could do a lot to alleviate this concern.

Perhaps the best way to improve aviator familiarity with ground operations is to give them more opportunities to command and control ground forces in training. The aviation brigade provides a fourth maneuver headquarters to the division commander. This headquarters would be ideal for the command and control of guard and covering forces if the aviation command and staff was given the opportunity to routinely train for this mission. The security zone fight is often challenging for divisions because of a shortage of C2 headquarters. The three ground brigades in the division are generally over tasked and the division cavalry does not have the combat power to perform guard and cover missions without additional resources. The cavalry does not have the

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<sup>157</sup> PERSCOM, "Branch Transfers to Aviation," *PERSCOM*, [ONLINE],

staff to adequately command and control large additions of combat power. The aviation brigade headquarters is the perfect solution to this common operational problem. All the aviation brigade headquarters needs to execute this mission is training and a chance.

The most dramatic course of action that should be studied is a variation on the 1983 TROAA branch detailing recommendation. Army aviation could follow the example of the newest branch in the United States Army, Special Forces. Commissioned officers are not assessed into the Special Forces branch until they have served a utilization tour in another branch. Using this model, officers would enter aviation branch after their first tour in a ground combat arms branch. They would attend IERW and the aviation advanced course at Fort Rucker and then report to their first aviation units as junior captains with a solid foundation in ground tactics and operations. This would involve restructuring aviation units to include warrant officer platoon leaders since there would be no more lieutenants in aviation units. This idea may not be supportable from a personnel standpoint but it deserves study and consideration at the highest level.

The United States Army is in the process of dramatic transformation. There are no “sacred cows.” The goal is to achieve a rapidly deployable, combat effective, versatile force capable of operating anywhere in the world. Critical to the success of the objective force will be effective combined arms operations. If Army aviation is going to fulfill their role in this objective force they must develop combined arms officers who are as comfortable with ground operations as they are with flight operations. This goal will only be achieved through experience and training.

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[Http://www.perscom.army.mil/OPavn/avnews.htm](http://www.perscom.army.mil/OPavn/avnews.htm) Accessed 20 April 2001

## Appendix A

### Doctrine and Other Publications

<b>AVIATION DOCTRINAL PUBLICATIONS</b>			
C = Current, U = Under revision, R = Revision Required			
Manual	Name	Status	Publication Date
<a href="#">FM 3-04.100 (1-100)</a>	Army Aviation Operations	<b>R</b>	21 Feb 97
<a href="#">FM 3-04.111 (1-111)</a>	Aviation Brigades & Task Forces	<b>U</b>	27 Oct 97
<a href="#">FM 3-04.112 (1-112)</a>	Attack Helicopter Operations	<b>R</b>	2 Apr 97
<a href="#">FM 3-04.113 (1-113)</a>	Utility & Cargo Helicopter Operations	<b>U</b>	12 Sep 97
<a href="#">FM 3-04.114 (1-114)</a>	Air Cavalry Squadron/Troop	<b>C</b>	1 Feb 00
<a href="#">FM 3-04.120 (1-120)</a>	Army Air Traffic Services Contingency & Combat Zone Operations	<b>R</b>	22 May 95
FM 3-04.130 (1-130)	Aviation Urban Operations	<b>U</b>	New
<a href="#">FM 3-04.140 (1-140)</a>	Helicopter Gunnery	<b>U</b>	29 Mar 96
FM 3-04.230 (1-230)	Meteorology For Army Aviators	<b>R</b>	30 Sep 82
FM 3-04.240 (1-240)	Instrument Flying and Navigation	<b>U</b>	15 Dec 84
<a href="#">FM 3-04.300 (1-300)</a>	Flight Operations Procedures	<b>U</b>	15 Jul 98
FM 3-04.301 (1-301)	Aeromedical Factors for Army Aviation	<b>U</b>	29 May 87
<a href="#">FM 3-04.303 (1-303)</a>	Air Traffic Control Facility Operations & Training	<b>U</b>	5 Apr 93
<a href="#">FM 3-04.500 (1-500)</a>	Army Aviation Maintenance	<b>U</b>	27 Jan 95

<a href="#">FM 3-04.508 (1-508)</a>	Maintaining Aviation Life Support Equipment	C	1 Mar 00
<a href="#">FM 3-04.513 (1-513)</a>	Battlefield Recovery & Evacuation of Aircraft	U	20 May 93
<a href="#">FM 3-04.564 (1-564)</a>	Shipboard Operations	U	29 Jun 97
FM 3-04.201 (1-201)	Fundamentals of Flight	U	New
FM 3-04.613 (1-613)	Utility & Cargo Fixed Wing Aircraft Operations	U	New

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<sup>158</sup> DOTDS, "Doctrinal Manuals," *Doctrine Division*, [ONLINE], <http://155.147.98.10/dotds/dotds.htm> Accessed 20 April 2001.

**AVIATION ARTEP MANUALS**

C = Current, U = Under revision, R = Revision Required

Manual	Name	Status	Publication Date
<a href="#">ARTEP 1-111-MTP</a>	Aviation Brigades	U	23 Sep 98
<a href="#">ARTEP 1-112-MTP</a>	Attack Helicopter Battalion	C	30 Mar 00
<a href="#">ARTEP 1-113-MTP</a>	Utility Helicopter Battalion	C	30 Mar 00
<a href="#">ARTEP 1-114-MTP</a>	Air Cavalry/Reconnaissance Squadron and Troop	C	30 Mar 00
<a href="#">ARTEP 1-245-MTP</a>	Heavy Helicopter Battalion	C	30 Mar 00
<a href="#">ARTEP 1-425-MTP</a>	Air Traffic Services Battalion	U	5 Apr 96
ARTEP 1-500-MTP	Aviation Intermediate Maintenance	U	NEW

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<sup>159</sup> DOTDS, "ARTEPs," *DOTDS*, [ONLINE], <http://155.147.98.10/dotds/dotds.htm> Accessed 20 April 2001.

## Appendix B

### Safety Statistics

ARMYWIDE CLASS A-C FLIGHT ACCIDENTS									
		ACCIDENTS				RATES			
FY	HOURS	A	B	C	A-C	A	B	C	A-C
1972	1,122,970	77	41	197	315	6.86	3.65	17.54	28.05
1973	1,564,594	64	56	214	334	4.09	3.58	13.68	21.35
1974	1,572,314	51	50	216	317	3.24	3.18	13.74	20.16
1975	1,477,625	52	51	194	297	3.52	3.45	13.13	20.10
1976	1,483,553	48	70	218	336	3.24	4.72	14.69	22.65
1977	1,498,906	44	77	205	326	2.94	5.14	13.68	21.75
1978	1,449,788	45	77	166	288	3.10	5.31	11.45	19.86
1979	1,443,836	39	32	200	271	2.70	2.22	13.85	18.77
1980	1,537,508	36	15	281	332	2.34	0.98	18.28	21.59
1981	1,632,790	43	21	290	354	2.63	1.29	17.76	21.68
1982	1,580,162	58	30	314	402	3.67	1.90	19.87	25.44
1983	1,589,680	40	22	319	381	2.52	1.38	20.07	23.97
1984	1,538,610	39	7	80	126	2.53	0.45	5.20	8.19
1985	1,531,829	45	10	76	131	2.94	0.65	4.96	8.55
1986	1,628,163	31	13	84	128	1.90	0.80	5.16	7.86
1987	1,704,675	37	12	72	121	2.17	0.70	4.22	7.10
1988	1,741,997	32	9	39	80	1.84	0.52	2.24	4.59
1989	1,685,100	32	11	78	121	1.90	0.65	4.63	7.18
1990	1,696,871	31	10	69	110	1.83	0.59	4.07	6.48
1991	1,299,734	48	10	98	156	3.69	0.77	7.54	12.00

<b>1992</b>	1,400,052	22	11	77	110	1.57	0.79	5.50	7.86
<b>1993</b>	1,299,337	23	16	87	126	1.77	1.23	6.70	9.70
<b>1994</b>	1,278,120	21	9	86	116	1.64	0.70	6.73	9.08
<b>1995</b>	1,203,699	10	15	70	95	0.83	1.25	5.82	7.89
<b>1996</b>	1,082,010	8	11	70	89	0.74	1.02	6.47	8.23
<b>1997</b>	952,956	12	12	58	82	1.26	1.26	6.09	8.60
<b>1998</b>	890,526	12	4	68	84	1.35	0.45	7.64	9.43
<b>1999</b>	912,617	18	12	71	101	1.97	1.31	7.78	11.07
<b>2000</b>	968,739	6	4	73	83	0.62	0.41	7.54	8.57
<b>2001</b>	968,739	4	5	29	38				

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<sup>160</sup> Official Statistics provided via Email from the United States Army Safety Center located at the Home of Army Aviation, Fort Rucker Alabama, on 20 Feb, 2001.



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