



General Wood, at right, discusses plans for the breakout with Lieutenant General Omar Bradley, center, and Major General Manton Eddy.

*Before There Was Digitization:*

## **How MG J.S. Wood's 4th Armored Division Stormed Across France Without Written Orders**

by Major Donald E. Vandergriff

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*“Burn Em! That’s the last written field order this division prepares! Every order I give will be verbal, either eye-to-eye or by radio.”<sup>1</sup>*

After viewing his division’s first written order in combat, MG John S. Wood, commander of the 4th Armored Division, told his G3 (operations officer) not to issue any more. Wood believed the formatted, five-paragraph order taught to U.S. Army officers at the Command and General Staff College at Fort Leavenworth would only slow down his division’s decision cycle in combat.

The fact that MG Wood could dispense with written orders while leading his division across France highlights the level of training, cohesion, and education that a unit would need to achieve in order to execute verbal mission orders.

The 4th Armored Division’s “daring, hard-riding, fast-shooting style” was made possible through the execution of mission orders. But only by “throwing away the book,” ironically, did the division accomplish the armored warfare envisioned by the writers of *FM 17-100, Armored Command Field Manual, The Armored Division*.<sup>2</sup>

The division was activated on April 15, 1941, at Pine Camp, New York, and stayed together and trained in the United States for 32 months before shipping out to England in December 1943. By that time, the division had trained in New York, Tennessee, the Desert Training Center in California, and Camp Bowie, Texas. In July 1944, the division entered combat for the first time during *Operation Cobra*, the breakout from the Normandy beachhead, and from that point on led the rest of the Army across France and into Germany. The division offers valuable lessons in developing the leadership and cohesion that allowed it to become one of World War II’s premier armored divisions, and its commander, Major General John Shirley Wood, the “American Heinz Guderian.”<sup>3</sup>

The 4th AD adapted many tenets of German maneuver warfare. The objective of maneuver warfare is to exploit firepower, mobility, and shock action through aggressive, audacious tactics and techniques. It optimizes the capacity to move, shoot, and communicate more effectively than the enemy. The 4th AD could do this because its commander and his subordinates modified or defied existing officer and unit personnel policies as they implemented an

evolving doctrine. Employing the fundamentals of maneuver warfare, the 4th AD exploited, pursued the Germans across France, and then carried out a mobile defense against a determined, well-trained, well-equipped, and well-led enemy in forested terrain inhabited by an unfriendly population.

By the time the division entered combat, with none of its units bloodied, it was ready to fight. Wood had reason to feel that his division was ready to take the fight to the enemy because it had been preparing for more than three years, in snow, mountains, sand, and hard scabble plains. Probably no other outfit in our military history had trained together longer, more intensively, or in

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more varied terrain and weather than the 4th Armored Division. It was ready to a fare-thee-well.<sup>4</sup>

And as it fought, it got better because its officers and soldiers could easily assimilate new lessons learned from the battlefield. This was the key to success. Flexibility became the division’s watchword, and accepted way of doing business.

Though the division was divided according to its Table of Organization and Equipment (TO&E) into three subordinate brigade-size commands, lettered Combat Command A, B, and Reserve, the actions of Combat Command A (CCA) merit specific study, providing many examples of rapid and decisive decision-making, from the individual tank crew to the combat command commander. The 4AD’s offensive in Lorraine demonstrated speed, “not just speed of movement, which is important, but speed in everything.”<sup>5</sup>

In several battles, the principles of leadership and cohesion held firm against the best the Germans had to throw at the U.S. Army at the time. The division had to employ maneuver warfare to succeed because it faced longer-range weapons, manned by veteran German soldiers with some of the best technology of the day. The Germans had better tank sights and range-finding equipment, and larger main tank guns

with more hitting power and longer ranges. Many of 4AD’s battles in France in 1944 would pit its smaller, yet well equipped forces against determined German units, some of high quality, such as the Panzer divisions, and some of inferior quality, such as the Volksgrenadier divisions. In many cases, the division operated its combat commands over vast distances, yet the long experience operating as a team bonded them as they fought. They had trained and grown to think as a team, with a single mind.<sup>6</sup>

It was the long period of training and building cohesion that enabled the division to perform at such a high level. The soldiers themselves were as confi-

dent as they should have been. One of their noted members, retired Brigadier General Albin F. Irzyk, remarked that, “We felt that we were destined for greatness, much the same feeling that a college football team must have when it senses the national championship.”<sup>7</sup>

The entire division did not stay together as a team through its three years. The Army’s poor policies stripped the 4th AD of many of its trained members to form the cadres of other divisions. In fairness, there was no choice: there were not enough trained personnel in the Regular Army at the beginning of the war to train the new divisions. In 1942, many members of the 4th AD were reassigned, yet a cadre of key leaders remained, allowing the division to remain effective. General Bautz describes how the division overcame this: “Though many soldiers were taken away in 1942, many leaders and staff officers stayed. This cadre of individuals, particularly men like [Bruce] Clark and [Creighton] Abrams, allowed the division to retain its lessons learned. The learning and innovating did not stop as a large body of lower ranking men were pulled away to create other divisions.”<sup>8</sup>

There were key reasons that allowed the 4AD to remain effective despite the loss of several thousand personnel. First, the division retained its key offi-

cers. Another reason was the command atmosphere: Wood fought hard to create and sustain an atmosphere of trust during his tenure as division commander. He began training his division in a situation that was no different than any other division. His new officers, the men who would train the division for combat, and lead its men against the famed German Army, were no more than amateurs.<sup>9</sup>

### J.S. Wood and His Officers

From the time of his youth, Wood was an individual of strong character and a naturally strong leader. A graduate of the University of Arkansas, he then attended West Point, which had a strong interest in him due his football reputation and his academic record. At the Academy, he excelled in both academics and athletics, particularly football, graduating in 1912. He became known as the professor, or “P,” for taking the lead in helping tutor other students.

As a Regular Army officer, Wood constantly showed his desire for independence and responsibility. In 1936, already a known advocate of maneuver warfare and a student of the writings of Charles de Gaulle, B.H. Liddell-Hart, and J.F.C. Fuller; Wood sought assignments that would give him experience. Despite the advice of friends, Wood turned down attendance at the Army War College and instead took command of the Army’s only independent truck-drawn howitzer brigade, stationed in Des Moines, Iowa.<sup>10</sup> It was during this assignment that Wood experimented with mechanization and mobility. In numerous exercises, Wood would use his initiative to move his howitzer brigade thousands of miles to separate firing points. He tested his unit’s abilities, as well as demonstrating its mobility, a trait unknown for artillery at the time. Despite Wood’s noble efforts, he continued to be criticized by senior officers, even as he was reporting to become Patton’s artillery chief in the newly formed 2nd Armored Division.<sup>11</sup>

Upon assuming direction of Patton’s artillery in September 1939, his character was once again called into question by senior officers because of his advocacy of maneuver warfare. Wood now attacked, verbally and in writing, the traditionalist views that advocated linear — or attrition — warfare. In numerous reports and articles, he stressed a familiar theme: “The motor offers one of the few hopes of securing surprise in modern war.”<sup>12</sup> Despite his warnings

and recommendations, and the demonstration of the power of Blitzkrieg as German forces overran Poland and France in 1939 and 1940, there was still resistance to an American armor force. It would fall on the shoulders of Wood to prove the value of his words with actions.

At the beginning of World War II, the Regular Army had 14,000 officers and 120,000 enlisted men. Almost overnight, the officer corps expanded about 60-fold. The war exposed Regular officers to responsibilities far beyond anything they had experienced, and forced them to rely on subordinates who were essentially commissioned amateurs. Most division commanders and their regimental commanders, who were largely pre-war regulars, turned toward authoritarian, top-down methods of command. They issued detailed orders, insisted on unquestioned obedience, and used their staff officers to check on compliance. Reposing trust and confidence in a subordinate entailed the possibility that he might fail, and embarrass his ambitious superiors with their eyes on one of the many commands being formed.<sup>13</sup>

Wood was the exception to this trend, taking the pain of creating autonomy that would allow his officers to learn from their mistakes. He won their loyalty, and developed subordinate leaders not afraid to take risks in the face of German actions.

Wood got the opportunity to combine the theories of maneuver warfare advocates such as J.F.C. Fuller and Heinz Guderian with his own experiences when he was offered an armored division in 1942. Wood took over the division in June, 1942, at Camp Pine, N.Y. He immediately brought with him simple, yet time-proven philosophies such as,

- Audacity (de l’audace)
- The indirect approach
- Direct oral orders. No details, only missions
- Movement in depth always. This allows flexibility and security of flanks
- Disregard old ideas of flank security
- Organization of supply (taking rations, gas, and ammunition in rolling reserve)
- Personal communication with commanders
- Never taking counsel of your fears

- Never fear what “they” will or do (“they” being the same old bogie — high officialdom or general opinion)
- Trusting people in rear to do their part, a trust sometimes misplaced, but not generally.<sup>14</sup>

“He would try anything once; he encouraged initiative.”<sup>15</sup> With this fundamental outlook toward training, it was not surprising that many officers, such as Major Creighton Abrams (later Army Chief of Staff), and Lieutenant Bruce C. Clarke (later NATO commander) became brilliant officers.<sup>16</sup>

The 4th AD did a lot of experimenting, and “Wood had ideas and was willing to give them without reserve.” One of these inventions was the use of the task force. At Pine Camp, the 4th Armored Division established the task force principle.... One key derivative was that the building blocks of such task forces — especially the tank and armored infantry battalions — would not be permanently assigned to any higher headquarters (a combat command in an armored division), but rather tasked out to one or another such headquarters depending on the tactical situation.<sup>17</sup>

Wood speeded up decisions by using this ability to change task organizations to solve a particular tactical problem. From the first day of his command, Wood did his utmost to ensure that his commanders and their staffs were not focused on processes or formulas. Wood understood that over time, through constant training, officers memorized and verbalized a seemingly complex decision-making process. He was against these tidy methods of control and written prescriptions for ensuring control. He wrote, “Contrary to the practice in many other armored divisions, we had no separation into fixed or rigid combat commands. To me, the division was a reservoir of force to be applied in different combinations as circumstances indicated, and which could be changed as needed in the course of combat by a commander in close contact with the situation at the front. There is not time or place for detailed orders, limiting lines or zones, phase lines, limited objectives or other restraints.”<sup>18</sup>

In order to create such flexibility, Wood stressed hard, realistic training. The division truly exemplified the phrase, “Train as you fight.” Constant maneuver training, in all conditions, enabled the commanders of companies,



A column of 4th AD tanks pass a destroyed German vehicle in the French town of Auvencheil-Aubac in September 1944.

battalions, and the combat commands of the division to know each other as officers seldom do. The division trained on how to task organize for a particular mission, and then, on Wood's orders, reform the task forces while on the move to meet a new threat. Wood did this with no fancy briefings or lengthy rehearsals. He used the radio, and face-to-face oral instructions to train his division to operate without written directives. Speed was always on Wood's mind as he trained, not just speed of motion, but speed in everything the division executed. The training enabled the division's officers to do away with many standardized procedures that would slow down their actions, such as abiding by strict radio procedures.

For example, Wood's battalion commanders and the division command learned to recognize each other by voice — authentication by familiarization. This increased flexibility, and translated into the ability of commanders to change directions more quickly, without worrying that the orders received were false. Rapid decision-making increased with operating procedures that eased the ability of commanders to make decisions. This translated into fluid tactics. When the division or its subordinate commands attacked, it was by flanking movements. The division practiced moving and attacking behind enemy lines. The spirit of such aggressive tactics infected the entire division.

Wood never let his standards drop, knowing that the Germans would never give the division a second chance. He kept his training intense and realistic.

From physical fitness to collective training, there was never a break in training. In force-on-force battles, opposing forces fought with live .30 caliber ammunition slapping against "buttoned up" turrets. Maneuver, speed and competence — the basic military skills — were taught and practiced over and over in varying situations.<sup>19</sup>

Wood exemplified the best in a senior officer. With a foundation established in the basics of soldiering and discipline, Wood created a command climate that was open to innovation. He believed loyalty was a two-way street, and continually stood up for his subordinates, especially when they followed his evolving armor doctrine. He had an intense — indeed fierce — sense of loyalty down; he was ready to act as a shock absorber for all who served under him. But he had little tolerance for rigidity, inflexibility, or stupidity and he could not condone it, even in his superiors; he felt his highest loyalty up was to his country and the Army he served, not to any single individual, even one of superior rank.

In the fall of 1942, 4th AD executed maneuvers in central Tennessee as part of LTG Leslie McNair's methodical training plan to prepare divisions for combat. It was an opportunity for Wood to see what his subordinates could do with his premise of "I will let you decide what to do on the spot." It also allowed Wood to shield them from his conservative superiors. An example of the fierce loyalty inherent in Wood's command style occurred after the division seized a bridge over the Columbia River in central Tennessee. Wood went

against guidance not to conduct movement at night. He seized the bridge after a surprise night march. The Second Army commander, Lieutenant General Ben Lear, criticized the officers of the 2nd Armored Division for being too aggressive and going beyond established boundaries. At that time, most officers adhered to the methods they had learned from the French Army — rigid adherence to staying within designated boundaries, reporting locations, and being on time. To leave the boundaries, even to outsmart the enemy through maneuver, was breaking the rules of the game in the mind of General Lear.

Wood bore the brunt of the verbal attack, by jumping between Lear and the division's officers, then said to Lear, "You do not know what you are talking about, either as to the employment of armor or of the quality of people in my division!"<sup>20</sup> Such moral courage can be traced to Wood's background, which fostered independence and commitment to excellence.

Finally, it must be highlighted that while Wood enforced high standards in both competence and performance, he was not a "martinet or a 'spit-and-polish' general."<sup>21</sup> He enforced maintaining the proper uniform — keeping sleeves and shirts buttoned — and saluting, not merely to a higher rank, but as an informal "soldier's greeting." To Wood, discipline brought about pride, so essential in a good unit. While Wood knew discipline was important, he did not, as some leaders did, believe in "imposing your will... even by the martinet method."<sup>22</sup> He refused to transfer

poor soldiers to other units, instead expecting his officers to train them. And as always, Wood exemplified the high standards he set by leading by example. He lived with his soldiers constantly, from the onset of his command until his departure in November, 1944.

### Organized for Speed

By the time the 4th Armored Division entered combat in July 1944 in Operation Cobra, it was not only well trained, but capable of speed under the revised organization for armored divisions that followed lessons learned in early combat in North Africa. Lieutenant General Leslie McNair, commander, Army Ground Forces, and Major General (later General) Jacob Devers, then chief of the Armored Force, created an incredibly flexible organization, styled the "Type U.S. Armored Division, Sept. 1943." The earlier division concept of 1942 had established two combat commands, lettered A and B (CCA & CCB), which allowed commanders to improvise task organizations to meet likely situations. The problem with the 1942 design was that "it was too tank-heavy and lacked infantry and mechanized artillery."<sup>23</sup> Later studies forced the Army to create a well-balanced all-arms division, and added a third brigade-size headquarters, Combat Command Reserve (CCR).<sup>24</sup>

Based on General McNair's goal, new divisions like the 4th AD were lean and simple, offensive in orientation, with attachments developed as necessary. Under the doctrine that had developed from the Louisiana Maneuvers and training throughout the growing Army, the corps was to be a tactical headquarters to handle a mix of infantry and armor divisions. It was the field army that allocated divisions to the corps, with combat service and service support assets when needed. Once combat began, units found it necessary to keep attached units at the division level. While other divisions kept attachments and task forces constant, the 4th Armored continued to change its mix of separate arms such as tanks, infantry, engineers, and artillery units throughout the 1944-45 campaign.<sup>25</sup>

When 4th AD arrived in Europe, it had three tank, three infantry, and three artillery battalions, along with attached engineer, antitank, and tank destroyer units. It had a total of 11,000 officers and men. As the division broke out of Normandy in August 1944, it found that its training had given it the ability

to create *ad hoc* units to overcome German resistance and to adapt to the extensive road network. These factors increased the speed of its advance. The 4th AD advanced on parallel routes in order to reduce the number of vehicles on a single route, thus preventing traffic jams, and hitting the Germans from many directions. It was an agility that the division had maintained in training that "kept the advance moving."<sup>26</sup>

### A Doctrine of Improvisation

The division's fighting from July 1944 to October 1944 epitomized decentralized combat while fighting toward a common goal. After their breakout from Normandy, 4th AD had to advance westward into Brittany to capture the peninsula's ports, as planned prior to D-Day. Wood saw the situation had dictated new plans, as did Patton, and they recommended moving east after breaking out of Normandy and encircling German forces attempting to counterattack into the flank of the 3rd Army. Planners at Lieutenant General Omar Bradley's 12th Army Group and at Eisenhower's Supreme Allied Forces headquarters saw no change in the situation. Orders came down from higher: Execute as planned. The 4th AD assisted follow-on infantry forces in clearing Germans from the Channel ports in western France, but at the price of losing precious time in cutting off and destroying German forces which were fleeing east to the German border. During this delay in August and early September — and also because fuel priorities were going to the British attempting to break out in the northern part of the beachhead — German forces had a chance to consolidate and reinforce, offering new resistance to the 4th AD. In a reversal of what had occurred during the previous five years of the war — where well-led, cohesive German units outfought Allied units — the 4th AD fought hastily thrown together German units, over-controlled by a centralized headquarters (Hitler). In this scenario, the U.S. forces were better led, trained, more cohesive, and had higher morale due to the teamwork developed over the previous three years and the months of recent fighting in France. Despite the 4th AD's advantages, the Germans could still fight and intended to counterattack the stalled 3rd Army forces, including 4th AD, in

the province of Lorraine in eastern France.

From the time the division rumbled through German lines at 9:45 on 29 July in the breakout from Normandy, it continually improvised with a different solution for every problem it encountered. On 30 July, after refueling their vehicles, the 4th Armored was instructed by Patton to seize all four bridges over the Selune River at the town of Avranches.<sup>27</sup> It is important to note that Wood sent the orders to conduct this critical mission over radio. CCB would attack the town from the north, and CCA would seize the bridges. CCA formed its task forces, also by radio orders, and CCA's commander, Colonel Bruce Clarke, had four separate task forces moving within



4th AD troopers keep their weapons at the ready during a break in the fighting in France in July, 1944. Note carbine in the guitarist's lap and the M3 "Grease Gun" at the fiddler's feet.

the hour.<sup>28</sup> Two of the bridges fell during the first assault, while the remaining two had to be seized after a prolonged battle with German SS troopers.

This first encounter demonstrated how valuable the 4th AD's strenuous training had been at moving decisively, exploiting the enemy's confusion, and saving lives.

The move westward into Brittany to clear German holdouts in the Channel ports diverted U.S. armor from pursuing the main German force that was retreating eastward. Wood had the foresight to point parts of the division east in anticipation of orders that would

allow him to continue the pursuit. When he received approval from his corps commander to move, the division quickly caught retreating German columns.

As the 4th Armored Division began its march toward Germany, it demonstrated more flexibility, ingenuity, and mobile firepower. The division's combat commands and task forces frequently changed configuration, based on changing tactical conditions. Wood made many of these adjustments by verbal FRAGO. He would observe the situation from the air in his small Piper Cub airplane, then land alongside a column using either a road or a field. Wood would pull the map out of his shirt, spread it, and point: "There's your boundaries, the units left, right and following us and the first, second and third objectives — let's get at it right now!" After brief details of enemy information, air and artillery support, Wood flew to the other combat commands, artillery headquarters, and to his division headquarters to brief his staff and put his concise attack order on a map and a few message-blanks. By the time the Army corps order arrived at Wood's headquarters, at least one — and sometimes all the 4th Armored Division objectives — had been taken and Wood's combat commands were mopping up.<sup>29</sup>

The benefit of bottom-up decision making and cohesion paid handsome dividends in the pursuit across France. With tanks usually in the lead, Wood's columns moved along secondary roads catching fleeing enemy units on the main road, bypassing road blocks, and moving on. Logistical units — including maintenance teams, medics, and supplies — were mixed in with the division combat columns. It was not uncommon for logistical units to engage German units missed or left behind by the advancing combat units. During their three years of training, Wood had also ensured that the first responsibility of his logistical units was the ability to defend themselves against attack.

Artillery also moved with the lead columns, and was expected to keep up. Wood avoided the habit that most other division and corps commanders had developed during World War I — slowing their advance in order to wait for their artillery. In the 4th AD, whenever the lead elements needed fire support, the artillerymen would pull off the road and "hip-shoot" the fire mission.<sup>30</sup> Forward observers were in front in

tanks or overhead in airplanes (Piper Cubs) calling for suppressive fires, pinning German units down, and hence assisting with rapid maneuver.<sup>31</sup>

The 4th AD had also worked out incredible cooperation with the Army Air Corps, especially the P-47 fighter-bombers of the XIX Tactical Air Command (TAC) attached to the 3rd Army. The airplanes, acting as light cavalry did in the past, screened ahead to attack targets marked by air controllers riding with the tanks or by artillery observers in their light aircraft. The commanders of Wood's task forces would use the "flying artillery" of the XIX TAC to fill the gaps when artillery was not available for immediate suppression. The ground and air units also had developed teamwork and standard operating procedures that kept friendly fire or fratricide incidents to a minimum. The success of the fighter-bomber to the combined arms teams of the 4th AD was an obvious payoff after long months of practice. Training had led to confidence and mutual understanding by imaginative and highly competent leaders at all echelons, working with the driving spirit of their commanding general.<sup>32</sup>

Despite the division's glaring success, Eisenhower decided to make them the secondary effort. By mid-September, Eisenhower's broad front policy — which diverted scarce resources to the British army's advance into Belgium and Holland — had given German forces the opportunity to regroup. Patton had also ordered attacks across the entire front of the 3rd Army throughout September, which also took away limited resources and slowed the 4th AD rapid advance.

Dwindling resources was not the only cause of stalling the division. Its immediate headquarters, the XII Corps, had become concerned about its flanks, which helped bring the division's advance to a standstill. The XII Corps Commander, Major General Manton S. Eddy, felt he needed to eliminate Germans bypassed by the 4th AD, so he ordered his infantry divisions to stop supporting the division and concentrate on destroying German pockets of resistance. In early September, despite being within reach of the German border, these factors, plus growing German resistance, brought the division to a standstill.<sup>33</sup>

By September 1944, the Germans were eager to return to the offense. The German forces arrayed against the 4th

AD possessed few advantages. The Normandy breakout had cost the Germans some of their best units, and other strong units were sent north to fight the British and U.S. First Army. The German advantages were their superior equipment, such as the Panther and Tiger tanks, their knowledge of the terrain, and their posture on the defense. On the other hand, they were handicapped by poorly trained soldiers, units thrown together just prior to battle, and officers new to their units. Although combat experienced and well-educated in the art of war, from the tactical to the operational level of command, turbulence handicapped the officer corps in Fifth Panzer Army and Army Group G. "One significant problem with German command and control was the constant rotation of leadership at higher levels."<sup>34</sup>

Despite lack of gasoline, Wood's division continued to defeat and repel fresh German forces and their counterattacks in mid-September. Ordered to encircle the town of Nancy and seize the high ground to the east of Arracourt, Wood was forced to divide the division into two thrusts, north and south of Nancy. During these operations, the division, particularly Clarke's CCA, provide examples of agility, initiative and depth. CCA conducted a river crossing, a forward passage of lines, a counterattack, then an exploitation and pursuit against reinforced German units defending in channelized terrain. These operations came to a climax when the division reunited at Arracourt and fought a mobile defense against better equipped and more numerous German troops.<sup>35</sup>

### Insights Into the Future

Oddly, there was a reversal of accepted historical roles during this period. While Wood and his subordinates sped up their actions, moving quickly on verbal mission orders, the Germans commanders operated under an extremely centralized system. The German military culture in 1944 turned into one where, "Generally, commanders lacked flexibility to make changes and were subject to court martial if they did so without first checking with Berlin. Orders were spelled out in great detail and subordinates had to follow them to the letter."<sup>36</sup> Hitler and his headquarters in Berlin and the *Oberkommando Wehrmacht* (OKW), attempted to control the actions of units down to and even below division level, employing the most modern communications devices to keep in constant contact with the front, army groups, and

army commanders. While Hitler attempted to manage two major warfighting fronts, his commanders wasted precious time waiting for permission to act. Hitler became so fanatical about making decisions that commanders risked court martial if they used initiative.

This climate of fear filtered down to regimental and even battalion commanders. Orders, once easily transmitted verbally, became detailed written transmission of actions. Subordinates were then expected to follow these orders to the letter. Gone were the days of *Auftragstaktik*, or mission orders; commanders now copied the orders of higher headquarters, making no adjustments to them. Only a few commanders, like Erwin Rommel, Hermann Balck, and Eric Manstein, still possessed the moral courage and character to argue with Hitler over “bad” decisions.<sup>37</sup>

Another problem with the German shift toward centralized command and control was the constant rotation of commanders, not due to death in combat but the assumptions of new duties. Changes occurred at the theater, army group, army corps and division level. Commanders also assumed new formations just prior to executing difficult missions. For example, both the commanders of the newly formed 111th and 113th Panzer brigades had to expose themselves, in combat vehicles with attacking units, to motivate and ensure their orders were carried by lesser-trained subordinates. As a result, both commanders were killed around Arracourt as the battle was being fought to a decision. Their places were filled by commanders also new to the position and situation.<sup>38</sup>

As the battles around Arracourt came to an end, the 4th Armored Division had destroyed 241 German tanks and inflicted high casualties. After the victory at Nancy and Arracourt, the division, combat commands, and task force commanders looked east toward Germany and proposed the seizure of Saarbucklen. They continued to focus on how to defeat and destroy the enemy. The Germans had feared this, since no reserves were present to shore up the front. This exploitation was halted only by bad weather and the caution of senior U.S. commanders at levels above the 4th Armored.<sup>39</sup>

### What We Can Learn From the 4th Armored Division

In the 1980s, the Army was recovering from Vietnam and senior officers took lessons from the actions of the 4th

AD and used them as examples on how to employ the Army’s new AirLand Battle doctrine. A great effort had been made in the Army’s education system to ensure all officers knew and understood the Army’s first maneuver doctrine, outlined in the 1982 and 1986 versions of *FM 100-5, Operations*.<sup>40</sup> Lieutenants, in their first exposure to formal Army education at their officer basic course, were inundated with the tenets of AirLand Battle doctrine — Agility, Initiative, Depth, and Synchronization. Later, these officers would serve as battalion executive and operations officers, and company commanders leading units in the Gulf War.

The operations of 4th AD exemplified how officers should practice these tenets. The division’s relentless pursuit of an offensive upheld *Agility*, both physically and mentally. It takes physical stamina for officers and men to stay focused and to sustain tempo for days. They must be mentally agile to evaluate the battle and to exploit enemy gaps as they discover them. The division demonstrated *Initiative* throughout its training and in actual combat operations, from Wood down to the lowest ranking tanker, infantryman, artilleryman, and logistician. Wood’s ability to control a division with only verbal, short orders consisting of a few lines, or what the Army calls FRAGOs, is an extraordinary accomplishment that should be emulated by today’s Army, with its computer-generated orders. In applying *Depth*, the 4th AD fought non-linear warfare, attacking enemy weaknesses miles behind German lines. These fights, while mentally and physically stressful, placed demoralizing pressure on the enemy.<sup>41</sup>

The 4th AD was able to practice this style of warfare for a number of reasons that we can emulate today:

- Logistics were forced forward, traveling with combat formations. Also, units lived off German supplies left by fleeing troops. Unit commanders did not fear for the security of their logistical units because they knew how to fight, and were soldiers first and technicians second.

- The division maintained small staffs. Competence and experience eliminated the need for most paperwork.

- Command, control, communications and intelligence were not deterministic. There was no separate chart or process to ensure they occurred. Constant practice ensured unity of effort.

- The division never massed its combat power up front. Using aircraft and autonomous reconnaissance units, it was able to maintain uncommitted units as a large tactical reserve. In effect, it was “reconnaissance pull,” allowing Wood and the CCA and CCB commanders to shift to routes of least resistance in order to maintain initiative and momentum.<sup>42</sup>

- The incorporation of assisting Army Air Corps fighter bombers used as “flying artillery.” The planes attacked German tactical reserves, and enhanced the movement of the ground element.

The 4th AD was a maneuver-oriented division. It did its utmost to avoid useless casualties in frontal assaults. It sought to collapse the enemy from within, by attacking his headquarters and support assets.<sup>43</sup> Future units might find themselves fighting the same way — widely dispersed, coming together to fight or raid enemy weaknesses, and then dispersing to avoid strikes by nuclear or chemical weapons. They must be agile, with commanders possessing the initiative, to destroy high value enemy targets pinpointed by intelligence-gathering systems and relayed by digital technology, or moving quickly to exploit enemy weaknesses. In these rapidly changing environments and threats, commanders will also have to make rapid decisions. Units will have to be trained in encountering different enemies in the spectrum of conflict from low-intensity in urban environments to high intensity in desert terrain employing different tactics, and countering them with a combination of drills and tactics that will rapidly destroy or neutralize an enemy’s units or his will to fight. In the future, time will not allow the U.S. Army three years to prepare. It must possess a culture whose foundation rests on its personnel system, which creates leaders who can command units of excellence that are both ready to go to combat on a moment’s notice.

*The author would like to thank MG Ed Bautz, Chuck Spinney, John Tilson, Pierre Sprey, William Lind, and Bruce Gudmundsson for their insights.*

### Notes

<sup>1</sup>Discussions with Major General Edward Bautz, USA, (Ret.) from Dec 1996-September 1997. General Bautz served as General Creighton Abrams’ S3 (operations officer) and XO (executive officer) in 1-37 AR, 4th Armored Division, during the training of the division from 1942

through 1944, and in its critical campaigns in France and Germany, 1944-1945. Shortly after relieving Bastogne, General Bautz was moved up to be S3 for Combat Command A (brigade), 4th Armored Division.

<sup>2</sup>U.S. War Department, *FM 17-100, Armored Command Field Manual, The Armored Division* (Washington, D.C.: U.S. Government Printing Office, 1944), p. 2-4. This manual was written based on the experiments and training conducted by the 4th Armored Division from 1942 through 1943.

<sup>3</sup>Discussions with Brigadier General Mike Lynch, USA (Ret.), 24 May 1998; John Wood and Heinz Guderian suffered the same fate. Both were relieved for having out-thought their seniors, thus gaining credit that deflated the image of their superiors.

<sup>4</sup>Lewis Sorley, *Thunderbolt, From the Battle of the Bulge to Vietnam and Beyond: General Creighton Abrams and the Army of His Times* (New York, N.Y.: Simon & Schuster, 1992), p. 46.

<sup>5</sup>William S. Lind, "The Theory and Practice of Maneuver Warfare," in *Maneuver Warfare: An Anthology*, edited by Major Richard D. Hooker, (Novato, Calif.: Presidio Press, 1993), p. 7. This is a compressed APEX, i.e., the steps involving analysis, planning and execution. This reflects the true meaning of maneuver warfare based on the ability to exploit favorable operational and tactical options as they arise, while overcoming unfavorable situations and circumstances that could cause failure.

<sup>6</sup>Major Dean A. Nowowiejski, "Achieving Digital Destruction: Challenges for the M1A2 Task Force," in *ARMOR*, January-February 1995, p. 21. Situational awareness is the thorough knowledge of both friendly and enemy elements. In a technological sense, this is translated to a small screen in the M1A2 for commanders to view their place in the larger formation and unit. This will hopefully decrease fratricide (friendly fire) incidents.

<sup>7</sup>Brigadier General Albin F. Irzyk, (Ret.), "The Name Enough Division," in *ARMOR*, July-August 1987, pp. 8-12; General Irzyk served as operations officer (S3), executive officer (XO), and commander of 8th Tank Battalion during the 4th Armored Division's fighting in Europe.

<sup>8</sup>Discussions with Major General Bautz, USA (Ret.) 12 August 1997.

<sup>9</sup>Author interviews with Army officers March-August 1997. Officers' complaints centered around the turnover of personnel as soon as a unit returned from a productive and infrequent CTC rotation.

<sup>10</sup>At the time, there was no rigid management of officers. Successful career patterns varied, but those of successful peacetime officers at the time relied more on political connections or working in positions that were under the view of senior officers than on competence in the field. George C. Marshall, Dwight D. Eisenhower, and George S. Patton Jr. all thought they had come to the end of their careers by the mid '30s due to the assignments they were serving in.

<sup>11</sup>Hanson W. Baldwin, *Tiger Jack* (Fort Collins, Colo.: Old Army Press, 1979), pp. 104-106; "The prophets of the future form of war were without honor in their own country."

<sup>12</sup>Hanson W. Baldwin, " 'P' Wood of the 4th Armored," in *Army* (Arlington, Va.: Association of the United States Army, January 1968), pp. 50-51.

<sup>13</sup>Russell F. Weigley, *History of the United States Army* (Bloomington, Ind.: Indiana University Press, 1984), pp. 598-600.

<sup>14</sup>Sorley, *Thunderbolt*, pp. 36-37; these were not Wood's exact words, but Dr. Sorley's interpretation of several prominent officers' insights into Wood's methods. General Bautz reinforced these approaches during a discussion with the author about General Wood's leadership style.

<sup>15</sup>Baldwin, *Tiger Jack*, p. 113.

<sup>16</sup>Baldwin *Thunderbolt, Tiger Jack*, p. 50 and 113.

<sup>17</sup>Sorley, pp. 36-37. This concept was based on Adna Chaffee's concept of armor.

<sup>18</sup>Baldwin, *Tiger Jack*, p. 52.

<sup>19</sup>Baldwin, *Tiger Jack*, pp. 144-147.

<sup>20</sup>Discussions with Major General Bautz, USA (Ret.), 27 July 1997; see also Baldwin, *Tiger Jack*, pp. 124-126.

<sup>21</sup>Allan R. Millett, *The General: Robert L. Bulard and Officership in the United States Army 1881-1925*, pp. 100-106 and 140-49; Millet discusses Pershing's use of fear in order to impress the British and French generals in WWI, which influenced the leadership style of the entire American Expeditionary Force (AEF), and in effect stifled decentralized leadership. This began the American tradition of authoritarian leadership style.

<sup>22</sup>U.S. Army, *The Officer's Guide* (Washington, D.C.: National Service Publishing Co., 1947), p. 247.

<sup>23</sup>Discussions with Major General Bautz, USA (Ret.) 12 August 1997.

<sup>24</sup>Jonathan M. House, *Toward Combined Arms Warfare: A Survey of 20th-Century Tactics, Doctrine, and Organization* (Fort Leavenworth, Kan.: U.S. Army Command and General Staff College, Combat Studies Institute, August 1984), p. 108.

<sup>25</sup>Dr. Christopher R. Gabel, *The Lorraine Campaign: An Overview, September-October, 1944* (Fort Leavenworth, Kan.: U.S. Army Command and General Staff College, Combat Studies Institute, February, 1985), p. 14.

<sup>26</sup>After-action reports of the 4th Armored Division, 29 July-30 September 1944, provided by Major General Bautz in November 1995.

<sup>27</sup>Major General Bautz made an appearance on the television show, *Modern War*, hosted by William Lind in January 17, 1997, discussing the actions of 4th Armored Division and maneuver warfare. Afterward, a group of U.S. Marine Corps lieutenants asked General Bautz how long did it take his battalion [Task Force 1-37 Armor, or Task Force Abrams] to move from an assembly area to conduct an attack. General Bautz remarked that it took 30 minutes to conduct a hasty attack from the time they received the order to "getting on the road." The lieutenants replied they were being taught to plan a platoon deliberate attack in six hours.

<sup>28</sup>Colonel Bruce Clark would later become General Bruce Clark, hero of the defense of St. Vith during the Battle of the Bulge in December

1944. In the early 1960s, he was supreme commander of NATO.

<sup>29</sup>Baldwin, *Tiger Jack*, pp. 41-42.

<sup>30</sup>"Hip-shoot" means firing artillery missions off a compass bearing using quick mathematical calculations to determine range and azimuth. Given more time (30-45 minutes) a battery could "survey" and stake out its new firing position, enabling it to use more precise calculations to deliver more accurate fire missions.

<sup>31</sup>Richard H. Barnes, *Arracourt-September 1944* (Fort Knox, Ky.: U.S. Army Armor Center, 1982), pp. 39-40.

<sup>32</sup>After-Action Reports of the 4th Armored Division, 29 July-30 September 1944, provided by Major General (Ret.) Bautz to the author, November 1995.

<sup>33</sup>Dr. Christopher Gabel, *The 4th Armored Division in the Encirclement of Nancy* (Fort Leavenworth, Kan.: Combat Studies Institute, April 1986), p. 33.

<sup>34</sup>Richard H. Barnes, p. 35-36.

<sup>35</sup>Commanders and Staff of Combat Command A, 4th Armored Division, U.S. Army, *The Establishment and Defense of the Nancy Bridgehead* (Fort Leavenworth, Kan.: Military History-Battle Analysis, Combat Studies Institute, 1994), p. Lsn 3-2-19.

<sup>36</sup>Richard H. Barnes, p. 35.

<sup>37</sup>For examples of this evolution, from decentralized to centralized command and control, see Mellenthin, *Panzer Battles*, pp. 312-318. Also see Manstein, *Lost Victories*, pp. 538-543.

<sup>38</sup>Richard H. Barnes, pp. 36-37.

<sup>39</sup>Donald E. Vandergriff, "The Exploitation from the Dieulouard Bridgehead: An Example of Maneuver Warfare that Applies Today," in *ARMOR*, September-October 1995, pp. 6-9.

<sup>40</sup>Discussions with General Donn Starry, USA (Ret.), 7 November 1997. General Starry was commander of Training and Doctrine Command, 1979-1982. General Starry was involved in the creation of AirLand Battle Doctrine, as well as writing more than 50 articles for various military journals on leadership, cohesion, and doctrine. General Starry also commanded the 11th Armored Cavalry Regiment in Vietnam, the U.S. Army Armor Center, U.S. Army V Corps, and U.S. Readiness Command.

<sup>41</sup>Gabel, *Encirclement of Nancy*, pp. 23-24; an analogy of the actions of the division with those of AirLand Battle.

<sup>42</sup>Reconnaissance pull is where reconnaissance units find gaps in enemy defenses, or surfaces, and "pull" follow-on units through toward enemy weaknesses.

<sup>43</sup>Baldwin, *Tiger Jack*, p. 26.

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