


The Army Vision:

The 4th AD in World War II

Robert S. Cameron
Ph.D., Fort Knox, Kentucky

THE ARMY FACED new challenges after the Cold War. Bipolar antagonism between the Soviet Union and the United States no longer dominated the world's geopolitical climate. Instead, a series of regional crises occurred in the 1990s that increased the frequency of American overseas deployments. While maintaining a powerful presence in Europe and South Korea, the Army also found itself supporting a growing number of contingency operations (CONOPs).¹ Senior military leaders anticipated the continuation of this trend into the 21st century. However, they did not consider the Army's force structure as being well suited for CONOPs. Organizations, training programs, materiel, and doctrine favored conventional, high-intensity combat.

The Army lacked the means to inject a powerful military presence quickly into an emerging trouble spot. Lacking a viable, rapid-response capability, the Army could do little to prevent crisis escalation or to avoid a subsequent large time and force commitment. Moreover, tactical organizations designated for CONOPs needed first to modify unit structures designed for the central European battlefield. Heavy forces offered considerable combat power and survivability at the expense of rapid deployment. Light forces offered rapid deployment with only limited survivability and lethality, especially when confronted by an armored threat. Neither force offered an ideal solution for CONOPs. Ad hoc force packages sufficed only while these missions remained exceptional. As the frequency of CONOPs increased, the Army required a more permanent solution.



4th AD infantrymen
fire at German troops,
27 December 1944.

In October 1999, the Army defined a series of initiatives intended to improve its effectiveness in the operating environment of the future. Collectively known as Transformation, these initiatives aimed at a fundamental redesign of the Army. The innovative application of new technologies to improve operational and strategic effectiveness lay at the core of this effort. Rather than a mix of heavy and light formations, the Army sought a single, high-tech force capable of achieving strategic dominance across the entire spectrum of military operations. In 1999, the Army called this force the Objective Force.

[Today, the Army no longer uses the term Objective Force. The Objective Force is now called the Future Force.]

Fielding the Objective Force required time in which to develop the related technologies, and to complete research and design work. Therefore, the Army also sought a more immediate enhancement of its capabilities through the creation of Interim Brigade Combat Teams (IBCTs). The IBCTs, designed as rapid deployment units with better survivability and lethality than light force elements, constituted a medium force that bridged the capability gap be-

The Army Vision: Excerpts

General Eric K. Shinseki, former Army Chief of Staff

On 12 October 1999, in "The Army Vision: Soldiers On Point for the Nation. . . Persuasive in Peace, Invincible in War," a speech given at the annual meeting of the Association of the United States Army in Washington, D.C., General Eric K. Shinseki, Army Chief of Staff, proposed a Transformation of the Army into a lighter, quicker deploying force, and he described the force's seven major attributes. Excerpts from Shinseki's remarks follow.

Strategic Dominance Across the Entire Spectrum of Operations

The world remains a dangerous place full of authoritarian regimes and criminal interests whose combined influence extend the envelope of human suffering by creating haves and have nots. They foster an environment for extremism and the drive to acquire asymmetric capabilities and weapons of mass destruction. They also fuel an irrepressible human demand for freedom and a greater sharing of the better life. The threats to peace and stability are numerous, complex, oftentimes linked, and sometimes aggravated by natural disaster.

The spectrum of likely operations describes a need for land forces in joint, combined, and multinational formations for a variety of missions extending from humanitarian assistance and disaster relief to peacekeeping and peacemaking to major theater wars, including conflicts involving the potential use of weapons of mass destruction. The Army will be responsive and dominant at every point on that spectrum. We will provide to the Nation an array of deployable, agile, versatile, lethal, survivable, and sustainable formations, which are affordable and capable of reversing the conditions of human suffering rapidly and resolving conflicts decisively. The Army's deployment is the surest sign of America's commitment to accomplishing any mission that occurs on land.

Responsive. Responsiveness has the quality of time, distance, and sustained momentum. Our threat of the use

of force, if it deters miscalculation by adversaries, provides a quality of responsiveness all its own.

Deployable. We will develop the capability to put combat force anywhere in the world in 96 hours after liftoff—in brigade combat teams for both stability and support operations and for warfighting.

Agile. We will attain the mental and physical agility operationally to move forces from stability and support operations to warfighting and back again just as we have demonstrated the tactical warfighting agility to task organize on the move and transition from the defense to the offense and back again.

Versatile. We will design into our organizational structures, forces which will, with minimal adjustment and in minimum time, generate formations which can dominate at any point on the spectrum of operations.

Lethal. The elements of lethal combat power remain fires, maneuver, leadership, and protection. When we deploy, every element in the warfighting formation will be capable of generating combat power and contributing decisively to the fight.

Survivable. We will derive the technology that provides maximum protection to our forces at the individual soldier level whether that soldier is dismounted or mounted. Ground and air platforms will leverage the best combination of low observable, ballistic protection, long-range acquisition and targeting, early attack, and higher first round hit and kill technologies at smaller calibers that are available. We are prepared to venture into harm's way to dominate the expanded battlespace, and we will do what is necessary to protect the force.

Sustainable. We will aggressively reduce our logistics footprint and replenishment demand. This will require us to control the numbers of vehicles we deploy, leverage reachback capabilities, invest in a systems approach to the weapons and equipment we design, and revolutionize the manner in which we transport and sustain our people and materiel.

tween heavy and light formations. [Just as the Objective Force has become the Future Force, the IBCTs have evolved into today's Stryker Brigade Combat Teams. The Army no longer uses the term Interim Brigade Combat Team.]

The IBCTs and the Objective Force of 1999 served different purposes. The IBCTs addressed a specific, near-term capability; the Objective Force represented the future Army. However, both shared similar organizational and operational characteristics, including the following:²

- Deployability via airlift into a theater of operations within 4 days.
- Agility to transition quickly between contingency and warfighting missions.
- Versatility to reconfigure tactical organizations on short notice.
- Improved lethality and survivability through leveraging advanced technologies, precision maneuver, fires, and leadership.
- Sustainability through improved mechanical reliability, reduced logistical requirements, and freedom from the supply lines and the "iron mountain" associated with past combat organizations.
- The ability to respond to the nation's will in an effective, timely manner.

Collectively, these "ilities" are desirable in any combat organization. They reflect a need for change, inspired as much by the current operating environment as from the lessons learned from the Army's history and heritage of victory. Similar features characterized the World War II armored division and contributed to the 4th Armored Division's (AD's) success near Arracourt in September 1944.

The Army's Response to Blitzkrieg

During World War II, the German blitzkrieg demonstrated a major change in the conduct of warfare. Germany's rapid conquest of much of Europe and large portions of Russia underscored the danger of ignoring this new style of military operations. The U.S. Army reacted by redesigning its force structure, doctrine, materiel, training, and tactical organizations. The Army prepared for an operational environment in which rapid, fluid action over broad

fronts replaced the trench warfare of World War I.

The Army transformed itself into a force capable of winning battles dominated by mobile, combined arms action, not prolonged artillery bombardments and short, carefully orchestrated advances. The transformation required sweeping changes to an

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army accustomed to deliberate operations, a slow operational tempo (OPTEMPO), and separate rather than integrated battlefield functions.

The Army had no equivalent to the German panzer forces that played such a prominent role in the rapid conquest of Europe. The panzer division possessed great mobility and impressive combat power in a unique combined arms organization. The formation's combat power generated the conditions for success, which its mobility permitted it to exploit. Grouped into corps, the panzer divisions proved tactically and operationally decisive.

The U.S. armored division evolved in response to the threat posed by the powerful and highly mobile German formations. By September 1943, the U.S. armored division included three combat commands and 13 battalions (see figure).³ The commands possessed permanent staffs, but they had no fixed troop assignments.

The division commander allocated combat and service elements according to the mission and tactical situation. The combat commands then organized one or more subordinate combined arms task forces (TFs) to accomplish their own missions. The division headquarters and combat commands were each designed to accommodate augmentation; attach and detach combat and service elements; and task organize assigned forces. The combat command structure and a robust communications

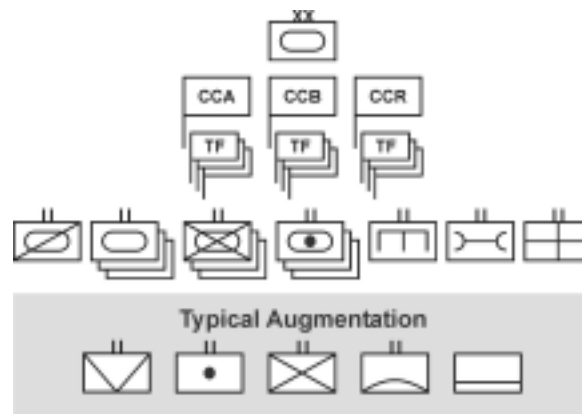


Figure 1. Armored division organization, 1943.



Private Kenneth Boyer of the 4th AD atop his 105-mm assault gun-equipped Sherman tank, 26 September 1944.

From the combat command down to platoon level, 4th AD commanders responded to events more quickly and with more aggressiveness than did their German counterparts, enabling many U.S. soldiers to stay alive during lethal, accidental encounters with the enemy in the fog at minimal ranges.

network permitted the division to operate as a collection of TFs, among which the division or combat command could redistribute resources to reinforce success.

The armored division's modularity and flexibility distinguished it from the Army's traditional emphasis on organizational rigidity. The formation included no brigades or regiments. Battalions served as the basic building blocks for the composition of combat commands and task forces. Battalions and their subordinate companies were intended for assignment to any combat command or task force on short notice. Moreover, the successful employment of the division depended in part on the ability to redistribute these tactical assets frequently in response to battlefield developments.

The armored division's unique nature posed significant leadership, organizational, and doctrinal chal-

lenges. To realize the formation's full effectiveness, commanders and staffs needed familiarity with continuous organizational change and combined arms action. Too often, such mastery occurred only after sustained combat exposure. The men of the 4th AD, however, benefited from their formation's role as a test bed for the armored force. The formation experimented with organizational concepts, and it played a central role in the evolution of the combat command concept. These experiences ensured an exceptional familiarity with the principles embedded in the armored division structure adopted in September 1943. Moreover, the 4th AD commander and many of his subordinate officers accompanied the formation throughout its training and into combat. Leadership continuity simplified the application of the new command and organizational principles in a combat environment.

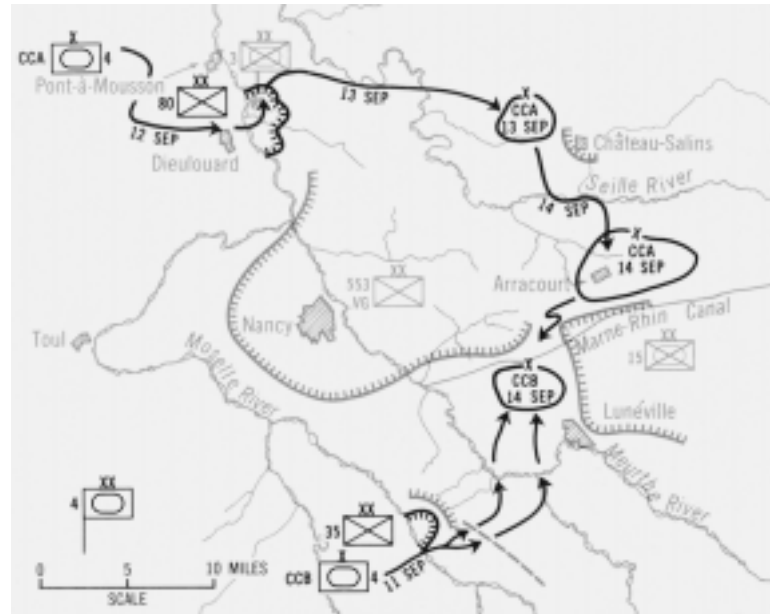
The 4th AD, deployed to Normandy to participate in Operation Cobra, helped shatter German defenses in Brittany, and then drove to the gates of Lorient. Reversing direction, the 4th AD then led the Third Army across France. The 4th AD pursued German forces into Lorraine, and crossed the Meuse River in a coup de main on 31 August 1944. However, Allied formations had outrun their logistical support. A theaterwide fuel shortage ensued, halting the 4th AD until mid-September.

When operations resumed, the 4th AD and its parent XII Corps intended to cross the Moselle River and seize the city of Nancy before advancing to the Saar River. The 80th Infantry Division (ID) and Combat Command A (CCA) of the 4th AD were to envelop the city from the north. The 35th ID and the remainder of the 4th AD would cross to the south, linking up with CCA near Arracourt and the Marne-Rhine Canal. The planned operation would carry the XII Corps into a gap between two German armies.

Infantry elements crossed the Moselle River on 11 September. A German counterattack collapsed when the 4th AD's Combat Command B (CCB) improvised a crossing site, drove through gaps between German units, and sped eastward. CCB reached the Marne-Rhine Canal by 14 September, but resistance and the canal itself delayed further advances. The division commander sensed the loss of momentum and shifted his emphasis northward to CCA. At Dieulouard, the 80th ID crossed the Moselle River on 12 September but nearly lost its crossing site to a German counterattack. The following morning CCA conducted a passage of lines amid German artillery fire and traffic congestion, advanced into the disputed bridgehead, and assaulted the counterattacking force. The Germans withdrew, and CCA thrust behind the Nancy defenses. Bypassing centers of resistance and overrunning surprised German columns, the command reached Arracourt on the 14th. CCA had penetrated 45 miles in 37 hours.

From 15 to 18 September, the 4th AD consolidated behind Nancy. CCA's position at Arracourt permitted it to block movement into and out of Nancy, making a shambles of German defenses by raiding across supply and communication routes. CCA then helped 4th AD elements south of Nancy cross the Marne-Rhine Canal. CCB moved toward Chateau-Salins, and the reserve command moved to Luneville. The entire division prepared to continue its drive to the Saar River.

German attacks forced the 4th AD to switch rap-



CCA protected its trains by keeping them close to its lead elements. When its columns moved through German defenses, the trains passed through before the Germans could reestablish a cohesive resistance. Keeping the trains and forward TFs close by provided additional security for the trains.

idly to a mobile defense. German armor struck the division along a south-north axis, starting at Luneville. Facing determined resistance there, the attackers bypassed the town and advanced on Arracourt. Under cover of early morning fog, the Germans repeatedly infiltrated CCA's scattered positions. Many tactical encounters ensued, and at one point, German tanks threatened CCA's command post and trains.

CCA first broke the momentum of the German attacks with aggressive counterattacks, then concentrated its forces, and finally mounted coordinated assaults on key German positions. The Germans were unable to turn initial surprise into tactical benefit. Their attack disintegrated into uncoordinated actions by small groups of tanks. When the fog cleared, U.S. artillery, air support, and combined arms assaults forced a German withdrawal.

Nevertheless, American intelligence reported a major buildup of German forces in the area. The 4th AD cancelled its plans to resume offensive operations. The division's ability to counter German thrusts depended on mobility, but the onset of heavy rains reduced off-road vehicular movement. Moreover, the Arracourt battles had left the combat commands dispersed and overextended. CCA, for example,

held a frontage of over 40 kilometers. The division concentrated, withdrew to more defensible positions, and then conducted a positional defense against repeated German attacks, which accomplished little at considerable cost to the Germans. On 12 October, the 4th AD withdrew to rest.

Responsiveness. The demands of global conflict drove the Army to build multicapable formations for World War II. Expecting to operate

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across a broad spectrum of mission types and environments, the Army wanted interchangeable units that commanders could easily integrate into corps or army commands. Standardized organizations promoted responsiveness to mission, operating environment, and command. Conversely, the unique materiel and training requirements of specialized formations necessarily imposed restrictions on their employment and assignment.

In September 1942, the Army abandoned plans to build permanent, specialized corps organizations. Corps commands lost their administrative functions and retained only headquarters staffs and signal units as permanent components. Tactical formations were assigned to them at the army or theater command level, based on the corps' mission. These assignments changed as conditions and the mission dictated. The flexibility of this concept allowed commanders to assign any type of division to a corps headquarters.

The corps structure encouraged a standard division design that facilitated control by a corps commander, regardless of his branch. Since the armored division with its array of organic assets did not simplify corps control, the Army removed assets not necessary for a typical mission set and let the controlling corps headquarters provide augmentation as needed. During operations in France, for example, the 4th AD relied on regular augmentation from its parent XII Corps (see figure). The division no longer required organic capabilities for all possible contingencies. Consequently, the organic tank destroyer, antiaircraft, and supply battalions of the early armored division designs were removed.

Deployability. The Army did not have a 4-day

aerial deployment requirement during World War II. Instead, America's ability to wage a global war depended on a careful balance between available sealift capacity and organizational size. However, early armored division tables of organization and equipment did not reflect deployment constraints. Instead, the formation's size grew to accommodate the armored force's desire to maximize combat power, a result that did not facilitate overseas deployment.

The problem was not limited to the armored force. All combat organizations exhibited a similar tendency to accumulate assets. While perhaps desirable in battle, the trend toward large formations threatened to ensure that they did not reach combat in a timely fashion. To resolve the tension between force design and deployability, the U.S. War Department established the Reduction Board, which was active from November 1942 to June 1943. The Reduction Board's task was to pare the vehicular, equipment, and personnel sizes of all Army formations so that the force levels required in multiple theaters could be met with available transport tonnage. The board clearly gave priority to deployability over organizational perfection. Consequently, the armored division shrank from 390 to 263 tanks and from 14,620 to 10,397 soldiers, but it retained its combat command structure. The cuts produced a manageable configuration with exceptional organizational flexibility.

Versatility. The armored division's mission profile in World War II did not include CONOPs. Nevertheless, it had to reconfigure its combat commands and TFs frequently to fit evolving mission needs and to tailor and optimize combat power for specific tactical environments and operations. The 4th AD normally concentrated its combat power in two combat commands, each controlling between two and four TFs.

During the race across France, the combat commands reconfigured about every 3 days, executing task organization and orders via radio. Task forces usually included a combined arms team able to cope with a variety of potential situations, but circumstances sometimes dictated otherwise. When the Germans attacked the reserve command at Luneville on 18 September, CCA dispatched a tank-infantry TF as reinforcements. The command recalled the TF the following day when the Germans attacked Arracourt. To speed its return, the TF split into two parts—a tank force and an infantry force. The tank force sped ahead to form a new TF with another tank company and immediately attacked German tanks threatening CCA's command post.

Elements of the 4th AD, including an M-18 tank destroyer, cross the Moselle River, 15 March 1945.



US Army

To maintain a high OPTEMPO, the 4th AD needed to change missions rapidly without reorganizing. Radio communications, mission-type orders, and the combat commands enabled the 4th AD to decentralize command and achieve an organizational flexibility that allowed quick transitions from one mission to the next without significant reduction to OPTEMPO.

The decentralized command structure allowed the 4th AD to conduct multiple actions simultaneously. During the fighting at Arracourt, CCA managed tactical engagements in its sector, concentrated the command in a better defensive posture, and simultaneously planned for the resumption of offensive operations to the east. CCB and division headquarters conducted parallel activities. Thus, while the Germans concentrated on inflicting a defeat on the 4th AD, the division was already preparing its next major operation. Such planning expedited the implementation of formal orders to proceed and enabled the division to exploit opportunities as they arose with minimal delay.

Agility. According to the Army's Transformation concept, when IBCTs and Objective Force elements deployed, they were to conduct a broad range of warfighting and stability and support operations. They needed the ability to transition quickly among these missions. The 4th AD's requirements in World War II focused entirely on warfighting. However, by 1940s standards, the 4th AD possessed a broad

mission set that included an array of offensive and defensive actions to exploit the division's unique mix of combat power and mobility.

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At Lorient, the division reversed its axis of advance and pursued the Germans across France into Lorraine. During operations near Nancy and Arracourt, the 4th AD ruptured German defenses,

crossed the Moselle River, and encircled Nancy. The division conducted raids, blocking actions, and probes to capitalize on its initial successes. Although the 4th AD was not oriented doctrinally or psychologically for defensive operations, it conducted a successful mobile defense against German armor at Arracourt before CCA wrested the initiative from

The Army wanted interchangeable units that commanders could easily integrate into corps or army commands. Standardized organizations promoted responsiveness to mission, operating environment, and command. Conversely, the unique materiel and training requirements of specialized formations necessarily imposed restrictions on their employment and assignment.

the Germans through aggressive, rapid counterattacks. From late September until it withdrew from combat in mid-October, the 4th AD defended in place against German attacks.

The flexibility of the combat command structure was critical to the division's successes. For example, CCA had initially prepared to establish a separate bridgehead over the Moselle River, but when the 80th ID crossed at Dieulouard, CCA did not delay operations by securing its own crossing point. Instead, it raced to Dieulouard, passed through the 80th ID's lines, attacked through German defenses, thrust forward to Arracourt, and began exploitations and raids. When a German counterattack forced a change in mission, CCA switched to a mobile defense.

CCB similarly adjusted its plans for crossing the Moselle River in response to tactical developments. When a plan to follow the 35th ID across the river became impractical because of German counterattacks, CCB found an alternate crossing site. Without waiting for bridging equipment to arrive, CCB drove through the Germans, thrust eastward, and established contact with CCA to the rear of Nancy.

Lethality and survivability. Leadership, situational awareness, and organizational flexibility were more important to the 4th AD's lethality and survivability at Arracourt than unit size or combat platforms. The 4th AD's tanks possessed no advantage over the German tanks they encountered, but they were more than adequate when employed at the right place and time.

The Germans had many advantages between 19 and 22 September. CCA was scattered over a broad

frontage, and the departure of detachments to support other operations left the CCA understrength in tanks and tank destroyers just as the Germans concentrated their armor for a decisive blow. The hilly terrain around Arracourt encouraged the use of infiltration tactics at which the Germans excelled, while a heavy morning ground fog negated the American advantage in air and artillery support. Moreover, the German force mix included a number of Panther tanks that were superior to CCA's Sherman tanks.

Nevertheless, the Germans suffered 80 tanks and 22 other vehicles destroyed, 617 soldiers killed, and 171 prisoners taken. CCA lost only 14 medium tanks, 7 light tanks, and 113 wounded and killed soldiers. CCA destroyed about 5 German tanks for every American tank it lost, and CCA killed or captured 8 Germans for every American soldier wounded or lost in combat. CCA remained operational; two German panzer brigades were annihilated.

This success stemmed from the 4th AD's method of operations developed during its race across France. The 4th AD functioned as a collection of combined arms task forces. Tanks led each task force column, with artillery and engineers nearby for immediate fire support and obstacle clearance. Field observers accompanied each battalion headquarters and lead element. Linked with each other and supporting batteries via radio net, every observer could fire any or all available support batteries at once. Liaison officers with forward elements coordinated close air support and identified aerial targets. As they advanced, the task forces relied on a powerful combination of firepower from many ground and aerial sources. The 4th AD routinely dispensed with phase lines, flank security, and rigid control measures. Subordinate commanders took the initiative and exploited opportunities as they arose. Commanders used liaison aircraft to keep in contact with forward elements, which were often separated by considerable distances.

Moving rapidly, the task forces kept the enemy confused about their locations and intent. They routinely destroyed phone lines and communications centers as they advanced. Collectively, these actions permitted the division to operate inside the enemy's decision cycle. Stunned and repeatedly surprised by events, German commanders could only respond to crises over which they had minimal control. Cohesive German resistance collapsed, and the 4th AD advanced to the Meuse River. When fuel shortages finally halted the 4th AD, the Germans marshaled reserves and planned a counteroffensive against the Third Army. However, the sudden double envelop-

US Army



Sherman tanks of the 4th AD cross the Frebnch National Canal near Bayon on 20 September 1944.

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ment of Nancy upset these plans and forced the Germans to execute a smaller operation that lacked careful coordination.

Using superior situational awareness, the 4th AD outmaneuvered the Germans and fought in conditions of its own choosing. Each combat command typically employed liaison aircraft and mechanized cavalry troops for route reconnaissance and early warning of enemy positions. Ground and aerial reconnaissance permitted TF columns to bypass enemy forces and avoid deliberate attacks against prepared positions. CCA quickly reached Arracourt, 45 miles behind German lines, with minimal losses. Taking advantage of the element of surprise, CCA overran enemy forces reinforcing Nancy and captured the headquarters charged with that city's defense.

At Arracourt, CCA relied on reconnaissance to coordinate multiple engagements and execute effective counterattacks. A network of observation posts provided early warning of a German attack on 19

and 20 September, despite the fog cover. When the fog dissipated, CCA's reconnaissance units pinpointed the location of the German armor, and American tank-infantry teams with artillery and air support attacked. When the Germans overran CCA's mechanized cavalry screen line on 22 September, they could not exploit their success. CCA's cavalry alerted the command of the attack and entangled the German tanks in a delaying action. When intercepted radio traffic provided details of the German plans, CCA promptly attacked with flanking fires and destroyed an entire company. A hovering liaison plane spotted and helped destroy another infantry column by directing artillery fire onto it.

Despite bad weather and platform inferiority, CCA outmaneuvered and outfought the Germans. The 4th AD had more experience and better training than its opponents, and its flexible, combined arms design enabled it to fight as a team of integrated systems. The Germans employed small groups of tanks

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with minimal or no support, but CCA employed task forces comprised of tanks, tank destroyers, infantry, and engineers.

From the combat command down to platoon level, 4th AD commanders responded to events more quickly and with more aggressiveness than did their German counterparts, enabling many U.S. soldiers to stay alive during lethal, accidental encounters with the enemy in the fog at minimal ranges. For example, when one platoon of the 704th Tank Destroyer Battalion stumbled onto a German tank company, the U.S. platoon attacked, despite its technical and numerical inferiority. A prolonged duel ensued in which the Germans lost eight tanks before retreating in confusion. Such aggressiveness surprised the Germans and disrupted the momentum of their attacks. Instead of an armored mass crushing an overextended U.S. force, the German thrust disintegrated.

Sustainability. The 4th AD's dispersed, fast-moving operations across France and into Lorraine precluded reliance on a fixed supply line. The combat commands normally carried sufficient fuel and ammunition for one week of operations, and the division headquarters also routinely allocated medical and maintenance assets to the commands. CCA and CCB thus possessed some self-sufficiency and a limited capability for independent operations. When CCA crossed the Moselle River and thrust toward Arracourt, it severed its link with the supporting 80th ID even though it had yet to make physical contact with the rest of the 4th AD. For several days, CCA remained isolated behind German positions at Nancy. Subsisting on its own supplies, it continued to operate at a high OPTEMPO and scored some of its most important successes, including the capture of the German headquarters controlling Nancy's defenses.

CCA protected its trains by keeping them close to its lead elements. When its columns moved through German defenses, the trains passed through

before the Germans could reestablish a cohesive resistance. Keeping the trains and forward task forces close by provided additional security for the trains. Problems could still arise, nonetheless. On 13 September, CCA's trains became separated from the rest of the command during the drive toward Arracourt. Unable to reestablish contact before nightfall, the trains provided their own security with personnel on hand. More typically, the combat commands carefully coordinated the trains' movements with TF operations and provided security elements when prudent.

The reliability of U.S. vehicles and equipment also aided sustainability. Between the landing at Normandy and the crossing of the Meuse River, the 4th AD's combat vehicles logged over 1,000 miles under their own power, and supply trucks logged nearly 3,000 miles. The division then embarked on a period of rapid operations that climaxed in some of the largest armor engagements that U.S. forces experienced during World War II. Despite the intensity of operations, the 4th AD did not lose significant numbers of tanks to mechanical failure.

The 4th AD: An Objective Force

The Army designed the 4th AD to fight on a European battlefield against a powerful enemy in a conventional, high-intensity conflict, not in CONOPs in undeveloped regions of the world. But the attributes that made the division so highly successful in World War II are similar to those the Army initially envisioned for the IBCTs and the Objective Force in 1999.

The operational environment described for the IBCTs and the Objective Force differed from that of the World War II armored division. The former were able to employ a much more extensive and sophisticated array of technologies. However, the IBCTs and the Objective Force incorporated the best attributes of the 4th AD: responsiveness, deployability, versatility, agility, lethality, survivability, and sustainability. In action near Arracourt in 1944, those attributes, together with effective training and decisive leadership, stood the 4th AD in good stead, and they are also the keys to success on tomorrow's battlefield. **MR**

NOTES

1. For purposes of this article, the term "contingency operations" includes the broad range of peace, stability, and enforcement missions; humanitarian relief actions; and intervention in local or regional conflicts involving potential enemies with paramilitary or limited conventional military capabilities.

2. These force attributes were taken from former Army Chief of Staff General Eric K. Shinseki's "The Army Vision: Soldiers on Point for the Nation . . . Persuasive in Peace, Invincible in War," an address given during the annual meeting of the Association of the United States Army, Washington, D.C., 12 October 1999. (See sidebar.)

3. Note that the 2d and 3d ADs did not adopt this organization. They retained a traditional regimental structure and were sometimes dubbed "heavy" armored divisions.