The USABOT Tech School Scholarship 2026 Application

SECTION I - APPLICANT INFORMATION

Full Name _____

Street Address _____

City _____ State _____ Zip _____

Telephone _____ Email _____

SECTION II - ELIGIBILITY

To be eligible for the USABOT Scholarship, you must be:

1. The natural, step or adopted child or grandchild of an Active Regular Member in good standing of USABOT as verified by the USABOT G-1.
2. A high school senior or graduate, accepted to a technical school. If you have not yet received a Tech School Acceptance letter, you may send it separately when received. (See notes at end)

Name of USABOT Parent or Grandparent:

_____

Parent/Grandparent's USABOT Member Number: _____

SECTION III – ACADEMIC and EXTRACURRICULAR RECORD

The information requested below may be attached on a separate sheet, if more space is required. Don't worry if all questions do not apply to you, we are just interested in learning about the things you did during your high school years. (Attach additional sheet if needed.)

High School Cumulative Grade Point Average and Scale (e.g., 3.7/4.0) _____

List any Advanced, AP, IB or College Courses taken during High School or technical courses you've taken:

_____

_____

List School Extracurricular Activities (Clubs, Band, Sports, Internships, etc.):

_____

_____

Volunteer work outside of school: _____

If you were employed during high school, how many hours per week? _____

SECTION IV – ESSAY

Please attach, on a separate sheet (or sheets) an essay of at least 750 words on one of the five topics related to the history of the United States Army Armor Branch that we have provided on a separate attachment. The essay should be double spaced using font size 12.

SUBMISSION INFORMATION AND DEADLINES

Please carefully check the accuracy of everything entered on this form, and submit it by mail, postmarked no later than March 23, 2026:

Robert F. Thomas
Attn: USABOT Scholarship
330 Baldwin Drive Bristol,
CT 06010

Or you may submit by email to:

bobthomas10@aol.com

In addition to this application, please include this required documentation:

1. Your High School Transcript, with expected or past graduation date. If you are currently enrolled in a Tech School then send your current transcript. This may be included in your submission with school contact information included for verification; or sent separately, directly from your school (same deadline applies).
2. Your tech school acceptance letter. If you have not yet received this by the application deadline, please send as soon as received, but not later than May 30th, 2026.
3. A listing of your List of Courses from the Tech school and length of the program.
4. Your essay
5. Letters of recommendation from somebody other than a family member. Examples: sports coaches, employers, supervisors at places you have volunteered, teachers, etc.
6. The Name of your Local News Outlet for USABOT to send a press release to in the event of you being awarded the scholarship.

By submitting this application for the USABOT Scholarship you give your permission for USABOT to use any photographs, any information you supplied and your essay.

ESSAY QUESTION 1

The 761st Tank Battalion was a predominately African American unit in World War II. Describe how their actions impacted race relations in the post war period.

https://en.wikipedia.org/wiki/761st_Tank_Battalion_(United_States)

ESSAY QUESTION 2

Choose one of the following five individuals to describe the impact they had on the armor community.

1) Major General Maurice Rose. He took command of the 2nd Armored Division in Sicily and in August of 1944 took command of the 3rd Armored Division until he was killed on March 30, 1945.
2) MG John S. Wood. Commanding General of the 4th Armored Division. In May 1942, Wood assumed command of the Fourth Armored Division, responsible for the organization and training of the division. He was promoted to major general on June 21, 1942. On July 28, 1944, he led the Fourth Armored Division into combat in France until he was relieved on December 3, 1944. The 4th Armored Division was Patton's spearhead and go to division.
3) General Creighton Abrams. He was one of the most aggressive and effective tank commanders during World War II. He was the battalion commander of the 37th Tank Battalion which was often the spearhead of the 4th Armored Division. He went on to command all US forces at the latter end of the Vietnam War.
4) Brigadier General Albert F. Irzyk. Commander of the 8th Tank Battalion of the 4th Armored Division during WWII. The 8th Tank battalion was the other go to battalion for the 4th Armored Division. (See the attached article, "Firsthand Account 4th Armored Division Spearhead at Bastogne")
5) General Heinz Guderian. Sometimes known as the father of blitzkrieg. An early pioneer and advocate of the "blitzkrieg" approach, he played a central role in the development of the panzer division concept. He led various Panzer units from battalion thru Army Group.

Firsthand Account 4th Armored Division Spearhead at Bastogne

National Archives

Albin F. Irzyk
November 1999

A veteran of the Battle of the Bulge tells the story of the 4th Armored Division's Combat Command B and the relief of the encircled city.

Just before dark on the day after Christmas 1944, elements of Lieutenant General George S. Patton, Jr.'s 4th Armored Division, attacking from the south, succeeded in making contact with the beleaguered Americans at Bastogne. The encircled 101st Airborne

Division had occupied that critically vital Belgian town for several days, categorically refusing German demands for surrender.

The dramatic linkup of the two forces broke the siege of Bastogne and was one of the great turning points in the Battle of the Bulge. This legendary event has often been described in histories of World War II, but there is a fascinating subplot to the story that is little-known.

It took the 4th Armored Division five days of bitter, costly fighting to break the ring of German units encircling the 101st, but only six days before the linkup, elements of that same division had actually been in Bastogne on the day it was being encircled. In fact, during that earlier movement into the town, those forces had come within one kilometer of the same spot to which they would return six days later, after heavy fighting. How could this have happened?

To understand this enigma, we must go back to December 8, 1944, the day the 4th Armored Division was pulled back from heavy fighting after reaching the Maginot Line, at a point a little more than nine miles from the German border. It was time for refitting and rest so that the division would be better prepared to cross the border and continue its assault to the east. The move to the rest area was not only welcome and richly deserved but necessary. The men of the division were exhausted after incessant fighting during the heavy, record-breaking November rains. The weather, the enemy and the gummy mud combined to make conditions deplorable and had taken a serious toll on the men and their tracked vehicles. Such extended breaks in the fighting were rare, and spirits were high.

At the time, I was serving with Combat Command B (CCB) of the 4th Armored Division, commanded by Brig. Gen. Holmes E. Dager, and its 8th Tank Battalion, which I commanded as a young major. During the division's rest period my command post was in Domnon-les-Dieuze, a tiny, wet, muddy and depressing French village about 40 miles

northeast of Nancy. Almost immediately, the town became littered with tank parts and equipment of all types. Not knowing how long we would be there, the men wasted no time in tackling their tasks.

On the fourth day the troops were excited and energized by the visit of the Third Army commander, General Patton, who swooped in for a quick stop. He arrived at high speed in his jeep, with a wide, crooked grin and all his stars blazing. He was jolly, animated and interested in how we were doing. After jumping out of his jeep, he worked his way along the entire length of the small town. He stopped at every vehicle, talked with every cluster of soldiers and had something to say to each–a question, a word of encouragement or appreciation, a compliment, a wisecrack, a good-natured dig. He was a master at this kind of rapprochement. His visits were brief, and he kept moving. But in 30 minutes or so, he had worked his magic–he had "touched" virtually every man in that battalion.

We soon learned that the 8th Tank Battalion was the only battalion in the division that he visited. Although the troops had no inkling of the momentous events that lay just ahead, Patton was apparently aware that an attack might be in the offing. After visiting the three other divisions of the XII Corps that day, he wrote in his diary that he had decided to put the 6th Armored Division and the 26th Infantry Division into the III Corps because "if the enemy attacks the VIII Corps of the First Army, as is probable, I can use the III Corps to help."

December 18 is a day I will always remember as the most confusing day of the entire war. Early that morning I was told to attend a meeting at division headquarters, but before I left for the meeting it was called off. The previous day I had been told that a move was imminent and to have my troops ready to move on short notice.

At 10:45 a.m. on the 18th, CCB was placed on a one-hour alert. I continued with my preparations for the move the next day to the east,

as well as the subsequent attack into Germany, by sending billeting parties forward to obtain billets for the battalion to occupy at the end of the march to the border.

At 5 p.m. the one-hour alert was canceled. Shortly afterward, I also received word the move to the east the next day was off. I recalled my billeting parties. With no order for the next day, the men settled in for the night after the evening meal.

Then, suddenly, at 11 p.m. the 8th was ordered by CCB to be prepared to move at once. That directive was quickly followed up with instructions to cross the initial point, or IP (as yet to be designated), at 12:50 a.m. and then move in a totally different direction–north! We would be moving to the III Corps zone (wherever that was) to assist in stopping a strong German counterattack in that sector.

The radical change in mission, the confusion that had preceded it, the lack of information, the uncertainty, the hasty departure in the pitch-dark and the highly unusual timing of the move–50 minutes after midnight–all combined to indicate we were involved in something serious. A cloud of apprehension hovered over the entire battalion.

As ordered, the 8th Tank Battalion crossed the IP at 12:50 a.m. on December
19. We had no information about the situation up ahead or about the enemy. CCB's orders were to move to an area in the vicinity of Longwy, France, many miles to the north. The 4th Armored Division, previously attached to the XII Corps, was now assigned to the III Corps.

Combat Command B, with its 8th Tank Battalion out front, led the advance of the division. Combat Command A (CCA) would be the next to move out, nine hours behind CCB and along the same route. Thus, the 8th led the odyssey north into the cold, black night, reinforced with the halftracks of the 10th Armored Infantry Battalion. At the head of the

8th was my tank, making it the lead element of the Third Army in its advance to the north.

Amazingly, the combat command had but one map, and that was with General Dager. During our rapid movements across France that summer and autumn, we occasionally had to rely on Michelin road maps for direction. But to be completely without maps was a new experience.

Once the column was on the road, we rolled mile after mile into the unknown. I was guided and directed by General Dager in a variety of ways. He radioed instructions from his jeep, his staff relayed radio messages, he sometimes rode alongside to shout directions at me in my turret, and at tricky intersections he dismounted and pointed the way.

The hours and miles passed, and Longwy loomed closer. The end was in sight. But then our spirits were dashed. As we reached Longwy, we were waved on, and we rolled through the city without slackening our pace. Our tank guns were still pointed to the north, and now, for the first time in the war, we were in Belgium. We passed through Arlon and changed direction to the northwest, still with no reduction of speed.

We began our journey in darkness and were to end it in darkness, as night came upon us again. A difficult situation became considerably more difficult, since we now had to travel under blackout conditions, and our progress would be greatly slowed. On top of that we had absolutely no idea of what lay ahead, and we were expecting to be fired on by the enemy at any moment.

Neufchâteau, another milestone, came and went as we continued to roll, still without enemy contact. Again we changed direction slightly, this time moving to the northeast. Now we were on the Neufchâteau-Bastogne road, headed toward Bastogne, another unfamiliar town.

As we neared the town of Vaux-les-Rosières, we were at last told to stop for the night. Combat Command B moved into that location, which was west of the road. I selected a spot about two kilometers east of the road for our bivouac area (I would later learn that it was near a town named Nives). By the time we settled in, it was 11 p.m.

Except for brief halts, and one longer one to refuel, we had been on the move unceasingly for more than 22 hours–half of one night, all day and half of another night under blackout conditions. Remarkably, we had traveled 161 miles over roads that were sometimes bad–without maps and without confusion. The fact that we arrived was a tribute to both our men and vehicles and spoke volumes for the work we had accomplished during the recent rest period. Most important, there had been no enemy contact.

That night none of us realized that we were the vanguard of what would later be called the greatest mass movement of men in the shortest period of time in the history of warfare. Patton's troops had been poised to attack the Saar to the east. Forced to abandon that plan, he ordered the major part of his Third Army to make a gigantic 90-degree wheeling movement and then drive north at full speed. Involved in the spectacular maneuver were thousands of men and vehicles operating in damnable weather, often over icy roads.

Once we reached the bivouac area, there was still no rest for many of us. Many of the men were exhausted, but as soon as we reached our position we sent forward some strong patrols of light tanks and armored infantry to detect any enemy movement from the north.

Early the next morning, December 20, I was, figuratively speaking, hit by a thunderbolt. General Dager called me on his radio and, without any preliminaries, ordered me to send a task force into Bastogne. I was stunned. I protested vehemently, reminding him that the situation up ahead was unclear, terribly confused, and that this was no time for a

piecemeal commitment of my forces. To my great surprise, Dager agreed with me. He said that he had just made the same arguments in a tug of war with Maj. Gen. Troy H. Middleton of the VIII Corps. Middleton had ordered him to take all of CCB into Bastogne, and he had hotly resisted, insisting that Middleton wait until General Hugh Gaffey arrived with the rest of the 4th Armored Division. Middleton finally agreed not to commit the entire combat command, but only after Dager conceded that he would send a task force instead.

As ordered, I formed the task force. It consisted of A Company, 8th Tank Battalion; C Company, 10th Armored Infantry Battalion; and C Battery, 22nd
Armored Field Artillery Battalion. I placed in command of the task force Captain Bert P. Ezell, my battalion executive officer. His force would henceforth be known as "Task Force Ezell." Ezell's mission was to report to Brig. Gen. Anthony C. McAuliffe, commander of the 101st Airborne Division, learn about the situation in Bastogne, receive instructions and render support if so ordered.

The task force moved northeast on the Neufchâteau-Bastogne road and reached Bastogne without seeing any enemy troops. Upon entering the city, Ezell was told to report for instructions–not to McAuliffe, but to Colonel William Roberts, commander of Combat Command B of the 10th Armored Division.

Shortly after Ezell radioed me that he was in Bastogne and had made contact with our troops, I was astonished to receive an order from divisional headquarters to recall the task force to Nives at once. I immediately called Ezell, whose radio operator told me that he was out talking to a colonel. I shouted, "Get him!" I reached him not a moment too soon, for at that very instant Ezell had been receiving instructions for deployment from Colonel Roberts. When I told him to return, Ezell was dumbfounded. As was to be expected, he had a difficult time

convincing Roberts that he had to leave with his force just after arriving in Bastogne. A short time later, just after noon, a delighted and vastly relieved task force was on the road again.

Seven hours after it set out for Bastogne, Ezell's task force returned to our bivouac area with many more vehicles than it had when it pulled out. The men were beside themselves, chatting and shouting excitedly. They had seen some strange sights–so strange that they had a difficult time explaining it all to the rest of us.

As the task force moved away from Bastogne, they had encountered an American 2 1/2-ton truck in a ditch on the right side of the road. The truck was barely damaged and its driver was still sitting behind the wheel. But the top of his head had been blown off above the eyes, apparently by an armor- piercing round.

Moving a little farther down the road beyond the ditched truck, the troops noticed tank tracks running across the asphalt pavement. They were much wider tracks than could be made by American tanks and must have been made by German Panther or Tiger tanks.

The task force then came upon another strange sight–about two battalions of U.S. artillery stopped along the road. The equipment seemed to be in good shape, but there was no sign of any troops. Some of the vehicles were still idling. It was not clear whether the artillery units had been attacked and their positions overrun, or if they had been spooked by the sight of German tanks crossing the road just to the north of them and had abandoned their guns and vehicles. Given the evidence they had seen so far, it appeared that a strong German force had moved rapidly west and cut across the Neufchâteau-Bastogne road while Ezell was moving toward Bastogne. Perhaps the lead German elements had been moving so rapidly that following forces had not yet caught up with the vanguard. Ezell's units had apparently managed to slip through a gap in the enemy echelons driving west. The task force

hauled back as much of the abandoned artillery equipment as they could handle and encountered no resistance on the way back to the bivouac area.

As December 20 passed, events continued to move swiftly. At 2 p.m., CCB was reassigned to III Corps with the rest of the division. The 8th Tank Battalion was ordered to retrace its steps of the previous night and move southwest to Neufchâteau, then southeast to Léglise. We arrived in the vicinity of Léglise after dark on the 20th. Shortly after, I was surprised to learn that the rest of the division had remained in the vicinity of Arlon, and none of its units had made any attempt to close up on CCB. Only later did we learn why CCB had gone where it did and when it did.

On the 21st, I received my orders from General Dager at CCB headquarters for the attack that would take place the following day. I was also informed that during the previous night and early that morning very strong German forces had driven west and flanked the city of Bastogne on the north and south. The two forces had met west of the city and completely encircled Bastogne. Trapped in the city was the 101st Airborne Division, to which were attached elements of the 9th and 10th Armored divisions.

This was shocking news, but Task Force Ezell had provided ample clues that the Germans had been on the move the previous day. What really was disturbing was the realization that the encirclement had been taking place while Ezell's group had been in Bastogne, and it had continued with unabated fury after the 8th Tank Battalion and CCB had left the area.

I could not help but think about what could have happened. If he had not been recalled by divisional headquarters, Ezell and his men might have been trapped in Bastogne along with Colonel Roberts' combat command of the 10th Armored. And what if General Dager had not won

the day in his tussle with General Middleton? All the 4th Armored's CCB–if we had moved into Bastogne as General Middleton had originally ordered–might well be stuck in the besieged city.

We moved out of Léglise at 4:30 the next morning–the 22nd–so as to arrive at the IP at 6. The 8th Tank Battalion and the rest of CCB were part of the 4th Armored Division's attacking force, coordinated with the 80th and 26th Infantry divisions of III Corps. The 4th Armored was on the left flank.

We began our slow, difficult return to Bastogne. The following day, at Chaumont, the 8th Tank Battalion was on the receiving end of one of the most powerful tank-led counterattacks of the war, temporarily slowing its advance to Bastogne and inflicting heavy casualties. Ironically, the battle at Chaumont was fought just four kilometers east of the quiet bivouac area we had occupied at Nives just three days earlier.

It took five days of bitter fighting to relieve the 101st in Bastogne, but by December 28 the area had been cleared of the enemy, and all of our positions had been consolidated. When Captain Ezell walked into the 8th Tank Battalion command post in Assenois, he was just one kilometer southeast of where his task force had been eight days earlier as it rolled into Bastogne.

Those of us who participated in this confusing operation, as well as historians who have analyzed the Battle of the Bulge in the years following World War II, could not help but note the ironies and incongruities surrounding the battle.

A number of questions have been raised about our mission:

*Why did CCB, whose original destination was the vicinity of Longwy, continue on alone until it reached a position in VIII Corps sector, only nine kilometers from Bastogne?

*Why did General Middleton of VIII Corps seem to exert “ownership” of CCB?

*Why did the rest of the 4th Armored Division not close up behind CCB instead of leaving CCB near Bastogne while the rest of the division assembled well to the rear, in the Arlon area?

*If General Dager had not protested dividing his command, what might have happened to CCB if it had rolled into Bastogne as ordered, on the day when the enemy was very much on the move?

*After moving into Bastogne, why was Task Force Ezell immediately and summarily recalled, especially considering that General Middleton had argued strongly for its presence there?

*After the elements of Task Force Ezell had returned to their parent units, why was all of CCB relieved from assignment to VIII Corps and withdrawn– back to the rear–less than a day after arriving in the forward position?

*Should commanders at higher levels have exploited Task Force Ezell’s rapid progress to Bastogne once they knew the unit had entered the town without a fight and returned? And should General Middleton have been allowed to hold onto CCB and use it to try to keep the NeufchâteauBastogne highway open, possibly preventing the encirclement of Bastogne?

*Once CCB had moved into its bivouac at Vaux-les-Rosières, should the rest of the 4th Armored Division have capitalized on the situation, moving up to attack from the bivouac location only a short distance from Bastogne rather than consolidating for the attack farther south

and then fighting its way north along the difficult forest axis from Arlon to the encircled city?

Among those who have answered “Yes” to the last two questions is Charles B. MacDonald, who stated in his book A Time for Trumpets: “If Middleton had been allowed to hold CCB and with it keep open the Neufchâteau/Bastogne highway, Bastogne probably never would have been surrounded. Even if the Germans had cut the Neufchâteau/Bastogne highway, the Fourth Armored Division might have capitalized on the location of CCB and attacked from Vaux-les-Rosières instead of from Arlon. Which would have spared many officers and men of the Fourth Armored Division a great deal of misery and, in some cases, death.” The following additional information about the events leading up to the Battle of Bastogne provides answers to some of these nagging questions.

On December 18, Lt. Gen. Omar N. Bradley, commander of all U.S. ground forces, called off Patton’s planned offensive into the Saar. Without hesitation, Patton told Bradley that he would concentrate the 4th Armored Division in the vicinity of Longwy, pull the 80th Infantry Division out of the line and get the 26th Infantry Division moving within 24 hours. Much later that same day he issued the order that got CCB moving just after midnight.

General Patton met with his staff at 8 the next morning, December 19, as CCB was already well on its way to Longwy. His plan, he told his staff, was to strike due north and hit the underbelly of the German penetration where it would hurt. During the next hour, Patton and his staff planned, in outline, three distinct operations. Arrangements were made for a simple code to indicate, via a brief telephone call, which operation would be implemented.

Later that same day, Patton met at Verdun with Supreme Allied Commander General Dwight D. Eisenhower and a distinguished

gathering of senior commanders that some have called perhaps the most historically significant conference of the 1944-45 campaign. All agreed that there should be a counterattack at the earliest possible moment. Patton told the group that he could be ready to attack with three divisions of the III Corps on December 22. A stronger force, he said, would take several more days to assemble and would forfeit surprise. The group was astonished at his rapid response to the situation and was more than satisfied with his proposal. It should be emphasized that at this meeting Patton pledged a three-division counterattack with the entire 4th Armored Division as the key division in the corps. He was completely unaware that CCB was then on its way toward Bastogne.

Given the situation, it is absolutely inconceivable that CCB should have been sent on its merry way all the way to the outskirts of Bastogne and told to report to the VIII Corps. It turned out that General Bradley was responsible for that trip. Whatever the rationale for its mission may have been, the motivation for this decision is difficult to comprehend.

In his memoir War As I Knew It, General Patton wrote, “The next morning I arrived at Bradley’s headquarters in Luxembourg and found that he had, without notifying me, detached Combat Command ‘B’ [General Dager] of the 4th Armored Division from Arlon to a position southwest of Bastogne. Since the Combat Command had not been engaged, I withdrew it to Arlon [not
Arlon but Léglise].”

Historian Martin Blumenson, in the second volume of The Patton Papers, quotes from General Patton’s diary entry of the same day, December 20: “In the morning I drove to Luxembourg, arriving at 0900. Bradley had halted the 80th Division at Luxembourg and had also engaged one combat command of the 4th Armored Division in the vicinity east of

Bastogne [not east but southeast] without letting me know, but I said nothing."

General Patton then drove to Arlon, to the headquarters of General Middleton's troubled VIII Corps to get a firsthand picture of the situation in the Bulge. When he arrived, he found Maj. Gen. Hugh J. Gaffey of the 4th Armored Division, Maj. Gen. Willard S. Paul of the 26th Infantry Division, and Maj. Gen. John Milliken of the III Corps already there. There is considerable speculation and some difference of opinion about what actually took place during their meeting. However, subsequent events lead easily to certain assumptions.

General Middleton still must have been anxious to send CCB into Bastogne behind Task Force Ezell and surely requested permission to do so. Elements of his corps were already scattered, and his armor was especially fragmented. Middleton wanted to avoid more of the same. General Gaffey must have wanted his combat command returned. With a major attack coming up in just two days, he needed his division at full strength, and it would have been severely handicapped without CCB. General Milliken also knew that the key to his III Corps three-division attack was having the 4th Armored at full strength. He surely must have supported Gaffey's argument to have his CCB returned.

As events later developed, CCB shouldered an extremely heavy share of the 4th Armored's fight at Bastogne. The combat command acted as the powerful left flank, not only of the division, but also of the III Corps all the way to the encircled city. In retrospect, General Dager's resistance to committing CCB to Bastogne earlier surely saved the unit. If he had not protested, CCB probably would have been in Bastogne before Patton was aware that it had been given away by Bradley.

It was fortunate that Task Force Ezell returned unscathed from its fruitless mission. The loss of a tank company, an armored infantry

company and an artillery battery would have considerably weakened CCB.

At the Verdun meeting, General Patton had committed himself to a coordinated attack with three full divisions. He knew that the situation in the Bulge at that moment was confused. That was not the time to reinforce a failing situation and risk having elements of the 4th Armored committed prematurely. Patton's decision was revealed when Task Force Ezell was ordered out of Bastogne shortly after noon and CCB was directed to move to the rear, which it began to do by midafternoon.

Patton chose as his ultimate course of action a well-planned, well-coordinated, orderly attack toward a known, specific objective. He jumped off from ground that was firmly in his hands. His planning and execution were sound and professional. Undeterred by the panic around him, he kept his eye on the ball.

Patton's counteroffensive not only broke the ring enclosing Bastogne but also destroyed a portion of the German penetrating force, eliminating hundreds of enemy vehicles and thousands of troops. Because of his rapidly organized and well-executed counterattack, he was able to snatch the momentum from the Germans and seize the initiative. He had done what he had promised his commanders he would do.

In the eyes of historians, the experience of Task Force Ezell is an extremely minor episode in the war in Europe. It did not have any significant impact on any campaign. But finding the answers to some of the more puzzling aspects of Ezell's mission helps to enrich our understanding of the Battle of the Bulge. It clarifies how the counterattack was planned and provides some fascinating sidelights on the men who made the decisions and brought about the dramatic linkup at Bastogne. No one who learns about Ezell's trip to the city

during its encirclement can help but be struck by the story's ironies and might-have-beens. Although I was a participant in much that happened, I still find it a strange and fascinating tale. In sharing my own experience and research, my goal has been to shed a little light on an obscure, yet telling, incident that had formerly been shrouded by the fog of war.

Brigadier General Albin F. Irzyk is the author of He Rode Up Front for Patton.

Further reading: A Time For Trumpets, by Charles B. McDonald; and Battle: The Story of the Bulge, by John Toland.

ESSAY QUESTION 3

Select one of the ten battles described in the attached article and describe the impact of that battle on the use of armor.

Here's How 10 Of The Largest And Most Important Tank Battles In History Played Out

Ben Brimelow, Business Insider Published May 1, 2018 6:45 PM

The tank is one of the most important weapon systems on the battlefield. Few weapons strike enemy soldiers with the fear that a fully loaded tank rolling towards them does.

After their trial by fire on the fields of Europe in World War I, tanks have become a necessity for any army that wants to be considered a serious foe.

In the one hundred years since its invention, tanks have been the winning factor in a number of battles. Entire wars have depended on their successful use.

Take a look at how 10 of the biggest tank battles in history went down.

Battle of Cambrai: November 20 – December 8, 1917

A Mark IV (Male) tank of 'H' Battalion, 'Hyacinth', ditched in a
German trench while supporting 1st Battalion, Leicestershire
Regiment near Ribecourt during the Battle of Cambrai, 20 November 1917.Wikimedia Commons

The Battle of Cambrai was the first time tanks were used on a large scale for a military offensive. The objective was to take the commune of Cambrai, an important supply point for the Germans at the heart of the

Hindenburg Line, in order to reduce the pressure on the French.

Nineteen British divisions were assembled for the battle, including 476 tanks and five horsed cavalry divisions.

The initial attack on November 20th was met with huge success. The British had torn through four miles of German defenses and captured up to 7,500 prisoners with low casualties.

But by the end of the day, more than half of the tanks were out of action due to mechanical failure. The German Army launched a massive counterattack, and brutal trench warfare ensued.

By the end of the battle, almost all the British gains were lost, over 100 tanks were lost or destroyed, and both sides suffered around 40,000 casualties each.

Battle of Hannut: May 12 – 14, 1940

Two destroyed French SOMUA S35s and an artillery piece being inspected by German soldiers, May, 1940.Wikimedia
Commons

The Battle of Hannut was fought during the Battle of Belgium, Nazi Germany's invasion of the Low Countries. It was part of the Wehrmacht's thrust into the Ardennes region and was meant to tie down the French First Army.

It was both the largest tank battle of the campaign and the largest battle in armored warfare history at the time. Over 600 German tanks and 25,000 soldiers squared off against
600 French and Dutch armored vehicles and around 20,000 soldiers.

The battle was technically inconclusive. Some of the French First Army was able to fight their way through the Germans to reunite with their British comrades at Dunkirk, but they had lost well over 100 of their tanks and armored vehicles.

German losses were much lighter, with only around 50 tanks lost. While the French SOMUA S35 tank was considered as one of the best at the time, German tactics and communication technology made the Wehrmacht better.

Battle of Raseiniai: June 23 – 27, 1941

An abandoned Soviet A KV-2 tank, June, 1941.Wikimedia Commons

The Battle of Raseiniai was a large tank battle fought at the beginning of Operation Barbarossa, Hitler's invasion of the Soviet Union. The battle was fought in Lithuania, then part of the Soviet Union's Northwestern Front.

Some 240 German tanks from the 4th Panzer Group were tasked with destroying almost 750 Soviet tanks of the 3rd and 12th Mechanized Corps.

Despite their numerical advantage over the Wehrmacht, the result of the battle was an utter catastrophe for the Soviets. Some 700 Soviet tanks and their crews — almost the entirety of the Soviet Union's deployed mechanized units on the Northwestern Front — were destroyed, damaged, or captured.

A large part of the German victory was due to their use of airpower. The Luftwaffe was unchallenged during the battle, and the close tank formations of the Soviets were easy targets for Ju 88 aircraft.

Battle of Brody: June 23 – 30, 1941

A German infantryman near a burning Soviet BT-5 tank, June, 1941.Wikimedia COmmons

The Battle of Brody is the largest tank battle in history, according to some historians.

Also fought during the beginning stages of Operation Barbarossa, the battle saw some 1,000 German panzers of the 1st Panzer Group's III Army Corps smash into 3,000 Soviet tanks from the six mechanized corps of the Soviet 5th and 6th Armies.

Again outnumbered, the Wehrmacht proved that superior training, tactics, communication technology, and air support make all the difference.

The exact number of casualties is not known, but estimates put Soviet tank losses at somewhere between 800 to over 1,000. The Wehrmacht also suffered heavy casualties, with anywhere between 200 to 350 tanks destroyed.

“This, in fact, is the biggest tank battle in World War II, and sparsely a word has been written on it,” according to David Glantz, a historian of the Eastern Front and Soviet military.

Second Battle of El Alamein: October 23 – November 11, 1942

A mine explodes close to a British artillery tractor as it advances through enemy minefields and wire to the new front line, October 1942.Wikimedia Commons

The Second Battle of El Alamein saw two legendary generals, Britain's Bernard Montgomery, and Germany's Erwin Rommel — who was nicknamed the "Desert Fox" — fight for the fate of North Africa.

North Africa had been a battleground since Fascist Italy's invasion of Egypt in 1940. Germany's Afrikakorps

had to step in to prevent their defeat in 1941 and were able to push the British all the way into Egypt.
They were stopped at the First Battle of El Alamein, which, though technically a stalemate, did prevent the Afrikakorps from rolling through the rest of Egypt, and by extension the Middle East.

Montgomery assembled a force for a counterattack, including around 190,000 men and over 1,000 tanks. Rommel commanded a force of 116,000 German and Italian soldiers, and 540 tanks.

After days of hard fighting in the Egyptian desert, Montgomery was victorious. Five hundred German and Italian tanks, almost all of Rommel's force, were destroyed or captured.

With the Americans launching Operation Torch in November
1942, the tide against the Germans began to turn in North Africa.

Battle of Prokhorovka: July 12, 1943

Panzer IIIs and IVs on the southern side of the Kursk salient at the start of Operation Citadel, July 1943.Wikimedia

Commons

The Battle of Prokhorovka took place during the larger Battle of Kursk. It was long thought to be the largest tank battle in history, but according to the book Demolishing the Myth: The Tank Battle at Prokhorovka, Kursk, July 1943 by Valeriy Zamulin, a Russian military historian, that is not the case.

But that is not to say it was small or insignificant. The battle saw over 600 Soviet tanks from the 5th Guards Tank Army smash head-on into around 300 German tanks from the II SS-Panzer Corps.

The fighting was some of the most intense in the history of armored warfare. The Soviets lost around 400 tanks, more than half of their force. German tank losses were smaller by comparison, up to 80 tanks and assault guns destroyed.

The Germans were unable to take Prokhorovka, and although it was not destroyed (the original goal of the Soviets), the II SS-Panzer Corps was exhausted, and prevented from continuing their offensive.

Thus, the momentum swung to the side of the Soviets, who eventually won the Battle of Kursk

Operation Goodwood: July 18 – 20, 1944

Sherman tanks carrying infantry wait for the order to advance at the start of Operation 'Goodwood', 18 July 1944.Wikimedia Commons

Operation Goodwood was a British offensive that was part of the Battle for Caen, one of the main inland targets that was part of Operation Overlord, the Allied invasion of Normandy. The goal was to break through to Caen so that it could be liberated.

The British had mustered as many as 1,100 tanks for the battle. The Wehrmacht had only around 370 tanks at their disposal, but they included the fearsome Tiger and Tiger II tanks.

The battle did not go the way the British intended. Their casualties were 5,000 men and 250 to 300 tanks

destroyed. German losses were 75 tanks destroyed, mostly by airstrikes.

Operation Goodwood did cause some controversy. Montgomery claimed that all the objectives were achieved and that the mission was a success. But the British had only managed to penetrate roughly seven miles or so East of Caen.

But Goodwood did draw valuable German tanks away from the Western part of Caen, where the Americans were making their push to the city.

Battle of Chawinda: September 17 – 22, 1965

Indian soldiers in front of a destroyed Pakistani Sherman tank during the Indo-Pakistani War of 1965.Wikimedia Commons

The Battle of Chawinda was one of the largest tank battles fought since World War II. It was part of the Indo-Pakistani War of 1965, fought over control of Jammu and Kashmir.

After the Pakistani Army's attempt to foment an insurgency (Operation Gibraltar) was discovered and subsequently foiled, India retaliated with an outright attack along the Pakistani border.

The Indian military had planned to take the city of Sialkot, an important railway hub and central part of the

Grand Trunk Road, so that they could use it as a beachhead for further operations into Pakistan.

But the Indian force of 80,000 to 150,000 soldiers and 230 tanks was met outside of their objective at Chawinda by a Pakistani force of 30,000 to 50,000 men and 132 tanks.

After more than a day of intense fighting, a UNSC resolution was signed and an unconditional ceasefire was implemented. India lost anywhere between 29 to 129 tanks, whereas Pakistan lost up to 44 tanks.

Battle of the Valley of Tears: October 6 – 9, 1973

Israeli troops fight off Syrian soldiers in the Golan Heights, the area was later named the Valley of TearsJared Keller

The Battle of the Valley of Tears was fought between Israel and Syria during the Yom Kippur War of 1973. The war had started on the holiest day in Judaism, when Syrian soldiers supported by 1,400 tanks crossed the border and invaded the Jewish state.

Just one Israeli armored brigade, roughly 100 or so tanks and armored vehicles stood in the way of the Syrian 7th Division, a force of 1,400 tanks, including 400 T-62s, at the time the most modern Soviet tank in the field.

The Israelis were manning British and American-made Centurion tanks, known for their good gunner sights.

Unable to call in effective air support, the Israeli defenders dug in and fought off wave after wave of Syrian tank attacks.

Some Syrian tanks broke through, causing the Israeli tanks to turn their turrets backwards to destroy them. But one by one, the Israeli Centurions were knocked out.

But on the fourth day of the fighting, Israeli reinforcements arrived, and the Syrians were forced to withdraw. Almost all of Israel's tanks were destroyed, but they gave far more than they got — Syrian armored vehicle losses were around 500, around 250 of which were tanks.

Battle of 73 Easting: February 26 – 27, 1991

An Iraqi Type 69 main battle tank burns after an attack by the 1st United Kingdom Armored Division during Operation Desert Storm, February 28, 1991.Wikimedia Commons

The Battle of 73 Easting saw American and British tanks go up against Saddam Hussein's Iraqi Republican Guard Tawakalna Division. Saddam had been warning his people that the “mother of all battles” was on the horizon, and the battle of 73 Easting was certainly part of it.

The main part of the battle was fought between the U.S. 2nd Armored Cavalry Regiment and Iraq's 18th Mechanized Brigade and 37th Armored Brigade.
The ensuing battle saw the Iraqi forces be completely decimated. Over 160 tanks and armored personnel carriers were destroyed, damaged, or captured by U.S.

forces. Up to 1,000 Iraqi soldiers were killed or wounded, and over 1,000 more were taken prisoner.

U.S. losses were just six killed, 19 wounded, and one Bradley infantry fighting vehicle destroyed. Historian and author Rick Atkinson described the battle:

“Here could be seen, with almost flawless precision, the lethality of modern American weapons; the hegemony offered by AirLand Battle doctrine, with its brutal ballet of armor, artillery, and air power; and, not least, the élan of the American soldier, who fought with a competence worthy of his forefathers on more celebrated battlefields in more celebrated wars.”

Read more from Business Insider:

The 'most powerful' helicopter ever fielded by the U.S. is also the most expensive

The Army is boosting the number of RPG-killing tank-defense systems it's sending to Europe to counter Russia

Stunning details reveal how Israel's spy agency pulled off one of the most brazen heists in modern history

ESSAY QUESTION 4

Traditionally, Armored Division patches use the “tricolor” backing shown above. Its three colors represent combat arms colors of branches that predate armor: yellow for cavalry, blue for infantry, and red for artillery.

Please read the attached article written by Albin Irzyk, and discuss how the 8th Tank Battalion demonstrated the multiple capabilities of armor. You may feel free to research other sources if you wish.

Firsthand Account of U.S. Army's 8th Tank Battalion's Daring Moselle Crossing During World War II

By Albin F. Irzyk

The tanks of the 8th Tank Battalion, which I was a part of, rolled through Vaucouleurs, France, crossed the historic Meuse River and moved into a bivouac along its bank. It was early on September 1, 1944. The 8th was part of Combat Command B of the 4th Armored Division, the spearhead of General George S. Patton's Third Army. Amazingly, those tanks had just advanced 328 miles in 12 days, moving forward as many as 51 miles in a single day. The 4th Armored Division's August sweep across the widest part of France was one of the most sensational operations in the annals of American military history and a triumph without parallel in the history of mobile warfare.

Pursuing the Germans relentlessly, the Americans reached the French border province of Lorraine. In 30 days they had covered a distance that Allied military planners had assumed would take nearly three times as long to travel. This astonishing advance was possible because conditions for armored operations were almost perfect. The days were long, the nights short. The terrain was dry, and the tanks could go cross-country almost unimpeded, often bypassing pockets of resistance. Opposition was scattered, and many enemy troops simply fled. Others had resisted fanatically, blowing up bridges in roads or mining and defending roads with anti-tank guns. Many bridges had been destroyed, but the tanks were able to ford most of the creeks, streams and small rivers because the water was low.

No obstacles had deterred the aggressive tankers of the 4th Armored Division. Now we sat just 63 miles from the German border and no more than 140 miles from our objective, the Rhine River. That was less than half the distance we had come during the last 12 days, and at the rate we had been moving, the Rhine surely could not be more than a week or 10 days away. I was so optimistic about our prospects that I had already bet several of my associates that the war in Europe would be over by Thanksgiving. And it appeared that Patton would realize his hopes of a rapid dash into Germany and crossings over the Rhine at Mannheim and Mainz.

Much to our surprise, we did not move the next day or the day after. On the third day, we were informed that because of extended supply lines there was a shortage of gasoline, and we would be forced to remain in place. With that announcement, I knew the grand and glorious advance of the past month was over. The ideal conditions for armored operation would vanish, and the incessant rains would come. And even more disturbing, the enemy was being handed on a silver platter that most cherished of all commodities, time–time to reorganize, time to receive reinforcements from other parts of Europe.

Then came more demoralizing news. There was gasoline, but not enough for all the Allied forces. The Allied command gave logistical priority to British Field Marshal Bernard Montgomery and the armies in the north. This was difficult for us to accept. In the north were built-up areas and difficult cross compartments, and Montgomery was a conservative and cautious commander. Patton was the one who had electrified the world with his August sweep, and he was closer to the German border and at least 100 miles closer to the Rhine than Montgomery. It is an established military principle that success should be reinforced. Since that principle was being violated, I could not believe that this had been a military decision.

At any rate, we sat. We read, swam, played touch football and basked in the sun. As we sat, we studied our maps and recognized that to the east we would soon be facing a formidable obstacle. The events occurring just to the north of us were not reassuring.

Major General Manton S. Eddy, our XII Corps commander, had ordered a crossing of the Moselle River north of Nancy, France. The mission was given to the 317th Regiment of the 80th Infantry Division. When they launched an assault boat crossing on the morning of September 5, the attackers received enemy artillery and mortar fire from positions dug on forward slopes of the dominating terrain across the river. The intense, accurate fire paralyzed the attackers, broke the American ranks and destroyed most of the rubber boats intended for the river crossing.

Later, a night attack was launched. About four platoons were successful in reaching the east side, although casualties were heavy and more than half the assault boats were lost. Before the Americans could be reinforced, the Germans left their foxholes armed with bayonets, grenades and machine pistols and wiped out the American position by 11 a.m. on the 6th. For the time being, no further crossings would be attempted.

Sunday, September 10, began as just another sunny day. But on that glorious Sunday afternoon, the unsuspecting tankers were surprised by orders to move. The men wondered if this was for real, and, if so, why they were being told to move out so suddenly. They did not stop to ask questions; they hopped right to it, tore down their 'homes and got ready to move.

For the next few hours there was mild confusion because the orders kept being changed. Finally, after 10 days of marking time, the 8th began rolling again. Task Force Conley (named for the 8th's commanding officer) moved out at 7 p.m., just as darkness was falling. In the days ahead, Colonel Tom Conley would operate with my advance guard, out in front and leading as he had prior to reaching the Meuse.

The tankers moved out smoothly, and after a few miles it was clear that the long rest period had not made any difference in the group's motivation. The men of the 8th had retained their aggressive combat edge. In no time, the eager troops reached and crossed the Madon River and continued east to a location south of Crantenoy, where they bivouacked for the night. A quick glance at the map located the command about 16 miles southeast of Nancy. During one day, the tankers had moved 31 miles.

Before retiring, I studied my map some more. I saw that we were now about three miles from the Moselle River, a major obstacle that had to be breached before the attack to the east could be continued. In the morning it would be our first objective, and there was bound to be trouble. Militarily, the spot was so advantageous for a defender that it cried out for a rugged, determined defense. The enemy had had ample time to round up the necessary forces and to reorganize and dig them in.

Early on September 11, lead elements of the 8th reached the Moselle and moved to a site overlooking the town of Bayon on the opposite side. We quickly sized up the situation facing us. Elements of the 35th Infantry Division had established a small bridgehead at that location.

A large, important river with its bridges down and defended by a dug-in, aggressive enemy is a major obstacle to an attacking force. Tanks can attack to the river's edge and fire on the opposite bank, but they do not assault the river. That is a job for infantry. They must either ford the river or, if it is too deep, cross over in assault boats. This is a difficult and dangerous operation because the infantry is exposed and vulnerable to enemy fire. Their mission is to cross any way they can, wrest a hunk of ground from the enemy and establish a bridgehead on the opposite side. During this complicated operation, the infantry is supported by artillery, so that the enemy will be pinned down while the infantry is exposed on the river. Once on the opposite bank, the infantry cannot hesitate, but must continue to fight and push back the enemy as succeeding waves of troops cross to help enlarge the bridgehead.

The goal of the assault is to push back enemy forces far enough so that they can no longer pour effective small-arms or artillery fire on the troops moving across the river. While the infantry and artillery engage the enemy, the engineers rush their bridging equipment to the riverbank, and when enemy fire lessens sufficiently, they work to quickly erect the appropriate bridge. The engineers also have an extremely dangerous mission, since they, too, are exposed and vulnerable as they work. The tanks are assembled nearby, and as soon as the bridge is completed, they begin crossing. Once on the other side, the tanks take over from the infantry and aggressively attack out of the bridgehead in typical armored style.

That is the way a river crossing is supposed to be made. However, as I had already learned many times, there are so many variables in combat that events rarely unfold as planned. The events that transpired at Bayon were an excellent example of plans gone wrong.

After the infantry had established its small bridgehead, aggressive enemy action kept them contained and prevented them from enlarging that bridgehead. The enemy was able to continue to bring effective fire on the damaged bridge site. The fire was heavy and accurate enough to deter the engineers from even beginning to construct a crossing for the tanks. The situation was getting no better, and the bridgehead was dangling by a thread. Someone in a position of authority must have recognized the danger and called for help from the tanks, which explained the abrupt departure of the 8th the evening before.

When their tanks reached the Moselle River and they found the bridge too badly damaged to cross, the men of the 8th Battalion should have backed off a bit–found cover and good firing positions and supported the infantry with direct covering fire concentrated on the opposite bank. But when they reached the river, the tankers quickly realized that the offensive had bogged down and sensed that not much was going right. They knew that something had to happen and that it was now up to them.

The first requirement was to get away from the bridge site quickly. The enemy had the location pinpointed and continued to pour fire onto it. So the lead elements of the 8th moved north and parallel to the river. Once out of enemy range, the tankers were able to pause and examine the problems and challenges that confronted them.

Commanding the advance guard, I stood with fellow Lieutenant William (Bill) J. Marshall, commander of the lead platoon of C Company. We stared at the mighty Moselle. Every man in the battalion knew that we were facing a formidable obstacle. To the north and south of our position, the Moselle was a wide, swiftly moving river that would certainly engulf tanks the

moment they entered its waters. But there was something different about the part of the river at which we were now staring. We were fortunate to have reached the Moselle at this particular location.

At some point upstream, the river apparently had separated into three channels. So the part of the Moselle that we were analyzing appeared to have three fingers, and separating the fingers were sandy, gravelly spurs of land sprouting short, wild underbrush. Bill Marshall and I immediately recognized the exciting possibilities. Instead of one mighty river, we now faced three smaller, narrower rivers, which might be forded.

Fording the river now appeared to be at least an outside possibility. We were well aware, however, that there was another problem. The Canal de l'Est, which ran north to south and parallel to the Moselle, lay between us and the river. It had steep, soft, muddy sides and was wide and deep enough to permit the transit of large canal boats. This other formidable obstacle, like a massive tank trap, had to be overcome before we could even think of fording the Moselle.

Both Marshall and I knew that if ever there was a time to grab the bull by the horns, this was it. Although it seemed impossible, we knew that somehow we had to get ourselves across that canal and river.

I looked at Marshall and he looked at me. I asked, Bill, can you do it? Marshall with his jaw set and determination in his eyes, nodded, and declared, We'll do our damnedest. Without another word, he spun on his heel and, having made a resolute decision, set in motion a series of remarkable events.

Marshall started the action by rapidly reconnoitering up the canal until he found the right spot for a crossing. If the depth of water in the canal had been normal, it would have been all over. But fortuitously, the locks somewhere had been opened or damaged, so the water in the bottom of the canal, though very muddy, was shallow. Marshall now pulled his platoon of tanks close to the canal and ordered the guns to open fire, pouring point-blank fire onto both sides of the canal. The high-explosive rounds, set on fuse delay, buried themselves in the muck and then exploded. The sides of the canal began to crumble. Large chunks of muck began to collect on the canal bottom, forming a rough bed. The continuous fire caused the banks to begin to collapse and increase the level of debris on the canal bed. Some abandoned railroad ties found nearby were dragged to the site and laid on top of the debris to give it some firmness and substance, hastily forming a rough ramp.

The moment of truth had now arrived. Marshall's lead tank, driven by Corporal Ray Fisk, moved toward the broken bank and slowly, carefully slid down the steep slope, sending dirt and mud ahead of it onto the ramp. It then began to move slowly across the uneven ramp with its tracks churning and sliding through the low water as it inched along.

There was a loud roar as Fisk gunned his engine. The tank leaped off the ramp, its chevron tracks spinning wildly in the mud as it tried to get a grip on the steep, slippery bank. With the engine roaring in lowest gear and the tracks spinning, the tank gained only inches at a time, but it was moving. As the tank slowly climbed up the bank, its tracks began to bite into the higher, drier ground, and little by little it began to move more steadily. With a final roar, it leaped to the top of the bank. A tank had successfully forded the Canal de l'Est!

There was no time to celebrate. The hardest work was still ahead. Without hesitation, Fisk brought out the tow cable. Tankers grabbed it, dragged it across the canal ramp and hooked it to the front of the next tank. That tank, following the path of the first one, moved down the bank under its own power. Pulled by the first tank, it steadily negotiated the hazard and soon stood on the opposite bank. The process was repeated until the rest of the platoon was successfully across the canal. Each tank helped to progressively level the banks, making the journey easier for each succeeding tank, until they no longer needed to be towed.

For Marshall and his platoon this was a two-phase operation, and crossing the canal had been only the first phase. Now, what about the mighty Moselle? What good was crossing the canal if you were stranded between it and the river? Captain Gene Bush, commanding officer of Company C, let Marshall have his head. The rest of the company and battalion waited as he tackled the river.

As he had at the canal, Marshall again dismounted, reconnoitered the river in front of him, and tested the footing of the approaches. He waded into the river and determined the depth of the water. He quickly gathered the information that he needed and picked a crossing spot. Corporal Fisk's tank eased down the bank and gingerly entered the water. Slowly, steadily, it moved across the riverbottom, and with each yard gained, the cold, swiftly moving water rose.

As the tank approached the midpoint, with Marshall (who, ironically, could not swim) hanging on to the gun tube, the water was dangerously high–already above the tracks and rising up the sides of the tank. They had reached the critical point. It was now or never. If the tank plunged forward into deeper water, its engine would surely be flooded and the tank would be stranded mid-river. Fisk, with one triumph behind him and knowing what to expect, gunned his engine. With a loud cough and roar, the tank leaped forward across the deep water and, without slackening its speed, moved into shallow water and up the bank. As it reached solid ground, water sprayed from its tracks. After letting the engine run to be sure that it had not absorbed too much water, Fisk eased the tank toward the next channel. He crossed the other two channels in the same manner.

As soon as Marshall had his platoon across, he established a small bridgehead on the east bank. Right behind his platoon came the rest of the company, then the rest of the battalion. Every tanker in the 8th knew that if one tank could do it, they could do it, too. The Moselle became a beehive of activity.

It was not necessary to follow the first tank's path across the river. There was ample room, so the tanks fanned out and picked their own crossing points. As was to be expected, some found water too deep or hesitated a bit too long in the deepest water before gunning the engine–and some tanks conked out. The tankers were prepared for this, and those already across had their tow cables ready. They quickly dragged their momentarily stranded brothers out of the river.

By the time darkness fell, all four tank companies of the 8th Tank Battalion not only had successfully crossed the canal and river but also had seized the dominating ground on the east side and thwarted a vicious counterattack. Astoundingly, a tank battalion had crossed a major river without a bridge. No military service school could have conceived an operation like it. This was truly an unprecedented river crossing by tanks.

A second task force of Combat Command B, built around an armored infantry battalion, was assigned the mission of crossing the Moselle at Bainville-aux-Miroirs, about 21Ž2 miles south of Bayon. The infantry was to establish a bridgehead there so that the engineers could repair a bridge that had been blown up.

After waiting for the engineers to bring boats, which did not arrive, one company found a ford and crossed the river. Other companies seeking to cross elsewhere were repulsed by strong enemy opposition. With such little progress, the force was ordered to withdraw and follow the tank crossing at Bayon.

Two days after the 8th's unprecedented crossing, Combat Command A of the 4th Armored Division crossed the Moselle at Dieulouard, north of Nancy. They made a traditional crossing, over a bridge that had been established by the 80th Infantry Division. It is the Moselle crossing at Dieulouard that is studied by students at Fort Leavenworth and Fort Knox.

The 8th's crossing may have had strategic implications that reached far beyond the bridge site at Bayon. There were rumors within the division that Montgomery wished to halt Patton's progress so that he could have the whole show to himself in the north. Patton, reportedly, was fighting hard to save a piece of the action for himself. Even though his logistical support had been cut to the bone, he still believed that he could do more than Montgomery if they gave him the chance, and he certainly wanted to keep trying.
Facing little support from his superiors, Patton reportedly had agreed to pull back if the Moselle could not be bridged by September 14. By crossing on the 11th and bridging on the 12th, the 8th Tank Battalion and Combat Command B more than met Patton's deadline. If there was any truth to the circulating reports, the 8th Battalion's action more than vindicated the Third Army commander.

This article was written by Albin F. Irzyk and originally appeared in the September 1997 issue of World War II magazine.

ESSAY QUESTION 5

Please read the attached article (including the introduction.) Write an essay offering your own opinion as to whether German tanks or American tanks were superior, and why.

For example, we already know who won the war, but was that because better soldiers won with inferior equipment, because American tanks were better, or some combination?

Irzyk explains performance of American tanks in World War II

Monday, January 30, 2017

Greetings from the Association of the United States Army (AUSA), our Army's and our soldiers' professional organization.

This year we celebrate the 100th anniversary of America's involvement in the First World War (WWI), known at that time as the Great War.

The Great War was a global war originating in Europe on July 28, 1914 and ending on Nov. 11, 1918.

While America's involvement in WWI was relatively short compared to the European nations, our contribution helped to end the war much sooner.

The growth of the Army in support of WWI increased the size of our force from less than 200,000 to approximately 4 million.

Our Army today has deep roots originating from the Great War. Most of our infantry divisions will celebrate their 100th anniversary this year.

One of the great technological advances in modern combat during WWI was the introduction of the tank.

The British Army claim the first tank-like vehicle ever produced, nicknamed Little Willie, in 1915.

Tanks in WWI were developed simultaneously by England and France as a means to break the deadlock of trench warfare.

The British Army claim the first tank-like vehicle ever produced, nicknamed Little Willie, in 1915.

For those interested in history, Little Willie can be seen in the tank museum in Bovington, England, along with the M4 Sherman tank nicknamed “Fury” used by Brad Pitt in the move of the same name.

America entered WWI in April 1917 in support of England and France with no tanks in our formations.

Gen. John Pershing served as the commander of the American Expeditionary Forces sent to the fight by President Woodrow Wilson. Pershing saw the immediate value and need for tanks as part of his forces engaged in combat.

Celebrating a 100th birthday this year is the United States Tank Corps, which used tanks supplied by France and Great Britain during World War I.

America's first tank, the M1917, had just started production when WWI came to an end.

The M1917, the United States' first mass-produced tank, was based on the French Renault.

Also celebrating a 100th birthday this year is retired Brig. Gen. Albin F. Irzyk, born on Jan. 2, 1917, in Salem, Mass.

Irzyk joined the Army in 1940 as part of the Army's build-up in response to the evolving threat of Hitler's forces in Europe after the invasion of Poland.

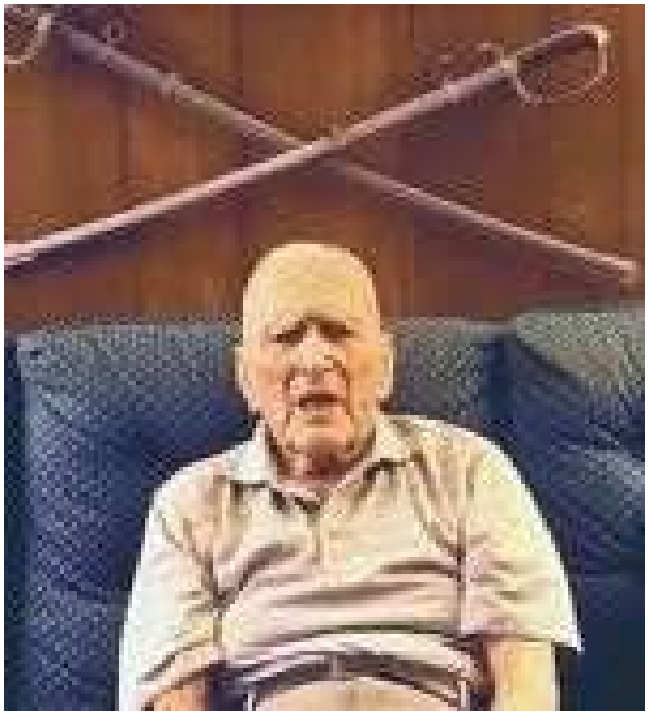
Serving as the 8th Tank Battalion commander in the 4th Armored Division during WWII, Irzyk's battalion performed magnificently.

Irzyk received the Distinguished Service Cross and two Silver Stars for his heroic efforts during that war.

Following WWII, Irzyk served as the commander of the 14th Armored Cavalry Regiment along the divided East/West German border in Fulda, Germany, during the 1961 Berlin Crisis.

His last assignment was commanding general of Fort Devens, Mass., before retiring in 1971.

All of us who wear or have worn the uniform of our nation wish Brig. Gen. Albin Iryzk a heartfelt happy birthday and our thanks for his contributions to America's Army and the nation.



Brig. Gen. Irzyk speaks in a video message to the 5th Annual Brotherhood of Tankers Homecoming in late 2016 at Fort Benning, Ga. View his interview at: www.youtube.com/watch?v=KwDWxJDctaw&t=120s

As a memorable tribute to the general, the following letter was written in 1946 by then-Lt. Col. Irzyk in response to critics about the performance of American tanks in combat during WWII.

“Tank versus Tank”

Lieutenant Colonel Albin F. Irzyk

Headquarters, 8th Tank Battalion

“The American tank is not nearly as good as the German tank.”

“Next to the German and Russian tanks, the American tanks are the best in the world.”

Quotations, opinions, and comments similar to the two above, which have been widely publicized and caused widespread discussion, have been made by various individuals.

Because they have, to a certain degree, jumped to hasty conclusions, and because they have helped fashion many erroneous conceptions, I shall attempt in this article to present considerations which they have apparently overlooked and which may change the outlook of many on American tanks.

In making those statements, what standards did the persons involved use?

What were the items and factors that they utilized in making their comparisons?

If they used simply the gun, the weight of the tank, and the width of the track and thereby the floatation of the tank as criterion, as I am sure they did, then I heartily concur with them that the German Tiger tank is unquestionably superior to the American Sherman tank.

The German Tiger tank (above) had a more powerful main gun, heavier armor, and wider tracks than the American Sherman tank (below).

The German 88 is more powerful than any American tank gun used during the course of most of the war.

The German tank is much heavier and therefore its armor is much thicker than that of any American tank.

The tracks of the former are much wider, with perhaps a less vulnerable suspension system than that of the latter.

If I stop here, as I am convinced so many have, there is no question but that the German tank is a much better one than our own. In this paragraph there is material, indeed, for some sensational headlines in newspapers in the States.

Today, however, let us not stop here. Let us go on!

What is the fuel capacity of the German Tiger tank? How long and how far is it able to run on a tank full of gasoline? Does it burn much oil?

What is the composition and life of its tracks? How many rounds of ammunition is it able to stow? What is the life (discounting its being hit in action) of a Tiger tank?

Is its engine comparatively free of maintenance problems? If maintenance problems occur, are they easy to remedy? How long and how much skill is required to change an engine?

Is the German tank able to move for long distances and continuous periods at a steady rate of speed? How is its endurance?

Could 53 Tiger tanks, for instance, move from the vicinity of Fenetrange, France, in the Saar, to an area near Bastogne, Belgium, a distance of 151 miles, in less than twenty-four hours to answer a fire call, as did tanks of the Fourth Armored Division?

Could a German Tiger tank be used for weeks of training in England, land in France and fight across the widest part of that country to the German frontier, race back to Belgium, retrace its steps again to the German border, and fight its way well into that country before being replaced?

Could a German tank roll for several hours at a speed of twenty-five miles per hour in exploiting a breakthrough?

Did it occur to the critics of the American tank that perhaps questions like those listed above, the answer to which will all heavily favor the American tank, and many others like them should be considered before a decision is reached? Obviously not.

I say most emphatically that such factors must be included before a

thorough, honest, and fair comparison can be made and a sound and intelligent conclusion reached.

In addition to those just cited, items to be remembered, as well, are tactics employed and required respectively by the Germans and Americans, missions involved, and number of tanks on hand for the operations.

To create a true picture of the weaknesses and strengths of the tanks being compared, those things take their places in the line of factors necessary to be examined.

On 6 June 1944 and for many days afterward, while the Germans had the Mark V Panther with a 75mm gun and a Mark VI Tiger with an 88mm gun, the American Army was equipped with the M-4A1 tank, or the Sherman, as it is popularly known.

It will be unnecessary in this article to list all the specifications of that tank except to say that it weighed approximately thirty tons and had a 75mm gun.

Its tracks were narrow and consisted of three different types: steel, flat rubber and rubber chevron.

During the initial period in Normandy just after the invasion, when engagements were toe-to-toe slugfests, battles with tanks fighting tanks were common.

Soon, however, the deadlock broke and American tanks streaked to and through Avranches and hustled across Brittany.

Without stopping for breath, the tanks continued on their way across most of France.

In order to keep rolling over hot roads for long, dusty miles for days on end, a light, mobile tank was needed which the terribly extended supply line could adequately furnish with precious gasoline.

To withstand the terrific beating the tank was taking hour after hour, it was necessary for it to have a simple yet tough and efficient engine and mechanical system.

The fact that the American tanks rolled with but few maintenance problems, and those rapidly attended to by the tank crew alone or by company, battalion, or division maintenance, all of which were close enough behind to repair the vehicle rapidly and send it immediately back into action, testifies to the excellence of the tank.

Thus, tank units were still at full tank strength and functioning efficiently when they reached as far east as the Meuse River early in September after moving and fighting consistently day after day from the Normandy peninsula.

They stopped then only because they had moved too fast and too far and were forced to wait a few days until their supplies could reach them in large enough quantities to send them ahead again.

During that phase of operations, a group of tanks had made a forced march of 258 miles in 38 hours and arrived in good enough shape to have continued on had the situation warranted it.

In discussing tanks, many forget that the tank is not a vehicle built primarily to fight other tanks.

Rather, its mission above all others is to get into the enemy's rear areas, to disorganize him, to destroy supply and communications, and generally to wreck havoc there.

This is done mainly with its 30-caliber machine guns, especially the one mounted co-axially, and with high explosive fire from the tank cannon.

The tank cannon's chief function, however, is to protect the tank while it is disrupting, exploiting, and destroying the enemy.

Of course, very, very often a few well-placed shots from the tank cannon will be much more effective than the 30-caliber machine guns, and therefore the cannon is used very frequently in offensive action.

The tank served its primary mission gloriously in that dash through France.

Its opponent was dazed, disorganized, and on the run.

Most of his equipment was "thin skinned," and was "duck soup" for our tanks.

The 30-caliber fire and 75mm high-explosive fire, for good measure, was plenty good enough to leave much of the German Army equipment and personnel strewn by the wayside.

A factor rarely considered, yet on occasion vitally important, is the type of bridge that a Sherman can use to cross a stream or river.

Many bridges that are adequate for the American tank pose a knotty problem for the German tank.

The bridge would have to be much wider and much stronger, and would require a great deal of time and more facilities to construct.

Many bridges intact and able to accommodate the lighter American tank would deny passage to the heavy, lumbering Tiger.

Hardly a critical word was heard concerning the American tank in those days.

The reason obviously was that it was plenty good for the task at hand.

The tank was accomplishing an ideal tank mission in a superior fashion, and it seemed to have been built for just that kind of job.

During the summer and fall of 1944, the Sherman performed to perfection

and brought the Allied armies within scent of the German frontier.

It was late in 1944 that the American tank became the target for taunts and criticism.

Forgotten quickly were the results it had gained just a month or two before.

In October, November, and December the ground became a sticky morass; the war was stabilized and no great advances were being made.

The war was bloody and difficult, slow and discouraging.

For every yard wrested from the enemy, tremendous effort had to be exerted.

During this stage of the war, the tanks could not perform as they had earlier.

Rather, they were forced to fight tank versus tank.

Here the German had a tremendous advantage.

He was fighting a defensive warfare. The terrain was admirably suited for him.

It was rough, and this enabled him to pick the key terrain features on which to post his men and vehicles.

The ground was so muddy that advancing, attacking elements could not maneuver, could not outflank.

They had to slug it out toe-to-toe, face-to-face.

Without a doubt the tank of the Germans was ideally suited for such a fortunate turn in the war for them.

The tank could pick dominating ground, and with its huge gun and thick armor proved to be a roving pillbox par excellence.

On many occasions it picked off American tanks as they floundered in the mud in an effort to gain valuable ground and dislodge their adversary.

It was during those trying days that many an American tanker and those that observed him began to lose faith in the Sherman.

The tanker was forced to move very slowly because of the muck, and very, very often spotted a German tank, fired first, and scored a hit only to see his 75mm shot glance off the enemy tank causing absolutely no damage to it.

The 75mm gun proved to be comparatively ineffective during this chapter of the war.

At 1,000 yards to 1,500 yards it could be effective, and a single tank has knocked out five Panther tanks with six shots.

An American soldier inspects a German Panther tank, c. 1944.

Yet to get that close to a German tank made the Sherman vulnerable indeed.

Many tanks were lost in endeavoring to get close in, which was necessary in order for them to strike a telling blow.

The absence of an effective armor-piercing shell proved to be a terrific handicap, as well.

Thus, during that siege, the American tank was impotent when running into the German tank head-on.

As a result, many a Sherman was lost even after it had shot first and scored the first hit.

That was when the seeds of dissatisfaction in the American tank were sown and when much faith was lost.

It must be remembered that the German tank had everything its way.

It was fighting a defensive game, the terrain was in its favor, and the wet ground played into its hands.

Still, it must not be forgotten that though the cards were stacked against the American tank, it defeated the enemy and gained the desired ground.

Though the Shermans were easily bested tank for tank, they could always bank on a numerical superiority, which fact was considered in tactics and strategy employed.

By banding together and maneuvering, they were able to dislodge and knock out the heavier German tank.

Even during those days, one German tank knocked out for one American tank was a poor score.

It was in most cases three-to-one, four-to-one, and five-to-one in favor of our side.

One must not forget that the German requirements and our own were totally different.

They were fighting a slow war, a defensive war where they picked their spots.

They had fewer tanks than we, so their tactics, of necessity, had to be different.

We were fighting an offensive war, we were hurrying to get it over with, we wanted to shake loose, and we had many tanks with which to do it.

Virtually never did a scrap take place with fifty German tanks against fifty American or twenty against twenty.

The proportion was usually five American to one German, even ten to one, rarely if ever less than two to one.

So it must be made clear to anyone comparing the tanks of the two nations that, as I said before, throughout the campaigns the requirements and needs were different.

We could not use nor did we want a lumbering, heavy, mobile pillbox type of tank, and we could not have done what we did if we were so equipped.

Then again we had numbers upon which to fall back, and we considered that in our tactics.

Mechanically we had a tank that performed superbly, and after groaning and grunting through heavy, sticky mud for weeks on end, it was still running at the end of this phase.

There is no denying that in those hectic days a tank such as our newest Sherman with a wider track and a more potent gun would have saved many American lives and would have knocked out more enemy tanks, and more quickly, too.

During that period, and that period alone, was the American tank discredited, criticized, and found lacking. The situation was hastily remedied, but for many it was a little late.

'It must not be forgotten that though the cards were stacked against the American tank, it defeated the enemy and gained the desired ground,' Irzyk wrote.

The closing days of 1944 and the early part of 1945 found a new type Sherman joining the ranks of American tanks and replacing its tired brothers.

Although it has no additional armor and weighs but a ton or two more, it arrived on the scene with a potent, long tubed 76mm gun with a muzzle break and high muzzle velocity that makes it effective at much longer ranges than the 75mm. As a result, it is not necessary for the new tank to get as close in as the old tank before becoming effective.

A new type, high-velocity, armor-piercing shell was added for the gun and gives it far greater penetrating qualities.

The new tank has an engine with higher horsepower which, in addition to an increase in power, makes it capable of higher speeds.

Its track is much wider and has a new type track suspension system which gives it more stability and cross-country mobility with which to combat adverse ground conditions.

The tank has the traditional endurance of American tanks and rolls consistently for endless miles.

It goes ninety miles and often more on a tankful of gasoline.

The tank is characteristically simple, as such equipment goes, and the tank crew alone is able to maintain its vehicle for long periods.

New men in tank crews catch on to their jobs quickly, which is one important factor in making our tank crews superior to those of the Germans and explains why our armor operated most of the time at top-notch efficiency.

One last advantage, though minor in discussion, was extremely valuable to the tank crew – the turret with two hatches.

Also, the new Sherman, like the old, had the potent 50-caliber anti-aircraft gun which proved so effective against enemy planes and which played havoc with dug-in Germans.

All in all, the new type Sherman is a marvelous tank.

It answered the prayers of the tankers and was on hand to drop a curtain on one of the dirtiest and hardest phases of the European war.

It was the new tank with the all the advantages of the old one and many new qualities that did the racing in Germany, Austria, and Czechoslovakia, and finished the war in a blaze of glory.

Mounted in that tank, no American tanker, was afraid to take on any tank that faced him. If only the new type tank could have been produced and brought to the front lines sooner!

German tanks, on the other hand, are not what they are cracked up to be.

Their heavy armor was a hindrance rather than an asset. The tanks could not carry on the same kind of offensive warfare that our tanks did.

With their heavy armor and complicated mechanism, they were tank destroyers and not tanks.

Even though the German tanks were much heavier and thicker than ours, their armor was centralized.

Most of it was on the front slope plate and turret. Sides and rear were often vulnerable, and how we capitalized on that!

The armor on German tanks was generally poor. It often cracked on impact, leaving ragged, gaping holes, whereas the holes in our tanks were clean, circular, and easily repairable.

The Germans developed a gun with a high muzzle velocity and an effective armor-piercing projectile. To do this they sacrificed space in the tank, for they had to increase the size of the shell and thus could not stow many rounds.

It must be mentioned that once again the Germans lost sight of the purpose and function of a tank and thought primarily of destroying other tanks.

Still, though our muzzle velocity was less than theirs, our high-explosive fire was just as effective.

Of the two, the high-explosive fire was for us the more important consideration.

The mechanical advantages of the German tank over our own were few.

The interiors of their tanks were not nearly as well equipped as ours, and it looked altogether too much maintenance to keep a German tank rolling.

Still another item often overlooked is that it was necessary for us to carry an adequate basic load of ammunition and gasoline in our tanks, for to replace what we used we had to call upon trucks that had to travel over a long, dangerous supply route.

The Germans, on the other hand, sat close in many of their defensive positions to their ammunition and other supply.

It might astonish some to know that prisoners of war claimed that some of their large tanks had a running time of a mere two and a half hours on a full vehicular load of gasoline.

Thus, the tanks did not have the endurance nor the cruising ranges of our tanks.

Therefore, in many instances they had to be transported by rail virtually to the front lines, unloaded, and put into the battle. How far could we have gone with our tanks if we had to follow a procedure like that?

Not yet mentioned is the power traverse with which American tanks are equipped.

It is one of the very important reasons why so many of our tanks bested the German tanks. Of course, it may have been that our gunners and car commanders were superior to the Germans, and that the excellence of our tankers provided us with the upper hand.

We agree to that, yet it is felt that of inestimable advantage to our tankers was the distinct handicap under which the German tankers

labored because of a lack of a 360 degree power traverse comparable to ours.

Because of that important disadvantage, they were slow firing and in many cases got off one round to our three or four. Instances have occurred where a Tiger tank lay hidden, waited in ambush, and fired the first shot at advancing American tanks and missed!

The mistake was fatal, for American tanks maneuvered about it and with their rapid fire destroyed the German tank.

A captured Tiger tank stands alongside a Sherman tank with the 4th Armored Brigade. The size and weight of the Tiger proved as much a hindrance as a help.

By means of the 360 degree power turret traverse with which all our tanks are equipped, a tank gunner is able to swing his gun in any direction in a second or a fraction thereof.

The average American tank gunner can lay on a German tank, is able to get the first round off, and can usually score the first hit. The power traverse enabled American tanks to move down roads at high speeds shooting from one side of the road to the other.

In this manner enemy infantrymen and bazooka teams were killed or pinned down as the tanks rolled by.

The power traverse has been such an advantage and of so much importance that it is immeasurable.

At the moment, virtually every tank battalion is nearly equipped with the new type Sherman tank technically called the M4A3-E8.

Of all the tanks operating today, that one, in my estimation, is the best there is. I would chose it above all the others.

Many, many experienced combat tankers feel exactly as I do.

The tank will go faster and will live longer than the German Tiger.

The Sherman burns less gas and oil and as a result is able to go much farther on a tank full of gasoline.

Its maintenance problems are few and far between and are easily remedied.

It is an easy matter to change an engine, which takes little more than four hours and which beats all hollow the best time for the Germans.

It has a good gun, and good ammunition for it. It does not take much to tow one of our tanks that is disabled, but a huge vehicle is required for the German Tiger, and often German tanks had to be abandoned because huge vehicles were not available.

Yes, considering all factors, I believe that even the most prejudiced or the one most difficult to convince will nod toward the Sherman.

The Sherman must give ground to the Tiger when the size of the gun and the thickness of the armor is considered.

The tanker knows and takes for granted that if his tank is hit by an 88 it will be penetrated.

He also knows that the addition of a few tons of armor will not stop an 88.

He respects, and always will, the German gun and the thick armor, but he will never swap his tank for those advantages.

To build a tank that would stop an 88 shell would be to lose a tank and gain a lumbering steel pillbox with no mobility left. It has been said, practically speaking, that the only thing that will stop an 88 is “Cease fire.”

Similarly, to stop our 76 with high-velocity armor-piercing ammunition, the enemy will need a mighty heavy tank, indeed.

Once again, let us not forget that the Americans fought an offensive, fast, deceptive, and winning war.

We crushed our adversary; therefore the tanks which spearheaded the victories must have been good. Tank-for-tank, toe-to-toe, we were outclassed.

But that was not our way of fighting.

For the person still not convinced I suggest that he tabulate the count of American tanks knocked out by German tanks and vice versa, and I am sure that he will discover, perhaps to his amazement, that the scale will swing heavily in our favor.

Not long before the curtain dropped on hostilities in Europe, the American General Pershing tank made its bow.

It has a 90mm gun, weighs forty-six tons, has a different suspension system, and has a low silhouette. It is said that here is a tank that incorporates all the advantages of the Sherman tank and with its new additions makes it superior to the German Tiger in every respect.

As far as my personal knowledge goes, I must reserve my opinion until later, for that tank is comparatively untried.

I will say to the persons that have so glibly sold our tank down the river that there is more to it than meets the eye.