

TANK versus TANK

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"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 which have 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 flotation of the tank as a 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 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 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 fifty-three Tiger tanks, for instance, move from the vicinity of Penetrance, 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

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to Belgium, retrace its steps again to the German border, and fight its way well into that country before being replaced? Could the 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 answers 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 75-mm gun and a Mark VI Tiger with an 88-mm 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 75-mm 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 thirty-eight 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 wreak 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 75-mm 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 would 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 he spotted a German tank, fired first, and scored a hit only to see his 75-mm shot glance off the enemy tank causing absolutely no damage to it. The 75-mm 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. Yet to get that close to a German tank made the Sherman vulnerable indeed. Many tanks were lost in endeavoring to get in close, 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 still was 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 tanks 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.

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 76-mm gun with muzzle brake and high muzzle velocity that makes it effective at much longer ranges than the 75-mm. 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 a 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 nobility 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 antiaircraft 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 the curtain on one of the dirtiest and hardest phases of the European war. It was the new tank with 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.

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 took 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 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° 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.

By means of the 360° 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 completely 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 choose it above all 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 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 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 90-mm 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.

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