The Monster German A7V TANK
Was One of the Most Formidable Fighting Vehicles of WWI
In a previous issue of *Military Classics Illustrated* (Vol. I, #3) we delved into the history of the German Naval Airship Service and the massive Zeppelins that roamed the skies over western Europe during the "war to end all wars". While the Zeppelins were the largest man-made vehicles to take to the skies, Germany also managed to put into play the largest vehicle on the ground during the war as well. This behemoth of the battlefield was the first effort on Germany's part to develop an armored corps in the closing year of the war.

By Philip Schreier

PHOTOS FROM THE AUTHOR'S COLLECTION
The first tank lost in the Villers-Bretonneux battle was the A7V Elfriede. Recovered by the French, she was displayed in Paris for years after the war until she was broken up for scrap.

Hagen and Schnuck are broken up by the salvage team on their way to the breakers torches.

This drawing by Rainer Strasheim shows the complete 360E field-of-fire that the A7V was capable of covering at one time. No other tank design since has offered such complete control of its environment.

When the operational models rolled off the factory lines in October 1917, they were perhaps the largest independently mobile beasts on the planet since the dinosaurs. Weighing in at an amazing 33 tons, the A7V was 26 feet long, 13 feet high and 10 feet wide, and boasted a crew of 18 men. In battle an additional eight men could go as passengers to give her a combat effective strength of 26.

The crew break down was thus: Captain and Lieutenant as officers of the tank; two drivers; two artillerists to man the main gun; and 12 machine gunners to work the six Maxim 08 machine guns. The 20 completed tanks were divided into three Abteilung, or companies. Each tank was manned by men from each of the three branches of the Army—the officers and drivers came from the cavalry, the cannon crew from the artillery and the Maxim gunners and shock troops from the infantry. This hodge-podge collection of soldiers was quickly trained and learned to work together with an esprit de corps that rivaled any of the other units in the German military at the time.

As a fighting monster, the A7V was well armed. She could spray a field of fire 360 degrees with 600 rounds per minute of 8mm rifle ammunition coming from six Maxim guns and deliver 12 rounds per minute from her forward 57mm Nordenfelt cannon with a reserve of 180 rounds of mixed ammo. The 57mm Nordenfelt was a cannon of English manufacture. Hundreds of Nordenfelts were supplied to the Belgians in the late 19th century for the defense of Antwerp. Subsequently, when Antwerp fell to the Germans, the cannons were captured and re-employed as the main gun in the A7V's complement.

The A7V was also fairly well armored. The frontal armor was one-inch thick, inch on the sides and inch on the top. As a weapon of shock value she was also equipped with an inventory of 08/15 Maxims, Bergman submachine guns and numerous small arms and grenades, as well as enough explosives to blow the tank up if capture was thought to be imminent.

The internal temperature of the tank could reach well over a sweltering 100 degrees. Noise of the two Daimler-Benz engines made communication impossible, so the commander used a series of colored electric lights to instruct the crew and drivers. The typical uniform also added to the immense misery that each crewman must have endured when operating the tank. Fearing an internal fire in case the fuel or ammunition was detonated, each crewman was suited in
a uniform of quilted asbestos coveralls
and a chain link mask to protect the face
from “bullet spray”. “Bullet spray” was
the term tankers gave to the flying splin-
ters of steel that flew about the interior
of the tank when the outside of the ve-
cle was struck by non-penetrating
ammunition.

The greatest handicap of the A7V was
its poor trench crossing ability. It was
capable of traversing widths of only 5
feet. The British MR IV’s could easily
clear 13-foot widths. Another handicap
that the “committee” failed to consider
was the overall height of the tank. On
the road, at 13 feet tall, the tank cleared
most overhead bridges with about 2 feet
of clearance. However the only way to
transport the tank to the theater of oper-
ations was to place it on the flat bed car
of a train. This additional elevation
would not clear most overpasses and the
driver’s and commander’s cupola was
fashioned to lie flat during transport,
ready to be bolted in place once the train
reached its destination.

The production of the A7V was accele-
rated in late 1917 and 20 tanks were
produced with the expectation that they
would play a huge role in the planned
German spring offensive in early 1918.
On the 21st of March, four A7Vs, or one
Abteilung, were ready for service and
positioned near St. Quentin as a part of
the opening act of Ludendorff’s offens-
ive, named Operation Michael. These
four tanks, moving forward with the aid
of an additional five captured British
tanks, launched the famed spring offen-
sive of 1918. During the initial advance,
two of the A7Vs developed problems at
the start and were sidelined for the
remainder of the immediate operations.
The two tanks that remained saw
tremendous action and were successful
in completing their combat objectives,
overwhelming areas of fierce Allied
opposition. They were instrumental in
keeping the German infantry from
becoming bogged down during the
attack and aided in the new German
combat concept of storm troops, where
they attacked until concentrated resis-
tance was encountered. Then upon they
would flank, isolate and bypass the
enemy strong points, eventually forcing
them to surrender or withdraw.

Following the battle the tanks were

A remarkable photo of an entire battle company, or Abteilung, of A7Vs. The A7Vs Wotan,
Hagen, Siegfried and Schnuck line up with their crew and officers. Each battle group
consisted of 4-6 tanks and more than 100 men.

The A7V had armor plating over twice the thickness of its British counterparts giving
the crew a small amount of protection.

The cupola of Mephisto was blown open when German Artillerist’s mistook her for the
disabled Elfriede and tried to prevent her from being of any use to the Allies. Their intent
had been to recover the Mephisto as she had no prior battle damage. The unfortunate
shelling made salvage by the Germans a moot issue. She was recovered by the
Australians and made quite a curiosity piece before she was shipped back to Australia.
returned to Charleroi, the staging and maintenance HQ of the armored corps, for repair and refitting. The four A7Vs soon joined the other two battalions of A7Vs ready for their next assignment and a date with military history.

Following the initial success of the German tank corps at St. Quentin, the three tank Abteilungen were sent to Marcelcave to prepare for the next attack. On the gray misty morning of April 24th, all three Abteilungen of German armor rumbled towards the town of Villers-Bretonneux, a medium sized town, key to the approach to Amiens and currently held by the British infantry’s Middlesex, Yorkshire and London Regiments of the 58th Division. Attacking from the east towards the west, the German plan of attack sent one group to the north side of the town, one group to the center and one to the south of the town. The first tank group to strike the Allied lines was the northern group consisting of 3 A7Vs. At 7:00 a.m., with visibility down to 35 yards due to a pea soup-like fog, the first of these tanks surprised the British defenders. A stiff resistance was put up at first but the British were soon overwhelmed by the unstoppable force of armor coupled with shock troops. A heated fight developed in a brick works factory at the southern edge of town. The tanks advanced in support of the main body of the infantry, where extreme house-to-house fighting raged for hours.

By 11:00 a.m., the tanks had done their work, contributing significantly to the capture of the town. Once the town was secured, they withdrew to a position of safety to avoid damage, as the British began to shell the town in earnest. The second group of six tanks advanced on the section of line immediately south of the town and enjoyed initial success as the storm troops cleaned up the British infantry after the tanks advanced and overran their positions. As the tanks advanced, they kept up a continuous wall of machine gun and artillery fire, which forced the British to keep their heads down until the tanks were virtually atop the trench line. Those soldiers that didn’t run upon first sight of the German armor, were soon surrounded and isolated from escape.

The first Tank vs Tank Battle
The primary objectives of the first two sections of German armor were accomplished rapidly and without loss due to combat. Only one tank, Mephisto, was lost, being at first stalled due to a fuel blockage and later by falling into a shell hole it could not drive out of. Villers-Bretonneux fell in just a few hours. A

During tests of the A7V chassis in the spring of 1917, slight modifications were made in the transmission design of the original Holt tractor that was used as a prototype. Here drivers are shown facing in each direction so they would have a clear view of forward or reverse. The final design had both drivers facing forward.

A wooden shell was fashioned over the chassis of the A7V to provide a working prototype for the A7V committee to evaluate. At one point in its development, the A7V committee was able to demonstrate the tank before Kaiser Wilhelm II and the German General Staff which had planned to use the tank as its secret weapon in the spring offensive of 1918.
complete and stunning victory for the Germans and their new weapons of war.

The four tanks of the third section got a late start and moved through the fog towards the road that lead south of Villers Bretonneux to the small town of Cachy. The lead tank, Elfriede, failed to observe a large sand pit and not only fell in but also rolled over on its side, completely capsizing. Its nearest companion, Nixie, continued the advance and soon encountered three British Mark IV tanks from Captain Frank Mitchell's 1st Tank Co.

Mitchell's small company of two female tanks, and his one male MK IV tank, had suffered manpower losses resulting from the initial German gas barrage that began when the battle first started. Undermanned, Mitchell began an advance to support the defending British infantry in the trenches running.

The A7V Adalbert demonstrates before a crowd of curious onlookers. The one major draw back to the A7V was its limited ability to cross open trench spaces. British tanks could cross nearly 15 feet of open space while the A7V could only manage 5 feet.

The road north from Cachy to Villers-Bretonneux. The German assault came from the fields on the right and was met by British tanks approaching from the left. In these fields the histories first tank vs. tank battle took place with mixed results for both sides.

The fields of Villers-Bretonneux were the scene of the world's first tank vs. tank battle on April 24, 1918. This photo is from the British point of view facing east where the German tanks emerged from the fog in the morning hours to scatter the defenders of what was known as the Cachy Switch trench.

Major James Robinson, the commander of the Australian 26th Battalion that captured and removed the A7V Mephisto from the Villers-Bretonneux battlefield on July 22/23, 1918. The tank had become a landmark for both sides in the three months she laid in no man's land. A drowsy German, whose job it was to take warm rations to his front line comrades, kept walking along the trench expecting to see Mephisto. When she wasn't where she had been the morning before he kept walking and eventually ended up in the Australian trench where he was captured and his warm breakfast was enjoyed by his captors.
north of Cachy. The sole German tank on the scene, Nixie, saw Mitchell’s three tanks emerge from the fog and began an earnest fire upon them. Strafing the male tank with machine gun fire, Mitchell and crew were wounded by flying shards of bullet splash and halted their tank to get a stable aim on Nixie with their 6 pound gun. Nixie meanwhile thought she had disabled Mitchell’s tank and turned her attention to the two advancing female tanks. Blowing huge holes in both of them, Nixie quickly put them both out of action. Mitchell’s main gunner, almost blind in one eye from the earlier gas attack, now had a clear sight on Nixie and fired rapidly into her front armor, killing and wounding a number of her crew. Fearing that Nixie might catch fire and possibly blow up, her commander, Lt. Blitz, ordered the crew to abandon the tank, which they quickly did, taking up defensive positions close by. Mitchell’s MK IV, now came under severe artillery fire and was struck by cannon fire, and as it tried to clear a trench it became bogged down in and lost a track, disabling it for the remainder of the battle. Another A7V of the 3rd group, Siegfried, happened upon seven small British Whippet tanks and with the help of German artillery and combined infantry fire, rapidly put four of them out of service and inflicted enough damage on the other three to force them from the field. About the same time all this action was taking place, the fourth A7V from this detachment, Schnick appeared, and not having enough support to continue its attack on Cachy, withdrew. Lt. Blitz, now assured that Nixie was not going to explode, remained with his crew and withdrew her to a safe spot where the dead and wounded could be removed and her damaged engines could be repaired. Siegfried also returned to the German rear lines as she had been ordered to do once the infantry had achieved their objectives.

Viewing both accounts of the first tank vs. tank battle it is hard to award a clear-cut ribbon for victory. To be sure, Captain Mitchell wrote up his account of the battle and became a minor celebrity, winning the Military Cross for his exploits. His losses were three MK IV tanks and four Whippet tanks, under another command, for a total of 7 destroyed and or damaged British tanks. The Germans lost only two tanks, Mephisto and Elfriede, both having been stopped by large holes in the terrain rather than combat. With the exception of Lt. Blitz’s Nixie, none of the other German tank commanders actually thought that they had effectively engaged any British armor. The world’s first tank vs. tank encounter boils down to a meeting of three formidable British MK IV tanks against the lone German A7V, Nixie. When the smoke cleared, Nixie had stopped two of the British MK IVs and, although damaged by Mitchell’s MK IV, managed to return to German lines in working order. Mitchell failed to destroy or capture Nixie and lost his own tank later in the battle. Of the seven Class A Medium Whippets that emerged
following the duel, Siegfried quickly knocked out four and sent the other three damaged, smoking and running for cover. All-in-all, the Germans accomplished their combat objective, the capture of Villers-Bretonneux, and destroyed seven British tanks without loss of armor on their side.

The action at Villers-Bretonneux on April 24, 1918 was the one brief shining moment for the German Armored Corps during the First World War. Once the British "with their backs against the wall" were able to stem the Operation Michael offensive in late April, the offensive use of the German tanks was at a virtual end. A few events along the Marne and defensive operations late in the war served to prove to the German General Staff that the tank could be an instrument of success on the battlefield.

When the war ended on November 11, 1918 only eight of the original 20 tanks were still in service. Following the battle at Villers-Bretonneux Elfriede was captured and removed to Paris to the Place de la Concorde and placed on public display. The tanks Hagen and Schmuck were captured by the British and placed on public display at Horse Guards Parade in London. Ninix II was sent to the Aberdeen Proving Grounds in Maryland to be examined by the U.S. Ordnance Department. C.E.W. Bean, the official Australian War Historian, personally saw it that Mephisto, captured by the Australian 26th Battalion, was sent to Australia and placed on display at the Australian War Memorial.

Numerous tanks were sent to the Polish Army as reparations following the Armistice where they remained active until the late 1920s. During World War II, all the trophies tanks were broken up for scrap iron. (The American trophy, Ninix II was sold for $11 a ton in 1941.) Only Mephisto escaped the cutter's torch and is currently on exhibit at the Queensland State Museum in Brisbane, Australia, and the sole survivor of the first German Tank Corps.

Following the war a special badge was created for those qualifying crew members of the German Armored Corps. Struck in silver, the oval shaped badge shows an A7V with guns a-blazing crossing a battlefield and is mounted with a skull & crossbones motif surrounded by...
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Author S.L.A. "Slam" Marshall was a veteran of World War I and a combat historian during World War II. After extensively interviewing combat veterans of both the European and Pacific theaters in World War II, he contended that no more than one in four soldiers actually fired their weapons while in contact with their enemy. To remedy the gunfire imbalance, he proposed changes to infantry training designed to ensure that American soldiers in future wars would fire more fire upon the enemy. His studies of the Korean War demonstrated a ratio of fire that had doubled since World War II. 224 pages, softcover.

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SAMURAI!
This is the gripping World War II saga of the rise and fall of the Japanese naval air force as reflected in the experiences of one of its top fighter aces, Saburo Sakai. Follow his career from fighter pilot school through the thrilling early Japanese victories to his incredible 600-mile flight for life from Guadalcanal to his base in Rabaul, and learn the poignant story of how the wounded veteran returned to the air during the final desperate months of the war. Softcover, 382 pages.

By World War II, all but one of the A7Vs were destroyed for scrap. Here the breakers are salvaging the interior of one of the two tanks that were on public display in London.

The A7V Cyklop returns from hard fighting following the debut of the new tanks at St. Quentin on March 21st. Some of the 18 members of the crew have chosen to escape the noise and heat of the interior by riding on top of the tank. Internal temperatures could reach in excess of 120 degrees.

The officers and drivers of Wotan examine the driver's cupola. The sides of the cupola could be dismantled and broken down to lay flat enabling the tank to clear low overhead bridges when transported by train.
GREAT WAR GIANT

The A7V and its effect on the war effort may be considered futile, the gains of April 24th at Villers-Bretonneux were lost within three days following the battle. Only 20 tanks were ever manufactured at a time when the British were producing and shipping to the Western Front nearly 60 tanks a week. However, the basis for a new type of warfare had been explored with positive results. When war clouds gathered over Europe again some 21 years later, it would be the German Armored Corps that led the way and maintained the offensive with superior machines and tactics for the first four years of World War II.

FOR FURTHER READING:
- Mephisto: A7V Sturmpanzewagen #567.
  By: Mark Whitmore. ©1989 Queensland Museum
- German Tanks in World War I. By: Wolfgang Schneider & Rainer Strasheim.
  ©1990 Schiffer Publishing
- The German A7V Tank and the Captured British Mark IV Tanks of World War I. By
  Maxwell Hundleby & Rainer Strasheim. ©1990 Haynes Publishing

The drivers and Captain's cupola of Mephisto. The stark interior shows the effect of the heavy shelling she experienced as a result of friendly fire that was intended to keep her from being of use if she fell into enemy hands.

The A7V Heiland with 14 members of her crew. Unlike her Allied counterparts, the Germans named their tanks with masculine names, many from Norse mythology. The uniforms depicted here show most of the crew wearing the Pattern 1915 tunic and soft field mütze. The Officer in the center has worn the Iron Cross 1st class and two of the senior NCO's on the right display wound badges on their tunics.

The only way to transport the A7V to the theater of operations was to place them on flat cars on a train and move them to the next battle area. Unfortunately the 13 foot height of the A7V prevented it from clearing most overhead bridges and to clear those passages the cupola was dismantled and re-assembled at the point of embarkation.

Crewman of the A7V Alter Fritz display their combat uniforms consisting of asbestos overalls, a leather helmet and a medieval looking face mask that protected the eyes and face from "bullet splash" - the flying fragments of steel that flew about the interior of the tank when it was struck by bullets and non penetrating shells.