HISTORICAL CORNER

FEBRUARY 2015

WAR THUNDER

[REGISTER]

P-51D-30 Mustang "Cripes A' Mighty", Major George E. Preddy, 328th FS, 252nd FG, Belgium, December 1944, created by max_86z | Download here

[ACE OF THE MONTH] Major George E. Preddy Jr

2. February - Author: Mark Barber

Born on February 5th 1919, George E. Preddy Jr grew up in Greenboro, a rapidly expanded and relatively affluent city in North Carolina. Preddy learned to fly at an early age and was smitten, quickly deciding that a career in aviation was for him. At the age of 20 he spent his first summer as a 'Barnstormer' – making a living as a stunt pilot by entertaining small crowds at country shows. With aspirations of joining the military, Preddy was faced with the decision of flying with the army or the navy; he opted for the latter but had no fewer than three applications to join the US Navy rejected on physical grounds.

In the summer of 1940, emboldened by the stories of aerial warfare raging across Europe and the Far East, Preddy changed his approach and applied to join the US Army Air Corps. Good news finally came his way – he was accepted, but was told to wait for a vacancy in the training pipeline. Eager to gain some military experience, Preddy joined the National Guard and served with the Coastal Artillery. After beginning his military flying training in April 1941, be graduated only days after the United States entered the Second World War – commissioned as a Second Lieutenant, he was shipped off to Australia to join the 9th Pursuit

Squadron of the 49th Pursuit Group. Operating as part of the US Fifth Air Force, Preddy flew P-40s against Japanese forces for six months. His early exploits as a fighter pilot saw him damage two enemy aircraft but in July 1942, he collided with another P-40 during a training mission when the second pilot, 2nd Lt John Suber, became disorientated by the glare of the sun; Preddy was seriously injured but did manage to take to his parachute; Sauber was killed.

After three months recovering in the United States, Preddy was assigned to Hamilton Field at San Pablo Bay, California, where he converted to the P-38 Lightning, an aircraft he spoke very highly of. After a succession of assignments across the United States over several months, Preddy was finally posted back to an operational theatre in July 1943. Now part of the 352nd Fighter Group, Preddy's unit was posted to RAF Bodney in Norfolk, England. His new unit, equipped with P-47 Thunderbolts, was heavily engaged in bomber escort duties over occupied Europe. After a short period of work up for the new role and theatre, Preddy flew his first combat mission with the 8th Air Force in September; on December 1st, after two years as a qualified fighter pilot, Preddy shot down his first aircraft, a Bf109. Only three weeks later he was recommended for a Distinguished Service Cross after leading three P-47s against six Me-210s who were attacking a lone, damaged B-24. Preddy shot down one German fighter and scattered the rest of the formation, ensuring the B-24's safe return home. The recommendation was not confirmed, but he instead received the Silver Star.

On January 29th 1944, Preddy shot down a Focke-Wulf FW190 over the French coast but was then hit by AA and forced to parachute into the English Channel. An RAF rescue flying boat was dispatched to recover him, but ran him over after landing, after losing full control in particularly rough seas. PReddy's injuries were minor and he was soon flying again. By the time the 352nd Fighter Group – now nicknamed 'The Blue-Nosed Bastards of Bodney' due to their distinctive livery – converted to P-51s in April 1944, Preddy had shot down a further two enemy aircraft. It was paired up with this wonderful fighter that Preddy would now surge to fame: after scoring his fifth victory on June 20th, a succession of kills followed. On July 18th, Preddy shot down four aircraft in a single day. However, it

would be on August 6th that Preddy would be immortalized for his finest hour, and the single greatest air-to-air success of any single P-51.

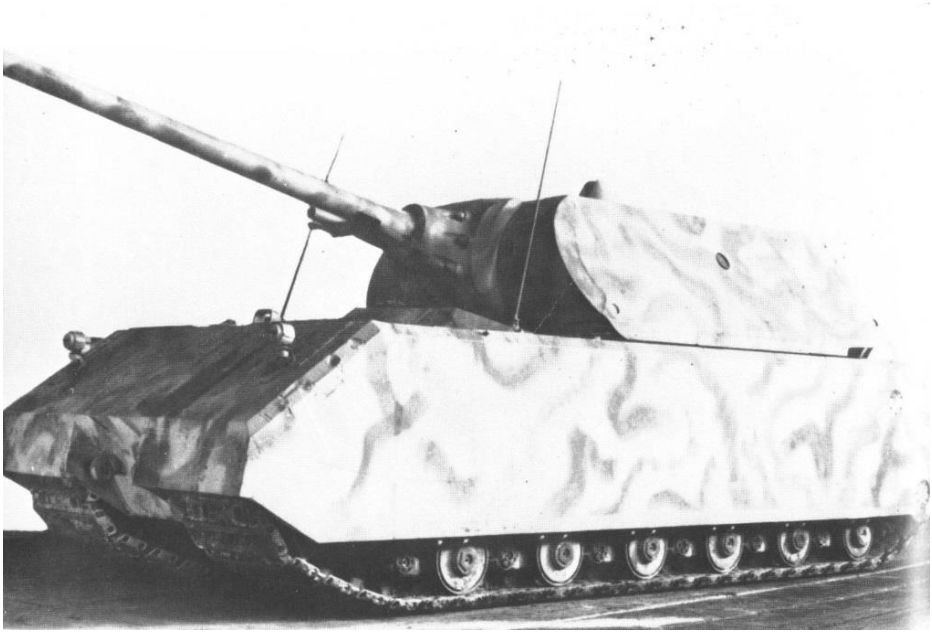
Having shot down an aircraft the previous day and then being informed that the next day's flying was cancelled due to bad weather, Preddy joined several of his squadron mates in a night out. However, in time honoured fashion the meteorological forecast proved to be less than 100% accurate, and offensive operations were re-scheduled. Allegedly nursing a hangover so bad that his fitness to fly was questioned, Preddy led his flight alongside the others of the Group whilst escorting a formation of B-17s. The bombers were attacked by a large formation of Bf109s, and Preddy immediately led his P-51s into the fight. In the ensuing combat, using every last bullet from his fighter's guns, Preddy shot down six Bf109s. This was confirmed by other pilots and gun camera footage. Preddy was recommended for the Congressional Medal of Honor, but was instead awarded the Distinguished Flying Cross.

Hailed as a hero and now one of the USAAF's top scoring aces, Preddy was ordered to return to the United States but pushed hard for a posting back to the front line. In October 1944, Preddy was given command of the 328th Fighter Squadron of the 352nd Fighter Group. He was soon in combat again and in December, as allied forces continued their advance towards Germany, Preddy was moved with his squadron to operate from a forward air strip at Asche, Belgium. On Christmas Day 1944, Preddy led a patrol of 10 P-51s which encountered a formation of German fighters. He shot down two Bf109s but, whilst positioning for a firing run on a third German fighter, was shot down by American anti-aircraft fire. His comrades recall seeing his canopy jettison at some 700 feet above the ground but he was unable to escape from his aircraft in time.

Remembered fondly by fellow pilots and ground crews alike, Preddy was a popular man renowned for his bravery, optimistic outlook and thoughtfulness. A big fan of dice games, Preddy would often shout 'Cripes A'Mighty!' for good luck before throwing, and had this personal slogan painted on his fighters. His final tally has been disputed several times over the decades since his tragic death, but is currently widely acknowledged as 26.83 aerial victories and a further

five aircraft destroyed on the ground. Many post-war narratives claim that, had it not been for his untimely death on Christmas Day 1944, he would have continued on to become America's top scoring ace of the European Theatre of Operations.

George Preddy 4 kills July 18th, 1944



In this series of articles, we will discuss the development of the Pz.Kpfw. VIII 'Maus'. After taking a look at ideas and visions leading to the development of its prototypes, we will take a closer look at the infamous German vehicle that got past the firing range tests.

[HISTORICAL] Panzerkampfwagen VIII "Maus"

3. February - Author: War Thunder Team

Part I.

During the final stages of the war, Nazi Germany's top leadership including Adolf Hitler began to embody the idea of creating heavy breakthrough tanks. It was a concept investigated in the USSR in the second half of the 1920's, where the concept of deep offensive operations was developed, which included not only fast tanks but also heavy multi-turreted vehicles.

In reality these tanks turned out to be ineffective due to their low speed and lack of maneuverability on the battlefield. And it is surprising that Hitler returned to this idea at the end of 1942 when the defeat of Germany

wasn't obvious. It seems that failures on the Eastern front and the increasing power of the Allies in Africa forced the German command to speed up victory over the Soviet Union in order to release forces and facilities used for that theatre to fight the United States and Great Britain.

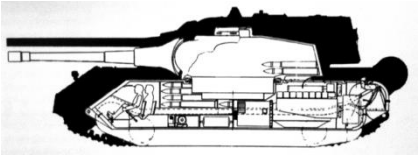
Ferdinand Porsche

German tank commanders such as Heinz Guderian did not completely approve of the Fuhrer's ideas. The wooden mock-up tank of new Panzerkampfwagen VIII "Maus" (Sd.Kfz 205; VK7001/Porsche Type 205) in it's flamethrower variant was shown to Hitler on the 1st of May 1943. It did not impress the German military commander Guderian, who complained about the lack of defensive armament on the proposed vehicle.

However, contrary to his military commanders, Hitler had already shown that he was seriously interested in the development of such a vehicle back in June 4th, 1942, during the demonstration of VK 100.01(P) / KV3381, the original version of the Panzerkampfwagen VIII "Maus". There, Ferdinand Porsche, head designer of the future super-heavy tank, had already suggested to increase the projected mass of the tank project to 120 instead of 100 tons.

Devotion to it's immensity along with the 149mm KwK L/40 cannon apparently boggled the imagination of the German leader who never thought about the technical problems of such a grand-scale idea. The issue was that the previous designs of Ferdinand Porsche were declined due to technical issues that appeared when trying to build experimental models.

However, the designers apparently also got carried away with the idea of a "supertank", which became very evident in the next variant K3382 (its weight reached 140t.) to mount the second turret with a 75mm KwK L/24 gun instead of a commander's cupola.



Project VK 100.01 compared to Pz.Kpfw. VIII 'Maus'

Also, Porsche's team suggested a third variant of the tank, the Type 205A "Mäuschen", as a final experimental project for a new heavy machine. All further designs, however, were focused on creating the Panzerkampfwagen VIII "Maus".

As we can see, the process of designing the super heavy tank the "Maus" was not a reactive decision forced by a difficult situation on the front, but was more driven by the German leaders vision to create a 'super tank' above everything else.

Part II.

After testing the preliminary layout of the vehicle on previous models, Ferdinand Porsche showed Hitler a wooden model of the prototype "Mäuschen". This variant appeared as weighing in at 179 tonnes. Immediately after this demonstration the plan for the project was approved in Berlin, the plan included building 2 experimental models before the end of 1943. The team rushed to complete the project objectives, they expected to use the already tested suspension of the VK.4501(P) (aka Tiger(P)) which was also used on the "Ferdinand/ Elephant".

But the Heereswaffenamt (German Army Weapons Agency) asked the designer to mount a flamethrower with a 1000 Litre capacity reservoir on the "Mäuschen". The overall weight with additional armament increased by almost 5 tonnes. which meant that the chassis had to be reworked since the mass had been increased as well as the size of the vehicle.

In early April of 1943 a model with all the changes was shown to Albert Speer and later, on the 1st of May, to Hitler and the German military representatives (that's when Guderian expressed his disapproval). During this very meeting the project received the name "Maus".

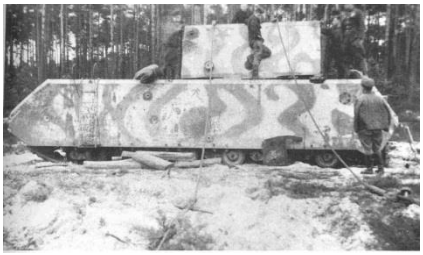
Ferdinand Porsche on an inspection

The designers again faced the problem of choosing which armament was to be used on the machine. In July 1943, specialists suggested 4 variants and all of them had 75mm KwK L/24 as a secondary weapon. The suggested main gun was to be chosen from AA, Naval and tank guns with

calibres from 105mm to 128mm. The preferable weapon was a 150mm tank or naval gun. However, the 128mm KwK 44 L/55 cannon was chosen.

It should be noted that creating such a large-scale project as the heavy breakthrough "Maus" vehicle required close cooperation of several German industrial companies. Structural components were produced in 8 towns in Germany and Czechoslovakia in the factories of Krupp, Siemens-Schuckert, Škoda, Daimler-Benz etc. General assembly work without armament mounting took place in Spandau while the complete assembly was in done in Stuttgart.

The first experimental model of the Panzerkampfwagen VIII "Maus" - Type 205 - was build in the "Alkett" factory from August the 1st to December the 23rd in 1943 and was sent to Stuttgart for final turret configuration.



Field test without armament of the Porsche Type 205/2

The final factory tests took place on the factory testing range under direct control of Ferdinand Porsche.

Part III.

In the spring of 1944, both tanks were delivered to the Kummersdorf testing ground located in Zossen: The "Porsche Type 205/1" and the "Porsche Type 205/2".

By June 1944, the first to undergo running tests was the Panzerkampfwagen VIII Maus with the inclusion of an attached turret (the first prototype had no turret). The first tests immediately highlighted that the concerns about the new tank's ability to overcome obstacles were unwarranted. The second prototype joined the testing ground in September 1944. Aside from running tests, this tank also underwent artillery tests with its standard weaponry.

According to the testimony of the leading engineer at the Alkett company, Laube, "in the tests, the

tank showed good maneuverability, mobility and manageability". However, developers abandoned further testing, as it became clear that German armour construction industry could not support the construction of such huge vehicles, even using a minimal production of 10 vehicles per month.The political and military leaders of the Third Reich systematically attempted to develop superheavy tanks, following a program of developing "wonder weapons". In spite of the fact that these projects led to the construction of only individual prototypes, the list of projects boggles the imagination.

In the final stages of the Second World War, German engineers had developed such vehicles as the Henschel E-100, the "Krupp-Maus" (VK 7001 (?)) and the "Bär" (Bear). In spite of their high intensity, developments on the VK 7001 (?) and "Bär" ceased at the design stage. By the end of 1944, project ?-100 was also frozen. The unfinished prototype of this tank ended up in the Anglo-American zone. Only Ferdinand Porsche's Panzerkampfwagen VIII Maus design was taken to the stage of a built prototype able to participate in military operations.

The lightning-fast advance of the Red Army and the impossibility of evacuating such massive tanks in a short time from the Kummersdorf testing ground forced engineers and testers to take the decision to destroy them by blowing them up. It is unknown why this is the case, but only the "Type 205/2" was subject to this significant decision. This vehicle was 14 km away from the testing ground, at a Stammlager (Camp HQ) near Zossen. "Type 205/2" took significant hull damage.

"Type 205/1" with its turret attached, was discovered near the western batteries of the Kummersdorf artillery testing ground. In spite of the fact that this prototype also underwent a demolition attempt, it did not take significant damage. No less interesting is the visible damage on the vehicle's side and frontal armour, received, by all appearances, from artillery fire against the tank with the aim of studying the capabilities of its armour.

After both prototypes of the Panzerkampfwagen VIII Maus were discovered, specialists at the Technical Commission for the Ministry of Transport Machine Building of the USSR, under orders from armour command, were able to assemble a single tank from the two damaged tanks. This tank was sent to the USSR with the aim of studying the capabilities of its design in depth. On the 4th May 1946, the Maus was delivered to the armour research institute at the Red Army Head armour Command testing grounds located at the Kubinka village. After the Panzerkampfwagen VIII Maus was studied, it took its place in the gallery of the Kubinka Tank Museum, where it can still be seen today.

'IS-2 No. 432 of 7th GTTB' skin by Gus_GustavoFring | download here

[PROFILE] IS-2 Mod. 1944

3. February - Author: Adam "BONKERS" Lisiewicz

After the beginning of Operation Barbarossa on the 22nd of June 1941, the Soviet Union found itself in the war against Germany. The Germans quickly found themselves fighting against new Soviet tanks, such as the T-34 and KV-1. The KV-1 heavy tanks were virtually impervious to German AT guns of the time. However, Soviet tank commanders had many problems with coordinating attacks by forces of medium and heavy tanks. This is why in 1942 works on a new "universal tank" began.

Two tank factories submitted their designs – the Chelabinsk tank plant came forward with the KV-13 prototype, while the Nizhni-Tagil factory developed the T-43 tank. However, after the Battle of Kursk the next year the priorities shifted again, with the earlier KV-1 and KV-1S designs being inadequate against new Panther and Tiger tanks. At first, the KV-85 tank was produced as a stopgap measure before the new tanks would arrive on the battlefield.

IS-2 arriving at the front by train

However, the introduction of the T-34-85 medium tank prompted the Soviet engineers to reconsider the

armament choice for the new heavy tank. While the IS-1 heavy tank was equipped with the same 85 mm gun, the new IS-2 was armed with a 122 mm D-25-T gun, which was a modification of the A-19 field howitzer. The reason for this was that the IS-2 was supposed to be used for breaching enemy defenses – and the 25 kg warhead of the High Explosive shell would be very useful for that purpose.

In 1944 the IS-2 underwent a modernisation programme designed to increase its survivability and improve battlefield performance. The modification featured a redesigned hull front – while the early versions featured a visible "step" in the place where the driver's viewport was, the new variant removed that feature. The commander's hatch was also equipped with mounts that permitted the installation of the DshK heavy machine gun, intended to be used against enemy infantry, light vehicles and low-flying aircraft. The gun was also modernised to increase its rate of fire. These tanks were mainly allocated to Guards Heavy Tank Brigades and were used in Red Army offensives in Eastern Germany and Hungary.

In game, the IS-2 mod. 1944 is an Era IV Soviet heavy tank with a battle rating of 6.7 in all game modes. It features the same armament as its predecessor, the IS-2. The 122 mm D-25-T tank gun, with the upgraded BR-471B APHEBC ammunition is capable of penetrating 197 mm of armor at 100 meters. The IS-2 mod 44 also features good armor protection – the 120 mm thick armor plate is also sloped at 60 degrees from the vertical, giving it an equivalent thickness of over 200 mm of armor. The IS-2 is also fairly mobile for a heavy tank, with a top speed of 42 km/h.

However, the IS-2 mod. 44 is also not without its weaknesses. The frontal turret armor is only 100 mm thick and only offers reduced protection when compared to the front of the hull. The 3 degrees of gun depression also severely hampers the tank during combat on uneven terrain, where obtaining a firing solution on the target might be difficult. The heavy two-piece ammunition hampers the reload time, extending it to nearly 30 seconds.

An IS-2 Mod. 1944 in X-Ray View

The playstyle of the IS-2 mod 44 is fairly straightforward. It should be used as a breakthrough tank, intended to smash enemy defences. Players should seek to shorten the distance between them and the

enemy to maximise the gun performance. They should also be mindful of their surroundings and constantly be on the lookout, so that they won't be surprised during the lengthy reload. While engaging the IS-2, try to use the terrain to your advantage to capitalise on the enemy's poor gun depression. The IS-2 mod.44 will lead you to the pinnacle of the Soviet heavy tanks – the IS-3 and IS-4M.

With an upcoming update, we will add the 'Emblem of the 78th Guards Heavy Tank Brigade' decal created by Branislav 'InkaL' Mirkov

Spitfire Mk Vc used by the SAAF, 2nd squadron, skin by _Mirage | download here

[AIR FORCES] The South African Air Force

4. February - Author: Aaron "anglomanii" Lentz

When the South African Air Force entered World War II it did so with a pedigree earned during the Great War, serving as the South African Aviation Corps (SAAC). After initially training in Europe, SAAC pilots joined the campaign for German South West Africa, returning to the Western Front on the campaign's completion. Some SAAC pilots would even see service in Russia during the Civil War there.

The establishment of the SAAF took place on February 1st 1920 under the Director of Air Services, Colonel Pierre van Ryneveld. The newly formed SAAF was established at Zwartkop Airfield and took delivery of some one hundred aircraft from British war stocks. Over the next decade and a half the SAAF began the slow process of training and organising its complement of men and material, going from one squadron in 1923 to four by 1934. In 1935 the SAAF went through a development program to expand the Air Force to seven squadrons, but still when the call to arms came in 1939 the SAAF was far from a modern fighting force. Equipped with a majority of aging Hawker Hartbeests, Harts and Westland Wapitis, the SAAF recognised it had far too few men and not enough aircraft to put them in. A desperate scramble to obtain modern aircraft was undertaken, while the establishment of several training schools and facilities was hastily organised.

Aircrew of No. 16 Squadron SAAF and No. 227 Squadron RAF sitting in front of a Bristol Beaufighter at Biferno, Italy

Recognising the need to train pilots from across the world, the RAF in cooperation with the SAAF established the Joint Air Training Scheme; this enabled the SAAF to maximise its ability to train its own pilots as well as contribute to the defence of the empire by training pilots and aircrew from around the Commonwealth.

Initially the SAAF's duty was to establish a defensible position in Southern Africa and to maintain the maritime corridor to the Suez Canal and around the horn of Africa. Soon though the SAAF was dispatched to the Commonwealth dominions in East Africa, deploying to hold of the advances of Italian forces and to counter the presence of the Regia Aeronautica.

Flying Gloster Gladiators, Furies and the now ancient Hartbeests the SAAF took on the Italian forces over the territories known as Italian East Africa, consisting today of Somalia, Eritrea and Somaliland. Initially the Regia Aeronautica dominated the SAAF, but the lack of fuel and spares soon drastically reduced the numbers of aircraft available to the Italians. Soon the SAAF established air dominance and with that the campaign on the ground sealed the fate of Italian East Africa, with the final battles taking place at Gondar and hostilities ceasing in November 1941.

With the completion of the East African campaign, the battles in North Africa heated up; aircraft of No.12 and 24 Squadrons pursued the Afrika Korps across the Sahara from Gazala to Alamein; the SAAF flying various types of Hurricanes, Spitfires and Kittyhawks went toe to toe with Italian and German fighters, while Bostons, Marylands and Marauders attacked ground targets. As part of the Desert Air Force the SAAF squadrons performed the vital tasks of defeating the Axis air and land forces. At the same time as the operations in North Africa the SAAF also took part in Operation Ironclad - the taking of Madagascar - and naval and coastal reconnaissance missions from the cape to the Mediterranean. The SAAF's involvement in offensive operations did not stop here - from the flights to supply the Warsaw resistance in 1944 to actions against fascist Italy with heavy bombers and fighter bomber strikes against point targets.

Supermarine Spitfire Mark VCs of 2 Squadron SAAF flying along the Adriatic Coast

When the Korean Conflict took place the SAAF rallied to the international cause and supplied pilots and machines flying F-51D Mustangs as well as a small number of F-86F aircraft in ground attack and air superiority roles, flying some of the very last missions over North Korean lines to suppress their airfields.

Today the SAAF continues to defend the southern skies of the African continent, providing for the defence of the RSA and to contribute to African Union and peacekeeping across the Continent.

With an upcoming update, we will add the SAAF 1947 roundel made by Colin 'Fenris' Muir

Bristol Beaufort MK.1 "Killer" of 42 squadron, Leachars, Scotland, 1941, skin by _TerremotO_ | download here

[PROFILE] DAP Beaufort Mk VIII

5. February - Author: Aaron "anglomanii" Lentz

The First DAP Beaufort flew in August 1941 and was part of the initial order of 180 aircraft contracted to the RAF Far East Service. However, after the shock of Pearl Harbour and the Japanese strike against the British Empire these aircraft were turned over for service by the RAAF. The initial 180 Australian built aircraft were designated as MK V's, VI's and VII's and could be called simply a modified Mk.I Beaufort with Pratt and Whitney engines and different defensive armaments; there was more to it than that, of course.

Following these first 180 aircraft was the Mk VIII Beaufort built by the Department of Aircraft Production; this was very much an Australian built aircraft as almost all the materials and components were sourced in Australia, only parts of the engines and some technically difficult avionics and communication equipment were from the UK and the USA. Small design changes were also under taken: larger tail fins, improved landing gear and armaments were all changed, adding .50 inch machine guns to wings outboard from the oil coolers and fitting universal bomb mounts to the bomb bay and inner wing sections. All this helped to improve the aircraft's versatility, whether it was attacking shipping or airfields.

Historically this was a great achievement for Australia being its

first all metal aircraft to be wholly manufactured in the country. Its service was long and while not as glorious as the Spitfires and Kittyhawks, the Beaufort had its fair share of heroic moments. On the 15th of August 1945 Beaufort bombers from No.7 Squadron carried out the last Royal Australian Air Force raid of the war, bombing enemy positions in the vicinity of Kiarivu, New Guinea. The last aircraft on target was No.7 Sqn Beaufort A9-608, flown by Warrant Officer Alan Fraser.

Beauforts being built at the DAP plant in Fisherman's Bend, Melbourne. The ASV radar aerial array on the rear fuselage and a small blue/white Pacific Theatre roundel indicates this is a late Beaufort Mk VIII.

Whether you're flying your Beaufort in Arcade, Realistic or Simulator, one thing that will stand out with your aircraft is its versatility. Its hardiness and speed compared to other aircraft of its battle rating are also noteworthy. The Beaufort is a steadfast and dependable aircraft using speed to get to its objective and accurately put ordnance on target. Speed is your friend and something you need to maintain to stay out of the reach of enemies, you do have good defensive armaments but your greatest defence is that speed. Attacking at low altitude or high is a viable option, using your speed to make swooping attacks on ground targets: never loiter over your target, get in and get out.

In Realistic and Simulation modes only the aircraft a full point of BR above this aircraft will give you much trouble, and even then your defensive armament will be a deterrent, but it is still best to use your speed which can be employed well to get to the target area and get out fast to do it all again. Alternatively, you can use this bomber's speed to skirt the enemy forces and attack from unexpected angles.

All in all I've actually enjoyed my time in this aircraft, it's been a guilty pleasure of mine to take it out and go hunting ships with it, or get it to altitude and dominate area targets from on high. I highly recommend you to take this little beauty for a joy ride, and if you enjoy it half as much as me it'll have been worth it.

M41 Walker Bulldog - available AP ammo: M339 AP round, M319 APCR & M331A2 APDS camouflage made by JoKeR_BvB09 | download here

[HISTORICAL] Armour-piercing rounds

6. February - Author: Jan "RayPall" Kozák

After the First World War, recently introduced tanks underwent rapid development, and as their armour protection grew stronger, a need for suitable armour-piercing ammunition was evident. In interwar period, several types of armour-piercing shells appeared, and their development further progressed during World War 2.

The most basic shell type was regular armour piercing (AP) shell. Usually, it was made from solid steel. These shells were relying on their kinetic energy to penetrate enemy armour, and as such, they relied on sufficient muzzle velocity, and were losing their penetration value over distance. Because regular steel would likely shatter or deform upon impact on enemy armour, high carbon content was added during manufacturing, giving the shell increased hardness. Upon impact, it acted like regular bullet. causing damage through spalling and by it's own mass.Typical example of this shell is American 75 mm M72.

When armour plates started to be face hardened (eg. hardening of outside armour plate), regular AP shells had difficulty to penetrate, and were likely to bounce or shatter upon impact. As a counter-measure, APC shell (Armour-Piercing, Capped) was developed.

Cartridge and shell of a British 17 pounder gun - ultimate anti-tank weapon

This shell, while retaining basic characteristics of AP shells, carried hardened cap, which had very hard tip, but soft steel body, and was intended to protect the underlying "main" tip of the shell from shattering. As an example of APC shell, we can use American 37 mm M51 shell.

AP and APC shells were effective against armour, but their shape was quite non-aerodynamic, causing higher drag during flight and thus decreasing effective range. This problem was eventually solved by adding so-called ballistic cap. The ballistic cap, usually made from soft steel, had more streamlined shape and was placed on tip of the AP shell, improving shell's aerodynamic shape. Upon impact, it shattered easily, and had negligible negative effect to shell's penetration capability. Combination of AP shell with ballistic cap was designated APBC (Armour Piercing, Ballistic Cap), while APC shells fitted with ballistic cap were known as APCBC (Armour Piercing Capped, Ballistic Cap). American 76 mm M62 shell is a good example of such round.

Aside from achieving more penetration, attempts were made to increase shell's lethality upon impact. These efforts resulted in adding of HE

bursting charge. Inside the penetrator, cavity was made, filled with explosive and equipped with a fuse. Upon impact, a delayed fuse would ignite explosive filler after passing through the armour, resulting in penetrator's detonation inside the target vehicle's crew compartment, creating deadly hail of fragments killing or injuring anyone inside. Increased lethality had one drawback though. Bursting charge's cavity decreased overall structural integrity of the penetrator, increasing probability of shattering. HE filler could be fitted into a standard APCBC shell (such as German 7,5 cm PzGr 39, carrying 18 g of explosives), or into AP/APBC shells, creating either APHE (Armour Piercing, High Explosive) shell, or APHEBC (Armour Piercing High Explosive, Ballistic Cap). As an example of the former, we can use Soviet 85 mm BR-365K round, while the latter is represented by also Soviet 122 mm BR-471B round.

Due to improvements in armour protection of armoured vehicles, it was necessary to further increase muzzle velocity to give AP rounds enough of kinetic energy for achieving penetration against thicker armour. In order to do this, propellant charge could be increased. However, this solution was very impractical and expensive, since it would require enlarged shell casing and subsequent construction of larger gun breech and barrel. The idea of achieving higher kinetic energy by scaling down the penetrator's caliber proved to be much better solution. This resulted in creation of Armour Piercing, Composite Rigid (APCR) shell. It's scaled down (eg. sub-caliber) penetrator was usually made from high-density material such as tungsten carbide, and was housed in a lightweight aluminium outer shell. These rounds had high muzzle velocity (often exceeding 1000 m/s) due to smaller mass of penetrator being propelled by the same amount of propellant as a regular full-caliber shell, allowing it to penetrate substantially thicker armour. However, APCR's smaller mass and lack of HE filler meant it caused less damage inside the target than full-caliber shells. Their lower mass also caused APCR round to have worse energy retention, losing it's penetration capability over distance faster than heavier full-caliber shells, and was more prone to ricochet, especially against sloped armour.

APDS shell (Armor Piercing, Discarding Sabot) was a further development of APCR. This type of round also used soft outer shell, housing high-density penetrator, but in case of APDS, outer shell (called sabot) was discarded upon leaving the gun's muzzle, leaving only the penetrator in a form of long, thin rod. APDS had even better penetration capability than APCR,but shared APCR's disadvantages – lower damage

potential, worse long-range performance, and a worse performance against sloped armour. Historically, APDS was fielded in limited numbers by British army as an ammunition for 17-pounder AT gun, while in-game, you can use American 76 mm M331A2 round aviable for M41A1 Walker Bulldog.

Sabot round used in modern tanks

Aside from the mentioned shells, High Explosive Anti Tank (HEAT) rounds were also used during World War 2. This round contained a conical cavity fitted with a copper lining (post WW2, other high-density materials such as uranium were used), and surrounded with explosives (forming a so-called shaped charge). Upon impact, the explosives were detonated, and the copper was concentrated into a narrow stream of cold-formed metal often called the 'cumulative jet', which moved at super-sonic speeds between an astonishing 7 to 10 kilometers per second. This speed resulted in an immense pressure when the jet hit an object in its path, which, according to the laws of fluid dynamics, often caused it to pass through the object as if it was liquid, resulting in heavy damage to anything in its way. As the cumulative jet was very small in diameter, the potential damage to surrounding components and crew was, however, limited, although armour particles could injure the vehicle's crew and cause other damage. Another possibility was the damaging effect from burning particles of the object the jet hit in its way. Contrary to popular belief, the explosive gases following the jet at sub-sonic speeds are irrelevant regarding the damage potential of the HEAT grenade. The prime lethality of the HEAT grenade results in the ability to easily set munitions and fuel in flames, if they are in the way of the jet. Due to their construction, HEAT shells didn't rely on kinetic energy and it's penetration capability was thus not affected by distance or muzzle velocity, making it perfect anti-tank ammunition for infantry anti-tank weapons (such as M10 Bazooka, or Panzerfaust) and low-velocity short-barreled guns. HEAT's low muzzle velocity however made long-range aiming difficult, and round could be easily defeated by spaced armour, causing the shell to detonate prematurely and dissipating it's particle stream before contact with main armour.

'M4A1 Sherman 76, 3rd Arm. Div, 33rd Arm. Rgt., Belgium, September 1944' camouflage by Ayy_Lmao | download here

[ACE TANKER] Lafayette G. Pool

9. February - Author: Sergej "NuclearFoot" Hrustic

Lafayette G. Pool was born on July 23rd, 1919, in Texas, USA. He joined the army as a tanker, and was assigned to the 3rd Armored Division which was fighting in France at the time. This deployment, however, only lasted from June to September of 1944 (83 days), and Pool and his crew lost 3 Sherman tanks during that time, each of them named "IN THE MOOD", numbered I, II and III. However, they made up for it by having destroyed over 250 tanks, SPGs, and armoured vehicles, and amongst them at least 12 Tiger Is and Panthers.

Pool and his crew faced a total of 21 full-scale engagements, often forming the spearhead of the attack due to their skill, as well as because of Pool's insistence to be sent to the front lines.

S/Sgt. Lafayette Pool

This, however, quickly resulted in their first lost tank. "IN THE MOOD I",

it was destroyed by a Panzerfaust rocket, number II was hit by friendly fire from a P-38, rendering it useless. Their third destroyed tank would prove to be their final combat mission. In one of Pool's memoirs, he vividly writes about his memories of that incident, on the 15th of September.

While trying to enforce the Siegfried Line, they were ambushed by a German Panther, superior in firepower and armour to their Sherman. The Panther's first shot clearly penetrated the Sherman's armour, hitting the ammo rack. Without time to properly aim, their own shot ricocheted off the Panther's frontal armour. Pool recalled shouting: "Back it up, Baby!" ('Baby' being the nickname of his driver) before losing consciousness.

It was later discovered that the Panther had fired a second shot, destroying the ammo rack and sending the crew hurtling out of the tank. Amazingly, they all survived. Two of them, however, Pool included, had to have a leg amputated, which ended their fighting career.

Pool received many medals for his service to the army, including Distinguished Service Cross, the Legion of Merit, the Silver Star, and the Purple Heart. He also received the Belgian Fourragere and the French Légion d'honneur. Interestingly, he did not receive the Medal of Honor, which the Army Board classified as an "Infantry award", because it would not be fair on the crew (even though they didn't mind).

His life after the military was rather dull. He changed several jobs in a few years, until returning to the 3rd Armored Division to serve as an instructor for recruits. After that, he completed a business college, before finally deciding to take up preaching as a profession.

Whatever his career choices may have been later in his life, it is undeniable that Pool was one of the best tankers of WWII.

Sturmgeschütz III Ausf. A

[PROFILE] Sturmgeschütz III Ausf. A

10. February - Authors: Jon Duke & Mark “wafu_vasco” Barber

A product of lessons learned in World War I, the specification for a Sturmgeschütz (Assault Gun) was issued in 1936. It called for an armoured infantry support vehicle equipped with a 7.5cm gun with a traverse of not less than 25o, capable of providing direct fire up to 6000m.

StuG III on Eastern Front

Full protection was to be afforded to the crew, and the vehicle was to be no taller than the average height of a standing man in order to aid concealment.

Daimler-Benz AG were given the task of designing the vehicle, which they initially based on the Panzer III Ausf B onto which they fitted soft steel casemates with wooden mockups of Krupp’s short-barrelled 7.5cm StuK (Sturmkanone) 37 L/24 gun. Initially designated Pak(Sfl.), and then Pz.Sfl.III (S.Pak) in 1937, the first 5 prototypes were only issued for test and evaluation, a few remaining in use as training vehicles into 1941. With open-top crew compartments and only 14.5mm armour they were considered unfit for combat, and by early 1940 Daimler-Benz had rectified these issues in the now-renamed

Sturmgeschütz. By now the vehicle was based on the Panzer III Ausf F and protected by 50mm frontal armour, although it still lacked any close-in defensive armament, relying on infantry for self-protection.

The Ausf A was the least numerous of all of the StuG variants; the first 24 saw action in the French campaign with Sturmartillerie Batteries 640, 659, 660 and 665 and the final six were issued to the SS Sturmartillerie battery of Leibstandarte SS Adolf Hitler division.In common with all of the short-gunned StuGs, the Ausf A performed well in the early war years, its low-velocity gun easily able to neutralise emplacements and pillboxes.

Later variants increased the track width from 36cm to 40cm, added a periscope gun sight and even provided a bell to help the commander get the driver's attention. Even with these modifications though, the StuG's worth as an assault gun was limited, and it would find its form with the addition of the StuK 40 L/43 high velocity gun in its new role as a tank destroyer.

In War Thunder itself, the Stug III Ausf.A provides a good (if at times frustrating!) entry point for the new player into the world of operating a vehicle without a turret. It shares some strengths and weaknesses with several other vehicles of a similar configuration and will for many be a new and exciting challenge to try to master.

Crew, modules and ammunition in StuG III Ausf. A

First and foremost, the Stug III has a low profile and (for its BR) good frontal armour, and this needs to be capitalised upon. Even with the best driver in the world, the Stug III is not intended for close range fighting with other armoured vehicles - it will quickly be outmanoeuvred and without a turret will not even be able to bring its firepower on target whilst conventional tanks are driving rings around it, turret cranked to one side to deliver a salvo of shots into the Stug III's more vulnerable flanks and rear. With this in mind, always try to keep the front of the vehicle facing towards the enemy for the sake of the stronger armour and your own firepower, even more so than with any other vehicle.

In terms of acceleration and handling, the Stug III is fairly mediocre and so research in this department is perhaps better saved for after other priorities. The Stug III is there to go face to face with the enemy and so delivering a solid punch is probably a

better area to spend research points on - the vehicle's two researchable HEAT rounds almost transform the offensively capability in one go, particularly the later Hl.Gr 38C. This round will have little difficulty with dealing with most of the armour encountered at this BR and is particularly effective when combined with the Stug III's relatively high rate of fire. However, beware digging in and blasting away as running out of ammunition is easier in this vehicle than with many others!

In terms of facaing the Stug III Ausf.A, the best plan if possible is to get around the sides. With 50mm of frontal armour, a low profile and a formidable gun, the Stug III is a fearsome opponent in a face to face slogging match. However, the gun does have a fairly narrow field of fire and disabling a track with a frontal shot is often all that is required to then move only slightly to escape the Stug's fire arc. Once close in and around the side, the Stug is in deep trouble.

Overall, for players who have spent many an hour on turreted vehicles the Stug III will require an entirely new style of play but, once its advantages are appreciated, will still prove to be a thoroughly effective combat vehicle in the right hands.

In one of the next updates we will introduce decal used by StuG Abt. 189 created by Branislav 'InkaL' Mirkov

'M5A1 Stuart VI, 24 Lancers regiment, 'Hetman Żółkiewski', 10th Armoured Cavalry Brigade, 1st Arm. Div.', camouflage by RazNaRok | download here

[GROUND FORCES] 1st Polish Armored Division

11. February - Author: Adam "BONKERS" Lisiewicz

The origins of the 1st Polish Armored Division in the West started even before the Second World War. In 1937 the 10th Cavalry Brigade of the Polish Army began transforming into a motorised brigade. At first this process was not received well by the Polish High Command as most officers believed tanks to be "mobile pillboxes", too dependant of fuel supply and favourable terrain. Also, the acquisition of armored vehicles was fairly expensive for a country such as Poland which was hit hard by the Great Depression. Still, the transformation was underway regardless of the feelings of many officers. In 1938 the unit, nicknamed "The Black Brigade" (for the colour of the unit trench coats), was transferred to the Samodzielna Grupa Operacyjna "Śląsk" (Independent Operations Group "Silesia"). The command of the unit was given to Colonel Stanisław Maczek. The unit was equipped with Vickers Type E light tanks, as well as TKS tankettes and towed Bofors 37 mm AT guns.

The outbreak of the Second World War was a shock to many; however, the Brigade fought bravely throughout the campaign. It managed to hold the advance of the German 22nd Corps near Chabówka on the 2nd of September, destroying up to

50 German tanks. Up until the 17th of September it was involved in the fight, slowing down the German advance as the Poles retreated towards the East. It was then that it was ordered to fall back into Hungary. Colonel Maczek and nearly 1500 men completed the crossing and were then interned.

Stanislaw Maczek

This would not stop them from fighting the Germans again. Maczek and his troops managed to leave Hungary and, through Romania, sailed into France where the Polish Government in Exile set up in Angers. The reorganised Brigade was stationed at the Coëtquidan camp; however the French were reluctant and slow with supplying the new unit with vehicles and other equipment. This changed in May 1940, after the German attack against the Low Countries and France. In just a few days the Brigade was finally equipped with vehicles and sent to the front in Champagne. There, it took part in the clashes near Sant Bond and also lead the counterattack on Montbard, where it succeeded in recapturing the city. However, the lack of fuel and ammunition forced the Brigade to abandon their vehicles. On the 18th of May Maczek decided to break up the Brigade and ordered his troops to march to the South. Most of them managed to evacuate to Great Britain.

In the UK the Polish units were quickly formed into the 1st Polish Corps and moved into Scotland to guard the shore from the expected German invasion. The 10th Armored Cavalry Brigade was again reorganised with Maczek as the commander. After the threat of the invasion had passed with the end of the Battle of Britain the Poles began lobbying for a creation of an entire Polish Armored Division. This was accomplished on the 25th of February 1942 when the 1st Polish Armored Division was created by the order of General Władysław Sikorski. It consisted of the 10th Motorised Cavalry Brigade, a reconnaissance regiment, the 16th Tank Brigade, as well as its own artillery, sapper and logistics units. At first it was equipped with Covenanter and Valentine tanks for training purposes. The command of the unit was given to the now Brigadier General Maczek.

Before the invasion of Normandy two major things happened to the Division. First, the Division was attached to the 1st Canadian Army of the 21st Army Group of Field Marshal Bernard Montgomery. Secondly, the Division was equipped with new tanks – mainly with Cromwell cruiser tanks, M5A1 Stuart light tanks and different variants of the M4 Sherman – predominantly the M4A4 and the Sherman"Firefly". The unit did not participate in the first wave of Normandy landings; however it was transported to France in July and August.

The Division went into battle on the 8th of August 1944, as a part of the 2nd Canadian Corps during Operation "Totalize". Its objective was to advance towards Falaise to close the encirclement of the German 7th Army. The objective, however, was not met. The Allies attacked again on the 14th of August during Operation "Tractable". This time, after 4 days of fighting along the river Dives, Maczek spotted a gap in the German defense. It was then that he divided the unit into two groups and pushed them into the gap. The first group captured a strategic crossroad near the town of Chambois while the second group moved into a defensive position of the Mont Ormel hills, known as the "Club". The Germans quickly began the counterattack, hoping to break through. At a critical point the Poles were being attacked from three sides, not only by the 7th Army, but also by the 2nd SS Panzer Corps. The encircled Poles fought bravely and thanks to allied supply airdrops did not falter. Finally, on the 21st of August the 4th Canadian Armored Division moved in and relieved the pressure. The Battle of Falaise ended with an Allied victory.

Sherman tanks of 1st Polish Armoured Division at the start of Operation 'Totalise'. Normandy Campaign 1944.

After Falaise the Division participated in the allied offensive toward the Low Countries. On the 6th of September 1944 the Division set foot in Belgium, liberating the town of Ypres after vicious street fighting. The unit then pushed north, liberating the town of Ghent and moving towards the southern Netherlands. There, the assault was being slowed down by heavy German defences. Regardless the Poles, the British and the Canadians moved on. The Division took part in the fights near Terneuzen

and also liberated the towns of Breda and Moerdijk before the end of the year. In April 1945, the Division participated in the final assault on Germany. There, it liberated a prisoner camp near Oberlagen where the captured female Home Army fighters who took part in the Warsaw Uprising were being interned. The war trail of the Division ended in the Kriegsmarine naval base of Wilhelmshaven which was captured with its whole garrison on the 5th of May 1945. After the war's end the Division fulfilled occupational duties in northwest Germany until 1947. It was then that the unit was transported back to the United Kingdom and demobilised.

In one of the coming updates we will introduce the emblem of the 1st Polish Armoured Division created by Branislav 'InkaL' Mirkov

F-82E Twin Mustang in Alaskan Air Command camouflage from 1952m created by RMK18 | Download Here

[HISTORICAL] Ugly ducklings - The North American F-82 Twin Mustang

12. February - Author: Mark Barber

The Second World War marked the pinnacle of the propeller driven gun slinger; piston engine fighters which fought each other in varied skies across many theatres all over the globe. This golden era of air-to-air combat still, to this day, causes debates to rage over which aircraft was the best piston engine fighter of the war. The North American P-51 Mustang is without a shadow of a doubt one of the main contenders to that title; a superlative aircraft which combined speed, handling and firepower with incredible range. This begs the question: given one of the most iconic and successful fighter aircraft of all time, known for its deadly beauty, why would anybody want to do this to it?

The P-51's origins were not nearly as impressive as when the aircraft hit its prime in the last two years of the war. Of all of this excellent fighter's qualities, perhaps its most loved – certainly by American bomber crews – was its long range. With the B-29 Superfortress pushing the bar even further with a range well in excess of the B-17 and B-24, even the mighty Mustang and the P-38 no longer had the legs for such long range missions and a new escort fighter was needed. The fine minds at North American Aircraft were tasked with the

conception of an ultra-long range escort fighter.

North American XP-82 Twin Mustang 44-83887 on test flight over Sierras, 1945.

A twin fuselage design – whilst relatively unconventional – was certainly not unheard of at the time and presented a number of advantages for the proposed task in hand. With two fuselages, a greater quantity of fuel could be carried in addition to the wing tanks where, again, the addition of a central joining wing in between the two fuselages presented the opportunity for more fuel still. With the wings strengthened for hard points, external drop tanks were also an option. With the design based heavily on the P-51, the existing fuselage was further modified by lengthening it behind the cockpit to allow for larger fuel tanks.

North American Aircraft now had a sensitive balancing act to complete. On the one hand, the aircraft needed to be as lightweight as possible not only for a favourable thrust to weight ratio for range, but also for performance. On the other, great consideration was required for the complexities of a multi engine aircraft with a less than conventional make up. How would the aircraft handle in the event of a single, or for that matter double engine failure? What configuration was best for harnessing the power of the two engines – propellers in unison, rotating outward from each other or inward?

Once this question was answered, what tail configuration would give the best control authority? The question of weight and centre of gravity calculations also came into play with crew composition, but after due consideration it was decided that a cockpit with full flying controls would be retained in both fuselages to allow two pilots to alternate control and share the workload on long escort missions.

127th FW NA F-82E Twin Mustangs, along with a Boeing B-29 Superfortress at Kearney AFB, Nebraska.

After trial and error and some teething problems along the way, the prototype XP-82 first flew in June 1945. As well as having an incredible range and endurance, the P-82 also

boasted a top speed in excess of 470 mph.

The P-82, whilst produced during the final stages of the war, did not see active service. It did, however, make headlines in February 1947 with a record breaking flight from Hawaii to New York – a distance of some 5000 miles – which was flown without refueling. It remains to this day the longest ever flight carried out by a piston engine fighter, and the fastest flight over such a distance by any piston engine aircraft. The Twin Mustang followed suit with other American fighters in being redesignated in 1948 as the F-82, when 'Pursuit' was changed to 'Fighter'. Performance also saw a reduction when, post-war, the cost of the license for the British designed Merlin engines was increased, and Allison V-1710 engines were fitted instead.

Even with war against Germany and Japan over, a new conflict would dominate US foreign policy – the Cold War against the Soviet Union and its allies. The F-82 was now seen as a strategic asset; an escort fighter for potential bombing sorties to the heart of the Soviet Union itself. However, with Soviet jet fighters entering service it soon became apparent that piston engined aircraft stood little chance against the new generation of combat aircraft, be it propeller driven bombers or the piston fighters which were tasked to defend them.

However, other roles were found for the Twin Mustang. With a multi-crew configuration and the capacity to carry significant weight, the F-82 proved to be a capable platform to be radar fitted and utilized in the night fighter role. It was night fighter F-82Gs of the 68th Fighter Squadron which, in the early hours of June 25th 1950, carried out the first aerial combat sorties of the Korean War. Another first occurred on June 27th when, during an escort mission to C-54 transport aircraft, F-82s of the 68th and 339th Fighter Squadrons shot down a Yak-11 and two La-7s. In addition to escort and night interceptor duties, the F-82 was also successfully used in the ground attack role during the conflict.

USAF operational F-82 Twin Mustang, F-82F AF Ser. No. 46-0415, on the ramp at Ladd AFB, May 1953.

However, despite a brave performance the days of the Twin Mustang were numbered. A non conventional piston engine fighter had little place in the new world of the jet aircraft, and by only 1953 the last F-82 had been phased out of service. Currently only five known

airframes are known to have survived out of some 270 aircraft produced. Attempts are being made to restore two to flying condition.

With a coming update, we will inculde the decal of the 68th Fighter Interceptor Squadron made by Jej 'CharlieFoxtrot' Ortiz

Fw-190 A-8 "Yellow 17" equipped with BMW 801 engine, camouflage
by KodiakGER | download here

[PROFILE] BMW 801 Engine

13. February - Author: Joe "Pony51" Kudrna

The BMW 801 is one of the most fascinating and yet most unlikely stories in the history of engine designs. It starts with a company called Siemens Schuckert Werkes - a division of the massive Siemens company - an early builder of water cooled in-line and air cooled radial aircraft engines. Seeking more powerful units they acquired a license to produce British designed Bristol Jupiter engines and used that experience to improve their own products. A few years later, after a subsidiary name change to Branderburgische Motorwerke GmbH (aka BraMo), a dependable nine cylinder Bramo 323 Fafnir was in production. Also, the company was well on its way to producing its twin row Fafnir design when BMW received approval by RLM to purchase it in 1939.

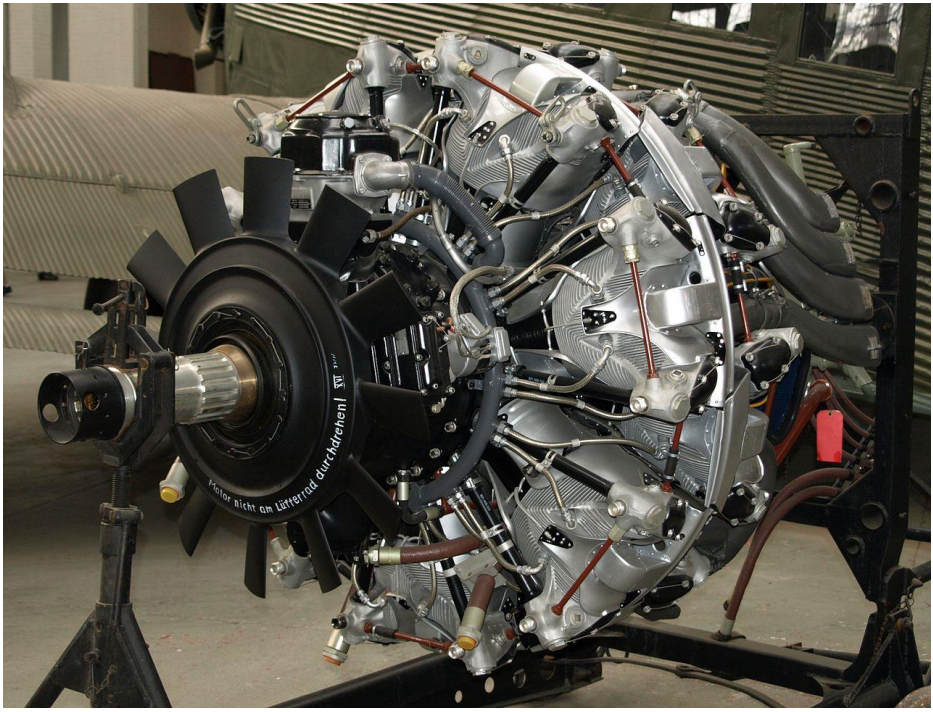
Most famous for their "driving machines", BMW's first products were actually aircraft engines; its famous Bavarian logo advertised as a propeller to further reinforce the connection with aircraft. Like Siemens, they too started making water cooled engines, the advanced six cylinder BMW IV and best selling 12 cylinder BMW VI. To offer an air cooled option in 1929, a license from Pratt and Whitney USA was acquired to manufacture their nine cylinder Hornet engines resulting in the "BMW Hornet" and a subsequently improved version: the BMW 132. The next step

was the BMW 139, a short lived twin row version.

A third piece came in 1937 when aviation pioneer Kurt Tank proposed a fighter built with a radial engine instead of the perpetually in short supply DB 601's. Despite the traditional European view of inline engines being better for fighters, new research with aerodynamic cowlings for radial engines were promising so the RLM agreed on the new fighter, the Fw-190. The BMW 139 was mounted in a closely fitted, channeled cowling. While it was complex and suffering chronic overheating issues the theory was producing results, so work continued.

With the acquisition and merging of Bramo and involvement of Professor Tank, from that combined brainpower an entirely new advanced engine was born in 1939 . Assigned a new block numbers post merger, the BMW 801A had a heritage with the Hornet and Jupiter but it was truly an original design re-imagined literally from the ground up. With a displacement of 41.8 liters (2,560 in3) this two row 14 cylinder engine - initially producing 1,539 hp (1,147 kW) at 2,700 rpm at takeoff power - was respectable when compared to the similar Wright R-2600-6 42.7 L (2,603 in3) which produced 1,600 hp (1,194 kW); its final versions far exceeded this early performance. What made it marvel above all other radial engines was its small power plant, a mere 1,290 mm (51 in) in diameter, in a tightly integrated cowling. An integrated cooling fan ran 3.17 times faster than the propeller, insuring air flow regardless of the situation so it was nearly impossible to overheat or choke, a problem that affected nearly all combat aircraft to various degrees. Another key feature was a fully integrated engine, everything included except fuel: the Kraftei ("power egg") concept. Dornier's own Do-217 was designed with a special wing mounted crane to facilitate engine changing in as little as 30 minutes!

What made the BMW 801 exceptional compared to any engine was its "Kommandogerät" (command-device), or Engine Control System. At the time engines required manipulation of the throttle, mixture, propeller, cowl flaps (cooling air), oil cooler, ignition timing, supercharger settings (aka Boost), WEP activation, etc, but the "Kommandogerät" used only 1 lever to control it all! This was an enormous tactical advantage as pilots flying aircraft fitted with the BMW 801 could fully concentrate on the battle while others could not. This level of automation was so advanced that even today few propeller driven aircraft have the equivalent "FADEC" system.



BMW 801D aero engine on display at the Imperial war Museum, Duxford.

Bf 110C-4, NJG 1 Luftwaffe. Arnhem, Netherlands, Fall 1940.
camouflage by SuchDogeVeryAce | download here

[ACE] Major Heinz-Wolfgang Schnaufer

16. February - Author: Mark Barber

Born in Calw in the rural Baden-Württemberg in Southern Germany in February 1922, Heinz-Wolfgang Schanufer was the oldest of the four children of Alfred Schnaufer; an engineer turned wine merchant. The young Heinz-Wolfgang excelled both physically and mentally; a gifted academic, he also stood out from his peers in terms of his sporting achievements. His future career was perhaps already set in stone from a relatively early age – as a boy he expressed a desire both to join the German Youth organization and to fly gliders. A love of the two fuelled his desire for both a life in the military and a career in aviation.

With a strong academic background behind him, it came as no surprise when he passed the entrance exams to become an officer in the Luftwaffe, joining in November 1939 shortly before his eighteenth birthday. After completing his basic military training in physical training, weapon handling, drill and field craft he began flying training in April 1940. Commissioned as a Leutnant a year later, he was selected for multi-engined fighter training as a Zerstörer or 'destroyer' pilot on the heavy Bf110 fighter.

By April 1941 the initial successes enjoyed by the Bf110 were long gone; the aircraft's weaknesses had been exploited and it was now showing serious weaknesses as a day fighter.

Heinz-Wolfgang Schnaufer

However, with the threat from RAF Bomber Command's increasingly regular night raids growing steadily and the Bf110 showing real suitability for combating this, Schanufer volunteered for training as a night fighter. Finally, in November 1941, Schnaufer arrived as a newly qualified pilot with II./NJG 1, No.2 Group of Night Fighter Wing 1. However, a period of particularly bad weather led to Schnaufer seeing relatively few operational sorties over the dark winter of 1941-42.

Schnaufer's Gruppe was relocated to Koksijde in Belgium in February 1942, and Schnaufer was involved in the vast aerial umbrella which provided protection to Scharnhorst, Gneisenau and Prinz Eugen during Operation Cerberus. After being transferred to the Stab (Headquarters staff element) of II./NJG 1, Schnaufer shot down his first enemy aircraft – a Handley Page Halifax – on the night of 1st/2nd June 1942. Whilst attempting an attack on a second British bomber, Schnaufer's Bf110 was hit by return fire – he was wounded in the leg, lost rudder authority and had one of his fighter's engines set ablaze. Managing to put out the fire, Schnaufer returned to his airfield – he and his radio operator Friedrich Rumpelhardt were both awarded the Iron Cross Second Class for their first aerial victory.

After recovering from his leg wound, Schnaufer's successes would soon start to mount. On the night of August 1st he shot down two Wellingtons and a Whitley in a little over an hour, for which he was awarded the Iron Cross First Class. By the end of the month – now assisted in the role by the new Lichtenstein airborne radar – Schnaufer shot down his fifth bomber to become an ace; by the end of 1942 he was credited with seven kills. With Rumpelhardt absent through illness and various professional courses for much of 1943, Schnaufer flew with a succession of other radio operators. His expertise growing with each

mission, Schnaufer's tally was also on the rise. On the night of May 29th/30th he again achieved three victories in a single sortie – this feat was repeated yet again on June 29th. With seventeen night kills, Schnaufer was promoted to Oberleutnant on July 1st.

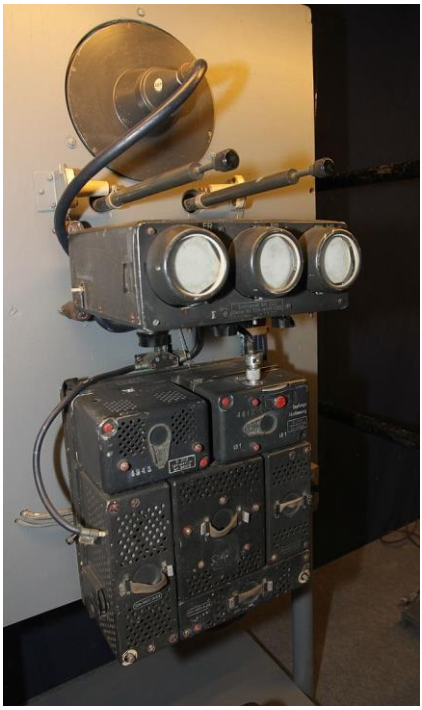
Radio control center for night fighters.

The next month, Schnaufer was posted to IV./NJG 1, operating from Leeuwarden in the Netherlands. Appointed the unit's new Staffelkapitän, he was also awarded the German Cross in Gold shortly afterwards. With standard operating procedure for the German night fighter force evolving, the crew of the Bf110 in the night fighter role was increased to three and Schnaufer and his radio operator now found themselves accompanied by an air gunner. The next stage in the evolution of the night fighter was more extreme – Schnaufer was one of the first pilots to trial the new upward firing Schräge Musik cannons fitted to the German night fighters.

On the night of December 31st, now reunited with Rumpelhardt, Schnaufer shot down his 42nd enemy aircraft and was awarded the Knight's Cross. However, Schnaufer was forced to take a break from flying for several weeks in early 1944 when, having been grounded due to appendicitis, be also burst his stitches and saw a second period of inactivity whilst recovering. He returned to front line duties in March 1944 as Gruppenkommandeur of IV./NJG 1, a posting which was backed up with a promotion to Hauptmann in May. On the night of May 25th he shot down five British bombers in a single night. Four kills on the night of June 22nd saw the addition of Oak Leaves to his Knight's Cross. It was only a little over a month until the much coveted Swords were also added to his Knight's Cross – presented by Hitler himself – whilst his radio operator and gunner were also awarded the Knight's Cross, leading to the trio being the most highly decorated night fighter crew in history. On the night of October 9th, Schnaufer shot down his 100th aircraft – he was awarded the Knight's Cross with Oak Leaves, Swords and Diamonds.

At the age of 22 – and with the German night fighter force regularly re-basing as they retreated in the face of the advancing allies – Schnaufer was made the youngest Geschwaderkommodore in the entire Luftwaffe, taking command of NJG 4

in late November. By the end of the year his tally had increased to 106, overtaking Helmut Lent to become the most successful night fighter in the world.



Lichtenstein UHF-band

In February he was informed by Herman Goering that he would be made Inspector of the Night Fighter Force, but Schnaufer requested to remain in his position as a front line pilot. Arguably his greatest achievement occurred on February 21st 1945 – he shot down two Lancaster bombers in the early hours; relaunching for a second sortie late in the evening he claimed seven Lancasters destroyed in 19 minutes – totaling nine bombers in a 24 hour period. His last kill was claimed on March 8th – his 121st victory.

After a period of testing the Dornier Do 335 for its suitability as a night fighter, Schnaufer was captured by advancing British forces in May 1945. He was interrogated with great interest by the RAF before being released. Schnaufer returned to his home to help his mother with the family wine business following the armistice. In July 1950, whilst on a business trip to France, Schnaufer was involved in a car crash near Bordeaux. After remaining unconscious for two days, he passed away on July 15th; he was 28 years old. With only 1100 flying hours logged, Heinz-Wolfgang Schnaufer was the most successful night fighter ace in aviation history.

'Jagdpanzer 38(t) 'Chwat', captured by Polish insurgents in 1944' camouflage
by RazNaRok | download here

[PROFILE] Jagdpanzer 38(t) 'Hetzer'

17. February - Author: Jan "RayPall" Kozák

In December 1943, a conference of the German High Command (Oberkommando des Heeres, OKH) was held. The topic of this meeting was a development of new, fully enclosed light tank destroyer which would be cheaper and easier to mass-produce than the much larger Jagdpanther and Jagdtiger tank destroyers. To avoid problems with reliability, the vehicle was planned to be based on the chassis of the ex-Czechoslovakian PzKpfw 38(t) light tank, which was already phased out of production as obsolete, but its reliable running gear was a valuable asset.

Development was assigned to the BMM plant in Prague, and progressed fairly quickly - the project was approved on 17th December 1943, with prototypes ready in March. As the vehicle used a reliable and thoroughly tested chassis, there was no need for any extensive tests and serial production was scheduled to begin in April 1944. According to some sources, the original designation was Jagdpanzer 38(t) für 7,5 cm PaK 39 L/48. However, the vehicle became popular by the name Hetzer ("Baiter"). Some sources claim that originally the name Hetzer was assigned to BMM's planned project of the light tank destroyer E-10, but by mistake it was added to Jagdpanzer 38(t)'s documents and was thus perceived (and then used) as official by soldiers.

A J.Pz. 38(t) Hetzer in Hungary, 1945

The Hetzer had an interesting design. It was quite small - only 1.85 meters tall and 2.63 m wide. The frontal upper plate was 60 mm thick, sloped to 60 degrees from the vertical, while the lower frontal plate had the same thickness with the slope reduced to 40 degrees. The side armour was much thinner – albeit well sloped, it had a thickness of only 20 mm. As a main armament the Hetzer was fitted with a 7.5 cm PaK 39 L/48 anti-tank gun. This weapon was able to pierce 82 mm of armour sloped up to 30 degrees at a range of 1000 m, using standard APCBC Pzgr.39 shells with a muzzle velocity of 750 m/s. As a secondary armament a single 7.62 mm MG 34 machine gun was mounted on top of the vehicle, remotely controlled by the commander. The total weight of the vehicle was 16 tonnes, and it was propelled by a Praga AE 2800 V6 engine with a maximum power output of 150 HP, allowing the Hetzer to reach a maximum speed of 40 km/h on paved roads and 13 km/h across open terrain. The crew consisted of four men - commander, gunner, loader and driver.

The first Hetzers were delivered to operational units in July 1944 and the vehicle quickly proved itself as an effective tank destroyer, both on the Eastern and Western fronts. Due to its small size it was easily concealable, thus being a very hard target to spot or hit. Its gun was able to penetrate the armour of nearly all Soviet or Western Allied vehicles at combat ranges, while its frontal armour offered a great degree of protection against nearly all Allied weapons. Approximately 2800 Hetzers were produced from April 1944 to the end of war, including command vehicles (Panzerbefehlswagen Hetzer) and Bergepanzer 38(t) armoured recovery vehicles. Production continued postwar in Czechoslovakia under the designation ST-I, ending in the 1960's. More than 150 Hetzers were also ordered by the Swiss army, which used it with slight modifications under the designation G-13

In War Thunder, the Jagdpanzer 38(t) Hetzer is a German tank destroyer with a BR of 4.7. It is the pinnacle of the PzKpfw 38(t) line in the German Tech Tree, following two PzKpfw 38(t) variants and the Marder III, and is a member of the "4.7 German TD Brotherhood" along with the StuG III Ausf.G and Jagdpanzer IV. When compared to its two bigger "brothers", the Hetzer is equally

armed and less mobile, but it is easily the smallest vehicle and has arguably the best armour from the three - its sloped, 60 mm thick upper frontal armour offers up to 108-138 mm of effective armour, while the lower frontal plate has 84-91 mm of effective thickness. As usual for TD's side armour is very thin, having only 20 mm of thickness. The Hetzer's maximum speed is 42 km/h across a flat surface, which it can reach in 17 seconds.

The Hetzer's firepower is adequate for its BR. Its 7.5 cm PaK 39 L/48 gun has a maximum penetration of 117 mm at point-blank range, and with basic APCBC ammunition, giving you enough firepower to defeat most of the opposition at BR 4.7. Additionally, you can unlock Pzgr.40 APCR ammunition, boosting maximum penetration to 152 mm, or Hl.Gr.38B HEAT rounds with 80 mm of penetration at all ranges. The reload rate is 7.6 seconds with a trained crew, on a par with other 4.7 German TD's.

In terms of gameplay, the Hetzer should be played as a typical tank destroyer. Find a suitable position, use your low profile and small dimensions to conceal yourself, and then fire upon unsuspecting enemies from mid-to-long range. However, if the enemies are closing in, it is better to fall back and relocate. Always try to minimize your vulnerability from the front by covering your lower frontal plate whenever possible, as its penetration will most often result in disabled transmission. As with all TD's, do not get flanked at any cost - thin side armour can be penetrated even by the lightest guns in the game, and there's ammunition stowage directly under it.

A Hetzer in the Kubinka Tank Museum, Russia

If the tables are turned and you are facing a Hetzer, try to shoot its weaker armour at the lower frontal plate. Alternatively, you can simply load APCR and shoot directly through the frontal plate – due to the position of its crew, a well-placed APCR shot will most likely knock out three crew members at once, disabling the whole vehicle. Always try to close the distance to a Hetzer to minimize its armour protection, and if you're not sure you have enough firepower to penetrate it frontally, flank it whenever possible and exploit its thin side armour to detonate its ammunition.

Over all, the Hetzer is a good TD, trading some speed and gun traverse for a small profile and great armour for a vehicle of its size. As said before, it is the end of PzKpfw 38(t) line, but it should be viewed as a good alternative to the StuG III Ausf.G and Jagdpanzer IV. And don't forget – Hetzers gonna Hetz!

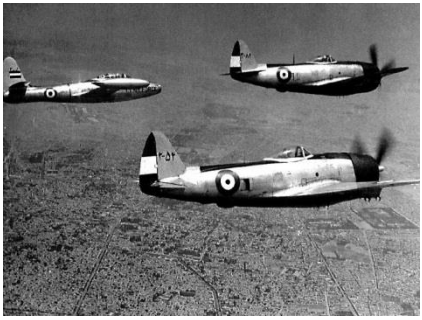
With an coming update, we will include the 'Chwat' ('Brave') decal to War Thunder, which was painted on a Hetzer captured by polish insurgents during the Warsaw Uprising of 1944 made by Branislav „InkaL" Mirkov

F-86 Sabre, Golden Crown Imperial Iranian Air Force

[AIR FORCES] Iranian Air Force

18. February - Author: Sergej "NuclearFoot" Hrustić

The Imperial Iranian Air Force (IIAF), as it was formerly called, was first established as a branch of the Imperial Iranian Armed forces by the Iranian ruler, Reza Shah, in 1920, in response to the rising importance of aircraft in warfare, and in accordance with Iran's own modernization. In the years after it was founded, the IIAF used exclusively foreign (European) aircraft, since they lacked the technology to make their own. The first country to accept their request was Germany, followed by France and Russia. However, simply buying the planes wasn't enough. The first Iranian pilot, Colonel Ahmad Khan Nakhjavan, graduated from flight school in France in 1925. This paved the way for the beginnings of the Iranian air force.



F-84 and two P-47 Thunderbolts formation comparison flight

During the following years, pilots were trained in France and Russia, and by the onset of WWII, the IIAF had around 400 battle-ready aircraft and pilots to fly them.

By 1941, Iran was a neutral country. They had decided not to participate in

the war on either side. However, Britain and the USSR felt that Iran's trade routes with Germany were an indication of their true allegiance. In an effort to secure valuable oil deposits needed to supply their troops in North Africa, the British and Soviets launched a coordinated surprise attack on Iran, with the former attacking from the Persian Gulf and from Iraq, and the latter from the Caucasus. The Iranian did not have time to prepare for a resistance, and they quickly crumbled under the pressure of the two superpowers.

Even though only 6 Iranian fighters were shot down, they were one of the few which actually made it to the sky. The others were either captured, dismantled, or destroyed, and the IIAF was effectively ruined. Some of those included the Tiger Moth, a local Iranian fighter and trainer, of which there were reportedly 109, and many American Hawkers. An interesting thing to note was also that Reza Shah, with barely 100 hours of flight experience, was regularly flying reconnaissance missions above Iran. This would be the first and possibly last time that the leader of a country personally participated in a war.

T 33 Shooting Star, Imperial Iranian Air Force

After the end of World War II, Iran's government became largely pro-Western, and the US and UK began selling its aircraft to Iran. Though their economy was crippled, Iran still managed to reopen their pilot training schools, as well as purchase new planes for their trainees to use. All the students who entered graduated, and the IIAF was back to becoming a proper airforce. By the 1960's, the IIAF was once again a modern airforce, with over a hundred F-84s and F-86s (in total). By the 1970's, the IIAF had a formidable number of modern airplanes, and well-trained pilots to use them. Their main airplanes of choice were the F-14 Tomcat and F-4D Phantom, and by the late 1970's they were the only airforce in the world other than the US navy to be using F-14s. Jalil Zandi, an F-14 Tomcat pilot, became distinguished in the Iran-Iraq war as not only the best Iranian ace, but also as the best F-14 pilot in the world, with 11 confirmed kills and several more claimed ones.

Hawker Typhoon Mk. 1b, 609 Squadron, RAF Torney Island, 6 June 1944.
camouflage by Kabanovich | download here

[PROFILE] Typhoon IB

19. February - Author: Henry Rothwell

During the prototyping process in 1938 and indeed well into the service life of the Hawker Typhoon, an inordinate amount of dangerous and indeed downright lethal flaws arose, including engine fires, carbon monoxide poisoning and, in severe cases, the rear segment of the fuselage coming free.

Sidney Camm, the lead designer of the project, pressed on however, and by 1943, with the help of many brave pilots, managed to eliminate, or at least mitigate, many of this aircraft's worst excesses. One of the chief troublemakers of the early days was the Napier Sabre engine, which often unnerved new pilots with the decibels it gave off alone, being a full five times louder than the Merlin. The chin radiator - arguably the aircraft's most distinctive external feature - was also a by-product of this powerplant, which, troublesome or not, generated an enormous amount of power. Coupled with the (usually) four bladed de Haviland or Rotol propeller, which had a diameter of 13 feet or almost four metres, it was capable of pulling

the Typhoon through the air at speeds in excess of 400 mph or 643 kph.

This ensured its survival, as although it didn't perform well as a high altitude fighter, at medium and low altitudes it was the only British fighter capable of chasing and catching the German fighter-bombers which had been plaguing the South Coast of England and, unless they were caught red handed, getting away with it. Now, suddenly on their way home they would find themselves being closed in upon by a beast of a machine which was fully capable of knocking them out of the air now the 12 7.6mm machine guns of the 1a had been replaced with four rather more useful 20mm Hispano cannons.

The second role it excelled in, much like its predecessor the Hawker Hurricane, was as a ground attack aircraft. The thick strong wing was ideal for carrying a mixture of ordnance and the 20mm cannon could also make short work of unarmoured ground targets. It could carry up to eight rockets with 60lb or 27 kilo warheads, or eight of the lighter 25lb or 11 kilo armour piercing rockets. Alternatively it could carry a pair of 500lb or 226 kilo bombs, with later versions doubling that.

In this capacity the Typhoon turned the tables on the Germans and by 1943 was disrupting supply lines and destroying targets of opportunity throughout Northern France. In August 1944, during the Battle of the Falaise Pocket – widely acknowledged as the decisive engagement of the Battle of Normandy, the Typhoons of the 2nd Tactical Air Force managed to knock out 175 enemy tanks in a single day.

Hawker Typhoon Mark IB (s/n EK139, "HH-N") "Dirty Dora", of No 175 Squadron, Royal Air Force, undergoing servicing in a blast-walled dispersal point at Colerne

In the game we have two three Typhoons, the 1a, the premium 1b and 1b/l. The following specifications are for the latter.

The Typhoon 1b/l is a Tier 3 aircraft with a battle rating of 4.7. It has a maximum speed of 410 mph or 661 kmh, a maximum altitude of 37,000 feet or 11,500 km and a turn time of 19.4 seconds. It's armed with four 20mm Mk.II Hispano cannon with 550 rounds of ammunition and a reload time of 40 seconds. It can also carry 8 76mm RP-3 rockets and has a bombload of 1000lbs or 453 kilos.

The 1b/l is far and away my favourite Typhoon in the game, and in fact one of my favourite British aircraft in the game. And although it carries an impressive amount of ordnance, if I take any out with me I tend to drop it at the first target of opportunity and use it as a straight fighter.

It's fast enough to get in and out of trouble on its own terms, and although turn fighting is possible, whatever you manage to line up in its sights is almost guaranteed to disintegrate when caught by the Mk.II Hispanos.

In one of the upcoming updates, we will introduce: the Emblem of No. 609 Squadron RAF and Emblem of No. 193 Squadron RAF made by Jej 'CharlieFoxtrot' Ortiz and Colin 'Fenris' Muir

Premium Tuck's Gladiator Mk.II available in game for 250GE

[PROFILE] Gloster Gladiator Mk II

20. February - Author: Scott "Smin1080p" Maynard

At a time when the biplane design was reaching its very limits in design capabilities, one biplane fighter shone out in RAF service. Despite being eclipsed by its monoplane brethren even from its very introduction, the Gloster Gladiator played its role in the Second World War superbly, fighting in all major theatres of conflict and operated by many nations.

RAF Gladiators practice formation flying

For a biplane, the Gladiator had many novel and unique features that made it a modern step up from what the RAF had been used to in its fighters: a fully enclosed cockpit, internally sprung landing gear, flaps and a four gun armament configuration of either Lewis, Vickers or Colt Browning machine guns. Its powerplant was a Bristol Mercury radial engine, similar to those found on the Bristol Blenheim. Designed in the mid 1930s as a private venture by Gloster to improve their Gauntlet fighter, the SS.37 first flew in September of 1934 and was presented to the Air Ministry in 1935 for evaluation. By July of that year, it received the name "Gladiator" and was ordered into production for the RAF. The fighter surpassed all

designs that the RAF currently had in its inventory; however it was not long after its first flight that its replacements and ultimately it successors were soon arriving. 1935 also saw the first flight of Hawker's sturdy monoplane fighter, the Hurricane, soon followed in 1936 by the iconic Supermarine Spitfire.

Finally introduced in February of 1937, it became a mainstay on frontline squadrons until the arrival of the Hurricane in December and the Spitfire soon after in 1938. When war broke out in 1939 the Gladiator was in the process of being replaced in front line service with RAF Fighter Command; despite this however, it participated in the Battle of Norway with No. 263 Squadron and as the navalised Sea Gladiator with 804 Naval Air Squadron, and was flown by the Belgian Air Force in 1940. Gladiators also took part in the Battle of Britain with No.247 Squadron. Perhaps the most famous use of the Gloster Gladiator in World War 2 was in the defence of Malta: six Sea Gladiators - three of which were named "Faith", "Hope" and "Charity" - protected Malta from the Regia Aeronautica and held out until Hawker Hurricanes of No.261 Squadron could arrive to assist the struggle. Whilst there were more than 3 Gladiators stored on Malta at the time, it was rare that any more than 3 would be operational at once. Most were consumed for parts and replacements, however the inspiring story of the 3 Gladiators showed that the type still had some fight left in it, despite being outclassed, outgunned and out matched.

Gladiators being refueled ready for combat

Within War Thunder, the Gloster Gladiator Mk II is a Tier 1 biplane fighter and one of the first RAF aircraft you will come across in game. This aircraft is the spearhead of the legendary Spitfire fighter line that will ultimately conclude back with Gloster's first jet aircraft, the Meteor. Once you have progressed from your Hawker reserve biplanes, the Gladiator should be your first choice for research. This aircraft, whilst still carrying many features from the early reserves will have a much better top speed, offensive armament, operational landing flaps and allows you to learn much more about British fighters before jumping right into a monoplane such as the Hurricane. The Gladiator's sturdy, reliable yet maneuverable characteristics make it an excellent low tier fighter, which in

the right hands can deal with all threats it's able to meet. Armed with 4 x 7.7mm Browning machine guns with a total of 2000 rounds, you should have no issues with the firepower of this aircraft at its tier. As well as the standard Mk II within the research tree, there is also the Ace pilot "Bob" Stanford Tuck's Gloster Gladiator Mk II available as a premium aircraft for the British, which is an excellent starting premium fighter to complement a low tier lineup.

With an upcoming update, we will add the decal used by 3 80 Sqn Escadrille Les Cometes (RAF/BAF/FAP) made by Colin 'Fenris' Muir

Dewoitine D.520 Groupe de Chasse GC III/6 Sous-lieutenant Pierre Le Gloan, camouflage created by Loldoors | Download here!

[ACE] Capitaine Pierre Le Gloan

23. February - Author: Mark Barber

The elite group of men and women who are referred to as 'aces' is selective at best; nations originally disagreed on not only the exact number of kills required but also the best term used to describe the elite pilots who met the standard. Even more elite is the fraternity made up of those who achieved the coveted title 'Ace in a Day' – those who shot down five or more aircraft within a 24 hour period.

French flying virtuoso Pierre Le Gloan was one of these few men. Not only did Le Gloan achieve the title of Ace in a Day, he was perhaps the only man who combined this remarkable feat with becoming an ace for the allies and the axis forces.

Born in Kergrist-Moëlou in Brittany in the northwest of France in January 1913, Pierre Le Gloan was only five years old when the first major air war the world had ever seen came to a halt in the skies above his own country. Le Gloan was not from a particularly affluent family; for a young boy growing up with a growing interest in aviation, a career as a pilot seemed at times like an unrealistic dream. However, hard work as an adolescent paid off and the teenaged Le Gloan won a civil aviation scholarship, funded by the French government, which gave him his first real taste of flying.

The scholarship led on to Le Gloan's entry into the French Air Force in

1931. During flying training he discovered he had an aptitude for formation flying; a keen marksmen, he also quickly took to air-to-air gunnery. A natural pilot and a fine shot, Le Gloan was selected for training as a fighter pilot. By 1935 he had been certified as a Flight Leader with the 6th Fighter Wing. By September 1939, with the outbreak of World War II, Le Gloan was an experienced and respected Sergent with the 5th Escadron of Group de Chasse 3/6, equipped with the Morane-Saulnier MS.406 fighter.

Pierre Le Gloan

When compared to the vicious, swirling dogfights of hundreds of aircraft which ravaged the skies of Western Europe later in the war, the air war over France in late 1939 began slowly. On November 23rd, their unit charged with defending the skies over Paris, Le Gloan and Lieutenant Martin shot down the Group's first confirmed victory – a Dornier Do17. With the pace of fighting slowly picking up, Le Gloan and his Flight were involved in more aerial combat and in February 1940 he was awarded the Croix de Guerre for his leadership. On March 2nd he shot down another Do17.

In May 1940, the 'Phoney War' for France came to a crashing halt as the forces of the Wehrmacht swept across the border; Le Gloan and his countrymen were thrust into bitter and violent fighting. As the fighting raged and Le Gloan's squadron took to the skies time and time again, he shot down two Heinkel He111s but by early June the entire Group had been reduced to only four operational fighters. With Le Gloan now promoted to Adjudant, The unit was withdrawn to re-equip with the more capable Dewoitine D.520 fighter. Shortly after this the situation for France deteriorated further when Italy declared war.

With Le Gloan's squadron already at Le Luc airfield in the south of France for their conversion to the D.520, they were ideally placed to face this new threat as the first bombing raids swept across the border with Italy.

Morane-Saulnier M.S.406

On June 13th, Le Gloan shot down two Italian Fiat BR.20 twin engine bombers. Two days later, Le Gloan would achieve nation-wide fame: flying in company with Capitaine Assolent, the pair engaged a formation of twelve CR.42 fighters. Although heavily outnumbered, the speed and punch of the D.520 was used to good effect against the comparatively archaic Italian biplanes – Le Gloan shot down three fighters whilst Assolent claimed a fourth. But Le Gloan was not finished – on route home he encountered another group of Italian aircraft and shot down another CR.42 and a BR.20.

His feat of shooting down five enemy aircraft in a single flight – achieving Ace in a Day – had not been achieved by a French fighter pilot since Rene Fonck had shot down six aircraft in a single day in May 1918. Fonck himself travelled down to congratulate Le Gloan and announce his field commission to sous-lieutenant. As an 11-kill ace, Le Gloan was now a national hero.

However, despite the aggression of French servicemen both in the air and on the ground, France capitulated to the Germans. The country's military was torn in two as thousands fled to allied nations to carry on the fight against the German invaders, whilst the newly established Vichy government was forced to work alongside their German conquerors. Le Gloan found suddenly himself on route to Syria as part of the now axis Vichy French forces. During the summer of 1941, Le Gloan became an axis ace when he shot down six RAF fighters.

The situation for the Vichy French forces became even more complicated in November 1942 with the allied invasion of North Africa – loyalties to the Vichy regime were becoming more strained and many French units refused to oppose the allied landings. Le Gloan found himself again on the allied side of the conflict. In May 1943 his Group converted to the P-39 Airacobra.

Dewoitine D.520 fighter

On September 11th 1943 whilst flying a two aircraft patrol off the coast of

Algeria, Capitaine Le Gloan ‘s P-39 developed engine problems and he turned for home, his engine trailing smoke. His engine failed and he attempted to carry out a forced landing in the vicinity of Ouillis. With fuel still present in the belly tank of his fighter, the aircraft exploded on contact with the ground and Le Gloan was killed instantly.

Remembered as a brilliant pilot and natural aviator, Pierre Le Gloan’s successes for both sides of the largest air conflict of all time make him unique in the annals of aviation history.

In one of the future updates we will introduce "African Mask", Fighter (Pursuit) Group III/6, 5th squadron insignia made by Jej 'CharlieFoxtrot' Ortiz

[PROFILE] T32 Heavy Tank

24. February - Author: Adam “BONKERS” Lisiewicz

After the successful deployment of M4A3E2 assault tanks in Europe in the summer of 1944, the US Army saw the need for more heavily armored tanks to enter the battlefield. In December 1944, High Command issued a proposal to the Ordnance Board to create a new version of the M26 Pershing tank that would incorporate thicker armor and increased protection.

The Ordnance Board complied with that request and began work on a new heavy tank. At first, the desire was to simply up-armor and up-gun the existing Pershing – this resulted in the development of the T26E5. However, soon a new idea was pitched – to design a completely new vehicle that would share as many common parts as possible with the M26 to ease logistics and maintenance. In February 1945, the Ordnance Board responded to the US Army’s requirement with the proposal of building four prototype models of such a vehicle. In March, the wish was granted.

The development of the new machine was given high priority – both the wooden mock-up model and most of the blueprints were ready by April 1945. The first prototype was constructed and completed by the Chrysler Automotive Plant in Detroit

in January 1946. The new tank's powerpack featured a V12 Ford GAC engine, capable of producing 650 net bhp @ 2800 RPM (770 gross bhp @ 2800 RPM), coupled with a new cross-drive transmission similar to the one used in the T29 heavy tank prototype. The new vehicle used a torsion bar suspension similar to the one used in the M26. The armament of the T32 consisted of a 90 mm T15E2 high-velocity tank gun and a coaxial .30 caliber machine gun mounted in the turret .The first two prototypes also featured a hull-mounted machine gun; however prototypes #3 and #4 omitted that feature. The first two prototype tanks were sent to the Aberdeen Proving Grounds for testing purposes – the third prototype was sent to the Fort Knox test facility, while the last one stayed in Detroit for engineering purposes. The T32 was, however, far too late for World War Two. After severe budget cutbacks to all branches of the military after the end of the conflict, no serial production was ordered. The prototypes were still used as test subjects for new technologies, which proved useful in the future.

In War Thunder, the T32 Heavy Tank is situated in Era IV of the US Ground Forces Tree, with a Battle Rating of 7.0 in all game modes. The 90 mm T15E2 gun is capable of firing two types of ammunition – the T43 APCBC shell, capable of penetrating 207 mm of armor @ 100 m range, and the T42 HE shell, with 17 mm of penetration at all ranges. The armor protection of the vehicle is fairly solid – the sloped frontal hull armor plate offers an equivalent protection of around 165 mm of armor, while the front of the turret is protected by nearly 300 mm of armor. This is, however offset by the thin side and rear armor of the hull – 76 and 50 mm respectively. The vehicle's mobility is fairly standard, with a maximum speed of 35 km/h.

Thanks to strong frontal turret armor and an excellent 10 degrees of gun depression, the T32 is the master of the "hull-down" tactic , capable of using hilly terrain to its advantage. The penetration of the standard shell is fairly adequate for the opposition the tank will meet; however the lack of an explosive filler means the shots need to be well aimed to score critical hits. While fighting the T32, try to get around the sides and rear, to have shots at the thinner armor of the hull. Also remember that the reload time of the gun is fairly lengthy at nearly 19 seconds, which means the T32 will be defenseless for a fairly lengthy amount of time after firing.

Overall, the T32 is a tricky machine that requires a skilled driver with a knowledge of advantageous positions to fully spread its wings. The T32 will lead you to the pinnacle of the US Heavy Tank branch – the M103.

[HISTORICAL] Schwere Panzerabteilung 507

25. February - Author: Jan “RayPall” Kozák

History of this heavy tank battalion start in May 1943 by redesignation and reorganization of I./Panzer-Regiment 3, stationed in Wien-Mödling. In June 1943, unit was redesignated back to I./Panzer-Regiment 3 and equipped with PzKpfw V Panther tanks, but in 28th September 1943, final redesignation occured, and unit was officially named 507th Heavy Panzer Battalion (schwere Panzer Abteilung 507 in German, abbreviated to sch.Pz.Abt.507). As usual, unit was consisting of one HQ staff company, three tank compaines and one workshop company, supported by several supply and support detachments. After forming up the personnel, unit was sent to Wezep/Zwolle in Netherlands, where it started to receive PzKpfw VI Tiger heavy tanks. Between 23th December 1943 and 25th February 1944, sch.Pz.Abt.507 accepted 45 Tigers, with another six Tigers arriving in early March 1944, bringing the strenght of the unit to 51 Tigers. Shortly after that, sch.Pz.Abt.507 was sent to Eastern front, particularly into Lvov area, where it entered active service.

Between 24th March and 2nd April, sch.Pz.Abt.507 was heavily engaged in battle against Soviet forces, and lost

seven Tigers - six to enemy action and one destroyed by it's own crew after being disabled. Losses were replaced by delivery of six Tigers in April 1944, and another six Tigers brought total strenght of the unit to 55 Tigers (one Tiger lost on 7th April). On 31th May 1944, sch.Pz.Abt.507 was transferred under command of Army Group North Ukraine as a part of 1st Panzer Army with 45 operational Tigers.

Between 30th June 1944 and 2nd July, sch.Pz.Abt.507 was transferred to Baranovichi area and again was engaged in heavy fighting, losing ten Tigers in action (7 of them in a single day on 20th July. Nevertheless, unit's numbers were boosted by delivery of total 12 Tigers (six of them transferred from sch.Pz.Abt.506) to 55 operational Tigers. Unit then from 14th January 1945 participated in battles around Vitebsk and Narev, where it was able to deal severe damage upon Soviet forces, but suffered heavy casualties. Up to 22 Tigers of the unit had to be blown up by explosives on eastern bank of Wisla river because there were not enough ferries to get tanks across the river. On 1st February 1945, sch.Pz.Abt.507 had only seven Tigers, none of them operational.

On 6th February, two companies of the 507th were sent back to Germany (remaining company returned some time later without any operational tank). In Seeneläger, it received 21 PzKpfw VI Ausf.B Tiger II heavy tanks. With these tanks, unit then fought American forces in central Germany. Sch.Pz.Abt.507 Königstigers were responsible for halting American assault near Paderborn, conducted by Task Force Welborne from 3rd Armoured Division. Germans inflicted heavy losses on American armour, and amongst the casualties was even 3rd Armoured Division's commander, General Maurice Rose.

Between 11th-17th April 1945, surviving personnel of the unit was relocated to Prague-Milovice, where it was redesignated Panzer-Abteilung 507, supposed to be equipped by Jagdpanzer 38(t) Hetzer tank destroyers. Ten of these vehicles were accepted on 6th May 1945, and were subsequently used in attempt to breakthrough to US-occupied western Czechoslovakia in order to surrender to US forces. This happened on 12th May 1945, and remnants of the unit surrendered to American troops, only to be handed over to Red Army shortly after. At the end of Second World War, sch.Pz.Abt.507 combat records claimed more than 600 enemy tanks and armoured vehicles destroyed, in exchange for 104 own tanks lost.

Captured Vickers Wellington Mk.Ic. Unit: Luftwaffe test center. Serial: KX-E (L7788) camouflage created by Paegas | Download here!

[PROFILE] Vickers Wellington Mk Ic series

26. February - Author: Joe "Pony51" Kudrna

Performance wise the Willington was not notably remarkable, its strength lay on the inside. Devised by one of the greatest innovative thinkers in history, Sir Barnes Neville Wallis devised a geodesic (geodetic) structure resulting in an exceptionally strong airframe. Together with Reginald Kirshaw "Rex" Pierson they designed their record making "Vickers Wellesley" opening the way for the "Wellington" and larger "Warwick". With high aspect ratio wing and spacious fuselage it proved capable of handling a myriad of missions including early airborne radar and robust enough to absorb severe damage and fly home. Although the bomb bay configuration limited bomb size its payload was slightly more than the Heinkel He-111H-3 and with greater range. It is also one of the first aircraft to have a powered turret in the extreme tail with a very wide arc; however it still was inadequate to defend itself against attacking fighters and early models lacked self sealing fuel tanks. Still, this aircraft was admired by crews and affectionately called "Wimpy" after Popeye's hamburger loving friend due to its portly appearance. Over 11,000 made it equiped many RAF squadrons including those comprised of foreign crews like the Polish (4 squadrons), New Zealand (No. 75), and Czech (No, 311) one of which was captured by Germans who used it for intel and training. "Viking", a passenger transport variant, became the world's

first pure jet transport prototype aircraft in 1948.

Wellington at RAF Museum Cosford undergoing complete restoration showing the geodesic frame with the tan areas the fabric covering over the structure

In the game the Wimpey is a solid easy to fly bomber and very profitable with a 4500 lb (2041 kg) bomb load. In game all the Mk I's (Mark 1) including Premium German are Tier 2, 3.3 BR in both AB and RB . Non-premium default bomb load is paltry 10x 250lb (117 kg) so upgrading is imperative to unlock the 18x 250 or 9x 500 "pounders" (500lb (226 kg)) option. In AB the winning tactic is to climb high and do base bombing with 500's "from orbit"; it helps to have escorts. In RB you air start so you have the advantage to trade altitude for airspeed and bomb ground targets and retreat before ground starting enemy fighters arrive, however be close to friendlies to intercept chasers.

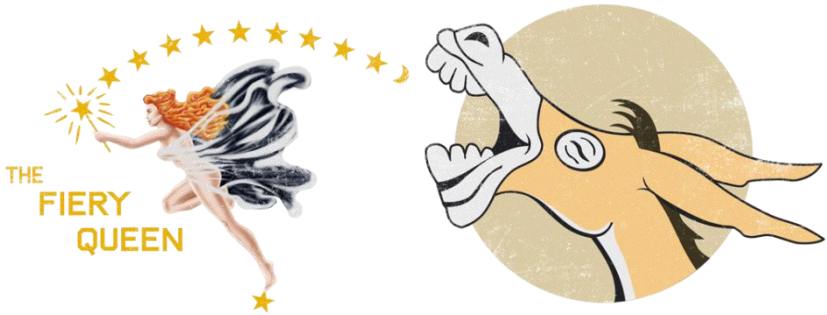
Upgrading and crew training any bomber is very important, for the UK Wimpey one must do this in order: Unlock the Turret 7mm ammo first, then the TC mk.I (torpedo) rack, and then the LBC mk.I. Unlocking the 7mm ammo access "Universal" AP-I load as one works up to the bomb rack for 18x 250 or 9x 500. After that you can pursue your choice of upgrades. As with all bomber, crew training with at least "Expert Qualification" is important for profitable missions. UK Wellington's offer 2x 1000lb (with 6x 250lb) and single 4000lb bomb, the latter being best for base bombing. There is a torpedo option in the rare case you can use it and are brave enough to try. The German Premium is fully unlocked but bomb selection limited to 18x 250's or 9x 500's and insure ammo is on "Universal".

Wimpey's are great Tier 2 turret platforms, wide arcs and stable flight, and except for engine fire are rugged. If your flight controls are shot out, adjustment of engine power will allow stable flight and more opportunities to fight back. Just remember it has only .303 (7mm) mg's so it is more luck to earn kill with them.

If you attack a Wellington, focus on engines, they are relatively easy to start on fire. While you should not worry too much about the turret, do not hang around either, and dead 6 attack is still dangerous.

Wing outboard of engine, showing main spar in the geodesic lattice work

Both the UK and German Mk I's are identical the only difference being the UK Mk.1c/Late model was move beam (side) turrets from above the wing to behind it. It is excellent bomber on UK side, and on German side an excellent alternative to the He-111H-6.



In one of the upcoming updates, we will introduce: "Braying Donkey" Emblem, No. 37 Squadron RAF, Egypt 1942 and "The Fiery Queen" Pin-up, No. 425 (Alouette) Squadron RCAF made by Jej 'CharlieFoxtrot' Ortiz and Colin 'Fenris' Muir

Bf 109 G-2/Trop 6./JG 53 "Yellow 6" , Sicily, first half of 1943 camouflage unlockable for shooting down 180 enemy aircraft

[HISTORICAL] “Invasion of Sicily”

27. February - Author: Aaron “anglomanii” Lentz

After the hammering of North Africa and Tunisia, the Italians set about establishing a defensive line around the Italian peninsular. Available to this defence was some 30 Divisions, though many units were lacking training and not fit for front line service. On the island of Sicily, however, the Axis forces were deprived of much in the way of manpower and material. Though units such as the 4th "Livorno" Motorized Infantry Division (formally Mountain Division) and the 28th "Aosta" Infantry Division maintained their formidable reputations, the majority of available manpower was in coastal defence units scattered around the island at key points.

The 315,000 men in the Italian 6th Army under General Alfredo Guzzoni did have a complement of German forces lead by General Field Marshal Albert Kesselring to supplement its deficiency of veteran troops. Of the 80,000 German troops eventually available, units of the Luftwaffe’s Panzer Division Hermann Goring and the Heer 15th Panzergrenadier Division formed the hardened core of the German commitment, although many others were not front line troops, those being Luftwaffe and Heer support staff.

When the Allied landings finally took place on the night of the 9th/10th of July, the island had been harassed by allied bombers and fighter bombers,

which had paid special attention to the island's airfields, road, rail and port infrastructure. Just after midnight on the cold and windy morning of the 10th and with gusting winds, paratroopers from US and British units landed just inland of the beachheads. Many were blown off course and scattered but even these units managed to sow confusion and panic amongst the defenders so that when the amphibious landings took place the defenders were already wrong footed.

All across the landing beaches tactical air support and naval fire suppressed and obliterated the coastal defence sites, causing many casualties; the bravery of these units were not in question as they fought hard and with determination in many cases, but were hampered by a lack of training, equipment and being vastly outnumbered. They were unable to prevent the concentrated forces of the British 8th Army and the US 7th Army. The Italian forces were dispersed along incredibly long fronts, the coastal areas at the Gulf of Gela and the Gulf of Noto were each held only thinly by coastal defence forces.

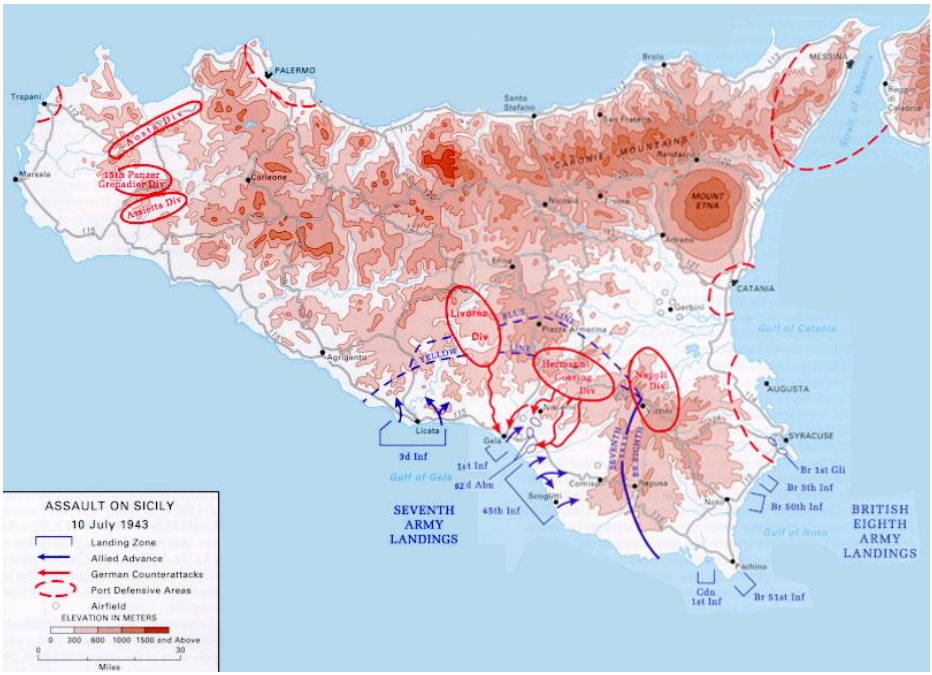
As the sun rose over the town of Gela, Italian Stuka Ju-87 dive bombers descended on the landing fleet, these were followed throughout the day by SM-79 torpedo bombers and German Ju-88 bombers. Only a few P40's were available to see off these attackers and during the attacks the panicked naval gunners fired at these aircraft by mistake. It was during these early morning attacks that the USS Maddox was sunk. Despite this, US forces landed and took the town of Gela in quick time.

A US crew checks their Sherman tank after landing at Red Beach 2, Sicily on 10 July

The supporting German and Italian forces held in reserve now swung into action, advancing on the beach at Gela. An Italian counter attack was the first to arrive: infantry of the Livorno Division support by light tanks pushed hard on the American positions, but were repulsed with many casualties inflicted by the defenders in the town and supporting naval artillery. The Hermann Goering Division arrived by early afternoon with the 15th Panzergrenadiers in company; they attacked the center of the bridgehead with Tiger I's and Panzer IV tanks and broke through the 1st Division before being repulsed by the combined fire of the cruisers

Savannah and Boise as well as 6 destroyers firing a recorded 3,194 shells, devastating the attacking divisions and destroying many vehicles.

Encountering much less resistance during the first day of the landings, the British secured almost all of their objectives by the end of the day. Syracuse, Ragusa and Noto were under British control, while the 7th Army prepared to do battle with strong German and Italian forces to their front, but the allied beachheads had been established and any chance to repel them had been wasted.



Map of the Allied landings in Sicily on 10 July 1943