

Jalik's Panzer Guide

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The last update was a little "quick & dirty" because I don't have as much time as I would like to have. But I hope that the most important things found their way into the guide. I also can't provide you with specific weak spots for the Vickers and the Panhard because tests eat up time pretty fast... time I don't have.
There is an Italian version coming but I won't be able to link it here. Please check the common message boards if you are interested in that Italian Panzer Guide.
Good hunting!

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PREFACE

This manual is directed to all players who want to fight with and against tanks - no matter if they are new players or experts of other military branches.

The information included in this manual tries to cover important aspects of the game play. It isn't intended to provide information about real life tank tactics since they are not unavoidably important in the game.

The manual want to show basics of tank game play and to describe general tactics. Those tactics were learned under heavy losses by countless tank commanders but of course anybody is free to develop better ways to achieve his task.

Before taking place in a tank the first time you should leave behind one great misbelieve: the invulnerable tank.

Invulnerable tanks don't and will never exist. In contrary German tanks of the first years of WWII are rather weak armored. Very often people think that tanks are heavily armored, well armed, noisy and unstoppable beasts. If you take place in a tank with this attitude will end up in a burning wreck very soon. That's no bug, it's a feature! The tanks are modeled as historically accurate as possible - the German as well as the allied tanks.

The more important is a prudent acting - although this doesn't mean that you won't die in a burning wreck the sooner or later.

1. THE MOVEMENT

Driving a tank is an easy task in principle. As soon as you got familiar with the controls (best to do in offline mode) and maybe altered it according to your personal preferences it's no big deal. But because it looks easy it can be hard.

A tank not only means firepower but according to the German blitzkrieg tactics it's a fast moving weapon. It's task is to break through the enemy lines and to clear the new territory for the following infantry. A tank never works alone but more about this later.

In battle every advantage can save your life and therefore should be used. You can use a tank as a kind of "bunker" but it's not it's main task. It can perform fast repositioning and thus attack the enemy forces on its weakest spots. To give away this advantage and to place your tank somewhere in the middle of nowhere and to use it as a kind of at gun would be a great waste if there are still other options.

1.1 Movement in the offensive

A moving target is always harder to hit than a non-moving target. When attacking with a tank the movement plays an important role.

Attacks on enemy cities often have two things in common: first the defenders, who entrenched inside or around the city and who are searching the horizon for enemy units and second the attackers who want to find or create weak points in the defense line. Often you can get close to the enemy lines without having to fear enemy fire. But soon you'll need to attack and to reveal your position. During the approach you will most likely discover some targets and you will have to decide whether to attack them or not.

For such situations there are two small basic rules you should keep in mind:

- The enemy has discovered you already and opens fire:

The worst thing to do now is to stop the tank. You would be a perfect target and an allied expert gunner won't need much more than one or two attempts to score a direct hit on you. The key is movement: the faster you are moving and the greater the distance is between you and the enemy the harder it is to hit you. You can also try to alter your route in order to prevent the enemy from zeroing if the distance is large enough (a zigzag course is not only altering the range to the enemy shooting at you but he also needs to modify the angle of fire).

In principle it now depends on what exactly you want to do. Do you want to save your tank and to give it another try somewhere else or do you want the duel?

The first option is easy to realize if you are still away far enough - a retreat in a distance closer than 500m to the enemy isn't rewarded with success in most cases.

The second option means shooting while moving. If you are not in a multi crew tank you will have to estimate the course of the tank for the next few seconds because if you switched to the gunner position already you won't be able to alter it without switching positions once more.

In practice you follow these steps: in the driver's position search a course without obstacles and a line of sight to the enemy as fast as you can. If your throttle is linked with the y-axis of your joystick keep the stick in the position the tank needs to move forward and switch to the gunners position. The driver will now drive the tank according to the last joystick position - until he hits the next obstacle. This way you are not just a moving target but you can answer the fire and can reach a better spot for the fight.

But be careful: hitting an obstacle could mean flipping the tank. The allies will thank you for that opportunity to get an easy kill.

Use the Offline Mode to train all this together with **shooting while moving** and try to kill little bushes, sweet sheep and pigeons.

- The enemy didn't discover you yet but you can see him:

Is it a tough enemy like a char you should think about to pass around without drawing his attention. Otherwise it's not unlikely that you will lose your tank. Moving fast without stop is the best thing to do now but always use all the **cover** you can get. It isn't wrong to switch to the gunners position in the meanwhile in order to keep up observing the enemy. Always keep in mind that you could be discovered any moment. So you don't want to drive your tank into a bad position.

If you did discover an easy target and if you are sure that there aren't any more enemies in range you have the choice between opening fire while standing still or while moving. If there is sufficient cover chooses the first option because aiming is much easier then. But if you think another enemy could show up any moment choose the second option (if the target isn't too far away) and/or think about how you can get out of this fast if there is a need to do so.

1.2 Movement during night offensive

The night isn't just reducing your sight but it also reduces the sight of the enemy. During night the tank can first be heard before anyone can see it. Furthermore especially fast movements can be spotted more easily than slow movements. Does the enemy have no clue that you are around and you get the chance to sneak into an enemy city or you need to pass around a unit you can minimize the probability of getting discovered with driving at real low rpm. That means you

select a high gear before moving and take care that the indicator needle never passes the 1000. Infantrymen reported that the tank sounds like being far away. Furthermore the high gear prevents the tank from accelerating too fast what results in a slow and smooth movement.

Of course your tank isn't invisible now but it's more likely that you will stay unspotted. As soon as you stop the tank disable the engine because it's really noisy when idling.

Same goes for any defense mission. You don't reveal yourself to infantry and can hear more of what's going on around at the same time.

1.3 Defensive movement

Nevertheless I see the tanks main task in attacking it can play an important role in defense. It happens very often that the enemy attack is focused on one or two flanks of a city. This means that most of the defenders will be concentrated in these areas. But it also means that one or two sneaky allies will try to infiltrate the city from another direction for sure - where the defenders would last expect them coming from.

The tanks cannot just play at gun and **guard 8,8 cm Flak** from attacking infantry and **airplanes** but it also can perform some fast repositioning from one side of a city to another. Use that to patrol less defended areas.

1.4 Movement in large cities

Movement is A and O, due to the numerous hiding places for infantrymen and PAK's in large cities and the danger coming from them, fast movement in the long and broad roads is a survival necessity. Here either a **multi-crewed tank** or to **fight while moving** recommended. Since urban roads are very strait and open with little or no cover, you need to be aware of the danger from enemy tanks and PAK's along your route.

If you drive into a long road or on a large open place, you need to set your course as described in the **Movement** section and then change to the Gunner position to scan for any opposition. In this way you can monitor the many entries and hiding places in houses and open the fire immediately if necessary, this applies both to attack, and defense.

The larger a city is, the more probable it is that hostile forces are around. Therefore always assume that an enemy could be behind the next corner lurking or that he comes in the next second with full speed from a side street.

Large cities offer outstanding possibilities, to flank and unnoticed approach the enemy. It might happen that you see a tank passing to disappear in to a side street, before you can engage it, but with some local knowledge its route can be guessed and then you can try to intercept it. It is simplest; if the enemy does not use of the principle of the constant movement then you can easily make an unseen approach.

Note: A tank weighing several tons can easy go in to an uncontrolled spin with a high-speed turn! Changing the driving direction with maximum speed requires an intuitive feeling and should absolutely be trained beforehand!

The principle of the constant movement does however not apply, if you guard an Armybase. In this case you should bring yourself into a good position, switch off the engine and wait until the enemy appears.

With the implementation of Attrition there are more and more infantry fights. In contrary to the rule of constant moving it turned out be useful to group up with other units and to move slowly from house to house. Troopers need the firepower provided by a tank if the city becomes a big meat grinder. You can try to defend important bridges or flag buildings like this. But be sure that there is enough own infantry around you because your tank will be an easy target without someone to check your six.

If the infantry is wandering off to fight somewhere else better get your tank moving. No matter how important a flag building is, you can't defend it alone and you will most likely lose a valuable piece of equipment.

1.5 Movement with cover

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The fact that German tanks are quite allergic to hits makes it mandatory to use every cover that is available. Before selecting your route, you should scan the surroundings to determine the possible covers available.

Usually grass and bushes offers very good covering along the roads. But you should be aware that roads are most likely monitored and its a big possibility that an enemy tank or a at-gun is hidden at roadside waiting for German tanks driving down the road tempted by the fast and smooth ride. For this reason it's not recommended to enter an area on a road that the enemy can monitor, unless you are 100% sure that no danger lies there.

In the area it's likely to be numerous bushes, hedges, individual trees and small forests that can be used as good cover and as a firing position.

You should always move from cover to cover. When you leave you cover for the next one you should try to get there as fast as possible with the hope that nobody sees you.

Be aware that the enemy is likely to know the pros and cons of bushes and hedges in the area!

Tanks in an ambush position were often killed when they had maximum cover, due to the fact that they didn't look for threats in their direct surroundings. A view over the shoulder should be done at regular intervals to prevent that the ambusher doesn't get ambushed.

Avoid the obvious path, which is already used by other players. It is most likely that the hostile defenders will concentrate on these routes and it will not offer any safe cover.

Note: The fastest way is not always the best one! Even if its slower it often pays to go in from the flank in the cover of bushes where the enemy don't expect an attack. A direct path to the target is likely to lead to a failure.

The so-called Hull down and Turret down technique offers excellent possibilities. If a sufficient hill exists, you can place your tank in such way that only the turret or the commander looks over the hill so that only a small part of your tank can be seen. It can prevent discovery and in the case of a fight you expose a smaller part and if the gunner is killed you will be able to back off and RTB. A prerequisite is of course that you can see or predict the route of the enemy.

Use your imagination to find out suitable cover especially in cities where the natural cover from bushes and hedges is more or less non-existent. Try to imagine you are the opponent and guess when and where they will probably come along.

When you sit in your tank, it is not always easy to judge if the cover is useful or not since you cant see it with the eyes of the attacker. For this reason we have a few example pictures, to give you a felling on how to select a good cover:



Turret Down. Very low profile. Excellent sight.



Hull Down. If too far behind the hill it's possible that the hill is in the line of fire. Excellent sight.





over under cameo net. Good choice for low vehicles, almost impossible to see. Bad sight.





Ambush in house entrance. Only for narrow vehicles and very tricky to do. No escape. Good sight.



Ambush in depot. No escape. Good sight.





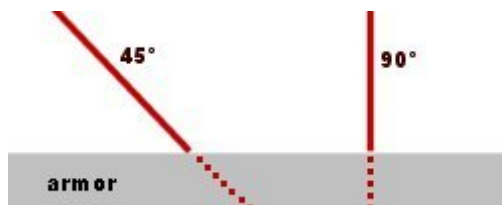
Cover in bush row not recommended! Easy to see by enemies.



1.6 Position of the tank under enemy fire

Since tanks were developed primarily for offensive purposes, their Armor protection at the front is usually stronger than at the sides or the rear.

The front and sides of the PzkwIII F is for example 30mm, where as the rear is protected by only 21mm steel (turret 30mm). The protection at the top varies only between 12mm and 17mm. The tank surfaces are usually quite vertically and sharp-edged. A projectile, which meets with an angle of 90° an armoring, has to overcome the slightest resistance. If the projectile hits in an angle of 45° the amount of steel between your crew and the shell is bigger than at a 90° hit. Furthermore renouncing is more likely.



A German tank can easily be completely destroyed by a single hit. Nevertheless each shot of the enemy is not always a high precision shot and it is always a good idea to face the enemy with the thickest part of your armor.

Depending on the distance, a PzkwIII F can take hits without taking damage. For maximum security you want the opponents either be on 1:30 o'clock, 4:30 o'clock, 7:30 o'clock or on 10:30 o'clock, thus always diagonally to your own tank. Even with this position the tank will probably not last for ever, but it increases the chances of survival considerably. Keep in mind that such a diagonally position increases the chance of a damaged undercarriage - but better immobile then dead. In any case you should avoid to expose any weak spots on your tank to the enemy!

Note: Always remember to close the hatch of the commander's cupola or the commander will be completely unprotected from enemy fire! This applies of course also to the driver's view slot!

The strength of the armor can be read in the game-manual. The data of the PzkwII C, is not in the game-manual, but you will find it in the [Appendix 1](#) of this Panzer-Guide. The StugIII B data can be seen in the [Appendix 3](#) and Appendix 5 is for PzKfwIVD.

2. TARGETS AND SHOOTING

Skillful aiming and shooting is surely the most important ability of a tank man.

If you position your tank at a perfect place, so you are hidden to your opponent; and if the opponent does not have the same favor of cover, then you should be able to easy end his journey.

Rapid range estimation, fast target identification, recognition of the weak spots, estimation of attack angle. It all occurs in fractions of one second and will affect the success or failure.

And something else, your primary consideration, in light of what has gone on before, never forget this:
The second, third and following shots after the opening shots, make it extremely easy for your opponent to spot you. Naturally, there is nothing more treacherous than a 'Bang', an incoming tracer round, followed by the burning of a tank shortly thereafter.
A shot is nothing more than a "Hi! Here I am!".

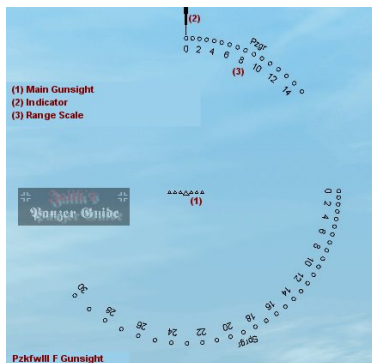
If you want to preserve yourself and stay unseen you need to resist the temptations from an easy target, if not you will become a victim fast.

Tipp: Add the following code lines into the *.cfm files (data -> cfml) of the appropriate vehicles. The code has to be before the </controlset> line!

```
<control function="Turret traverse">
<keyabsolute value="44" index="4" onrelease="50">
<key>left arrow</key>
</keyabsolute>
<keyabsolute value="56" index="6" onrelease="50">
<key>right arrow</key>
</keyabsolute>
<keyabsolute value="0" index="1" onrelease="50">
<key>left shift</key>
<key>left arrow</key>
</keyabsolute>
<keyabsolute value="100" index="2" onrelease="50">
<key>left shift</key>
<key>right arrow</key>
</keyabsolute>
</control>
<control function="Turret elevate">
<keyabsolute value="44" index="4" onrelease="50">
<key>down arrow</key>
</keyabsolute>
<keyabsolute value="56" index="6" onrelease="50">
<key>up arrow</key>
</keyabsolute>
<keyabsolute value="0" index="1" onrelease="50">
<key>left shift</key>
<key>down arrow</key>
</keyabsolute>
<keyabsolute value="100" index="2" onrelease="50">
<key>left shift</key>
<key>up arrow</key>
</keyabsolute>
</control>
```

This (by the way completely legal modification) enables you to use the arrow keys for slow turret movements and left shift + arrows for fast movements.

2.1 Targeting



As you can see in the following pictures the sights consists of two main components even though they can look completely different from tank to tank: The main sight (1) and the range scale (3). The targeting sight of the 37mm KwK L/46.5 of the PanzerIII F will be used as an example for the other German KwK's.

The distance scale with the description "Sprgr" (High Explosive Shell) does not yet have a function in the game.

2.2 To determine the distance

To calibrate for known distance is one thing. To determine the distance and then calibrate is a completely different thing!

A tank carries a large supply of shells, but it is not a beautiful experience to fail because all the shots went directly into the dirt. However in principle this is only a question of practice. An experienced panzer man does not need more than two shells to zero in on the target.

The bigger the distance the less likely is a hit. For this reason you should consider if to shoot or not to shoot, the target might move or be **too far away**.

To be able to obtain a safe hit and not just blow up the lawn and to be able to decide whether to take the shot or not, you need to develop a feeling for the distance.

In the off-line mode of the game a shooting course for tanks is to be found. There you can shot at distances of 250m, 500m and 1000m.

The following pictures are to clarify, how large the different tanks compared with the individual targets are (click to view a larger picture). With this guide and sufficient exercise no allied tank is in the long run safe from you!







Shooting from a standstill tank belongs to the basic knowledge of a tank man and can be practiced in the off-line mode. It can't go wrong if you know how to determine the distance to the target and how to calibrate your gun. The only problem worth mentioning is the swing of the barrel.

The cannons of the PzkwIII F and Pzkw 38(t) permit a very high rate of fire. After each shot the entire tank shakes and the barrel swings down which can be seen in the optics.

Before the cannon is still again, the next round is already loaded and its tempting to shot again. If the barrel hasn't become still the next shot will be inaccurate. On short distances this is no big problem, but with increasing distance to the target you should increase the duration between two shots to avoid misses.

2.5 Shooting during movement

Shooting from a moving tank belongs to one of the top skills that a tank man should strive for. To shot while moving on a rough terrain is extremely difficult and you need to practice this type of engagement to be successful in the long run.

Rough terrain will create sudden bumps and make a hit a pure stroke of luck. The faster you move, the harder it is to hit your target. Ammunition consumption during these circumstances is enormously high for every scored hit. The distance to the target also plays a crucial role whether the target moves or not. The further away the target is the smaller the chances are for a hit.

If the target is moving in the opposite direction to your route, you need to shot much more ahead of your opponent to hit him. If you and the target move in the same direction you don't need to aim that much ahead of your target.

To have any chance at all to hit your target, you should not drive faster than medium speed on as even ground as possible and slower if the target distance is long. This requires a lot of exercise and good situational awareness.

2.6 Selecting Weapon and Ammunition

Against enemy tanks only armour-piercing shells (AP) or HEAT rounds have a considerable effect.

If the mg is empty or the distance too far, high-explosive shells (HE) can be used, but be economical with them, since the tanks do not carry many of them and HE is only suited for soft or lightly armored targets.

Once a shell is loaded you must fire it to be able to load another type. If you have a HE in the chamber and you suddenly meet an enemy tank around the corner of a building, your chances to leave with a victory are equal to the armor piercing capability of your HE shell... almost zero.

Note: When using 20mm, 37mm or 75mm shells you'll notice a difference in the flighpath of AP and HE/HEAT shells. An AP can hit the target while you could shoot over the target with HE/HEAT without touching the range scale. That involves any kind of ammunition since the mass (and therefore the flight path) varies between the different types ammunition usable for a certain caliber. Remember that when changing the monitions type

2.7 Vulnerable places on allied tanks

Every opposing tank has its weak spots. You should absolutely know these spots to be able to fight it fast and effective.

Each shot that miss or don't damage the target gives the enemy time to return fire! One shot - one hit - an enemy tank fewer is the ideal goal of each tank man.

Tip: the top armor of a tank is always the weakest. With a high firing position you can even destroy the heaviest tanks.

Important: I have to add, that any tank that can be killed at all, can be destroyed with *one single* hit. In WW2OL you can't summate damage values what means you can't damage a certain part of the armor with X hits untill it's weak enough for a penetration shot. Under constant conditions a hundred shells can be deflected from the armor if you always hit the same spot. Sentences like "you need 2 shots to kill an A13" just mean that you usually need 2 shots to find the right spot for a kill shot. But that also means that you actually *can* kill anything with one shot if you hit the right place. A shell bouncing off without doing any damage is just like a shell that has never been fired.

(But of course you can do damage to a tank without killing it completely.)

MK IV A13: This light British tank is the favorite target of German tank men, since it can be destroyed in a fast and uncomplicated way. Generally you can shoot anywhere on the A13. Its armoring is so thin that damage is almost guaranteed even at long ranges.

Nevertheless each hit is not likely to destroy the A13. You can end its day with a well aimed shot to its turret, only one well direct shot is often sufficient. According to rumors the ammunition supply is stored in the turret. With the loss of the gunner it's not possible to continue the fight in an A13. The turret also got a special feature: a double layer armor which can resist HEAT rounds.

With the help of these pictures you can learn which spots are good places to aim for and often one or two shot is sufficient to destroy the tank:



Renault R35: This light French tank is often mistaken for the Char B1, even if it is much smaller. It's much weaker than its larger brother. Nevertheless it has a substantial armoring, which can resist some hits. With this vehicle the weak points are particularly at the rear side of the turret (turret hatch) and at the hull.

The hull is strangely thinner at the front than at the back and its sides, only 32mm instead of 40mm. The turret front and the sides are protected by 40mm steel, which makes it difficult for shells to pierce it, even if it is not by any means impossible. The following pictures clarify the most worthwhile attack regions of the R35:



Somua S-35: The S-35 is equipped with the same the turret as the Char B1 as well as with well sloped armor. Armoring on the S-35 is many places strong enough to resist 3,7cm shells. Besides good armoring the S-35 is quite fast and maneuverable. From the Char B1 it inherited the disadvantage of the very slowly turning turret and the bad all-round visibility.

A shelling test especially executed for this manual revealed a few further weaknesses of the S-35:

- Underneath the well visible seam between structure and chassis in the front is a very vulnerable area on the S-35.
- From the rear shelling of both the large radiators showed in the test that this was unhealthy for not only the engine, but sometimes also for the entire crew of the tank.
- Further the flanks of the tank seem to represent a weak point. The ammunition seems to be stored on the right inside of the tank what makes a hit fatal.

The data of the armor on the S-35 can be read in the [Appendix 2](#).



3. FIRE FIGHT AND TANK TACTICS

The basic tactics of a tank driver were discussed in the two preceding sections, now we are going to take a deeper look on the possible tactics that can be used.

Depending upon situation the tank man must decide on one of the many possible methods to be used in order to get the best result.

Each city is different, each situation is different and therefore you must adopt your tactics to the situation.

There are nevertheless a few standard situations, which you will meet more frequently.

Some of them will be described now in the third and last section.

All first and highest, irrefutable principle of each tank tactics participates:

- Discover the enemy if possible, before he discovers you!
 - Thus you always have the initiative on your side.
 - You can shoot at the enemy, before he can shoot at you.
 - You can destroy the enemy, before he even knows that you are there.

3.1 Practical combat distance

Tank men often fight at an absurd distance.

First of all the punch power of the shells decreases with the range and secondly even the smallest dispersion or inaccuracy when directing at 1000m and more will result in a miss.

The longer the distance to the target, the smaller the effect!

The meaningful combat distance also depends on the tank.

An A13 at 800m is possible to kill with some skill from the attacker, but you will very likely not be able to put a Char out of action at that range.

Its better to engage enemy tanks at ranges of 500m or 600m and enemy tanks are often much closer before you discover them.

It has proven to be wise to preset your range, for example to 200m to 250m. According to my own experience this is the most useful distance. Should you discover an enemy tank you can then engage him from 0m to 400m, without any adjustments to the sight, at this range the ballistic effect on the shell will not be that big.

Depending on the terrain and the situation you might need to change your default pre-setting. In the north the terrain is open and very flat, but to the south you have a lot of hills that might force you to have a shorter preset on your gun sight.

3.2 When to use what tank?

Pzkfwll C:



The Pzkfwll C is a light and rather fast tank which is mostly used for infantry support or as mobile Flak. With its 20mm KwK and one MG it can fight all non- and lightly armored targets and is the unlimited tank of the axis forces.

Since it's fully armored it's almost invulnerable to strafes and therefore got an advantage the Flak30 didn't get.

The disadvantage is that the armor is really thin. Not only it can be penetrated by enemy tank cannons and at-guns - hand grenades and satchels are a big threat also. You should fight enemy infantry from distance and avoid enemy tanks.

Use that tank if others are unavailable and you'd just have to face enemy infantry and light at-guns or if you have to fight the local enemy air superiority. If used carefully this tank always is a good choice.

Ammunition:

AP: 12 clips (10 shells per clip)

HE: 6 clips (10 shells per clip)

The data of the armor on the PzKfwll C can be read in the [Appendix 1](#).

Pzkfw 38(t):



This tank of former czech production is of small size, got good speed and acceptable firepower. It's off road performance is a little worse then of German tanks. Because of 2 MG's (one coax and on mounted in the hull) it can fight infantry quite well though it's main task is to fight enemy tanks.

It's 3.7cm KwK seems to be a little better then the German one mounted in the PzkfwIII F even if it's still hard to kill heavy tanks like the Char or Matilda.

The tank got the same weakness like the PzkfwII C: a thin armor that is quite vertically and sharp-edged.

Use the tank if you appreciate it's small size. It's a good choice for any mission type.

Ammunition:

AP: 59 shells

HE: 15 shells

PzkfwIII F:



Many allies call this medium tank the best exist tank there is. The tank is rather fast and provides excellent off-road performance. It got 3 MG's (two coax and one mounted in the hull) what means excellent firepower against non-armored targets. The 3.7cm KwK is roughly equal to that of the Pzkfw 38(t) and got the same problems against heavy allied tanks.

Like the most axis vehicles of this period of WWII the armor is inadequate even if it is a little thicker then the Pzkfw 38(t)'s armor. It is also build in a rather old fashioned sharp-edged way what provides less protection then the well sloped armor of some allied tanks.

This tank is a good choice for any mission type.

Ammunition:

AP: 97 shells

HE: 24 shells

PzkfwIV D:



The PanzerIV was designed as support vehicle for the PanzerIII and is equipped with the same 75mm cannon as the StugII B. It was used to support the Panzer Units with enough firepower to eliminate enemy strong points and infantry nests.

The tank is fast enough to keep pace with the PzIII and shows good off-road performance. It also got one coax MG and one MG in the hull to defend itself against infantry attacks. Unlike the Stug it got a turret which allows the good visibility you are used to get in German tanks.

The tanks weakness is the thin armor and the short barrel of the cannon which makes it hard to hit targets at great distances. It also causes a low V0, which results in the inability to kill the heavy allied tanks in a duel.

The tank is a good choice for any mission type but the gun is a little inaccurate at great distances.

Ammunition:

AP: 12 shells

HEAT: 22 shells

HE: 46 shells

The data of the armor on the PzkfwIV D can be read in the [Appendix 5](#).

StugIII B:



The StugIII B is no real tank. It's an self-propelled 75mm assault gun using the PzkwIII F's undercarriage which was developed for infantry support. It's task was to eliminate MG nests, bunkers and the like. It's a fast vehicle and provides good off-road performance and because of the missing turret it's much lower then a tank. It also got 50mm frontal armor that can resist some hits. Additional to the HE rounds the StugIII B got a small amount of AP and HEAT ammunition for self defense purposes.

The StugIII B is very vulnerable on it's flanks and the rear. Because of the missing turret it got a bad over all visibility. It helps a lot if you don't button up your commander before you actually start to fight but he will be very vulnerable then. In order to fire you need to deploy the gun sight (switch to gunners position and press 'D') and because of the open hatch the gunner can easily be killed by enemy fire. Furthermore the StugIIIB got no MG's resulting in complete defenselessness against enemy infantry.

You can use the StugIII B to ambush enemy tanks but it's not its main task. Destroying FB's and AI is where it really shines. Stay close to friends that can protect you against enemy infantry. Do not enter cities with a StugIII B since it's easily overrun.

Ammunition:

AP: 6 shells

HEAT: 12 shells

HE: 26 shells

The data of the armor on the StugIII B can be read in the [Appendix 3](#).

SdKfz 232:



The SdKfz 232 is an armored 8-wheeled reconnaissance vehicle. It's the fastest armed ground vehicle of the axis. It got a 20mm gun and a MG and its armor is very thin. But its true weapon is the engine.

On-road or off-road the 232 is incredibly fast. If under fire it can easily retreat - very often without being hit. It also can outmaneuver the AI if you don't drive straight towards it. At high speed it's very unstable and the pilot needs to be really careful.

The 232 is perfect for killing the AI before any defender on map will notice the attack. In later phases of an attack the 232 can kill en attacking axis tanks because of it's fast moving turret. But of course the 232 is perfect for reconnaissance as well

Ammunition:

AP: 12

HE: 6

The data about the armour of the 232 can be read in [Appendix 6](#).

3.3 In combat against the Char B1

Unfortunately, the by far the most frequent situation is to fight the Char.

As already described, the Char is the hardest target to crack in the French arsenal and at long range the most dangerous French tank. If you see one you should think twice before you engage it, but with proper tactics and training you can have an edge on him. A Char can destroy every German tank with ease and is almost invulnerable...

The Char has a very efficient 47mm turret cannon and a 75mm howitzer; the 75mm are however only capable to fire in a forward direction.

The Char is the favorite target of the 8,8cm Flak and it should be, but often there will be situations where an 88 is not around to take it out.

The only possibility to pull out a few of its teeth is to move in and place your shoots as described in [chapter 2](#). This is however more easily said than done. If the Char already noticed your tank and maybe already opened fire you can forget the idea to immobilize it. You won't be able to bring yourself closer to him and you will most likely be a fireball with in the next 10 seconds. It might be better to put in the reverse gear and head for cover fast.

If you remained undiscovered, you should make sure that no other enemy tanks are around. These could stop your attack, since an unnoticed approach will be difficult. And if you engage any of them, he will warn his fellow allies that you are coming and concomitantly the Char will be alerted. A single Char is preferred, if they drive into groups with other tanks, all the same, which type, the chances of success sink against zero.

If you finally have found a lonely Char that has not seen you yet and with no 88's around that can take it out, you can then execute an attack, but **never** a frontal attack.

The trick is to do a so-called flanking maneuver, you move around the Char using as much **cover** as possible.

A frontal attack fails because of the thick armor and also because of the fact that the Char drivers almost always looks forward. Only beginner, completely maniacs or hopeless players do a frontal assault against a Char!

A successful "Flanking" should place your tank on the left side of the Chars and you should be able to open fire in to the radiator. Up to three shells should be sufficient to get a black smoke to rise from the radiator.

Many Char drivers despawns when they notice that they can't return to their base. However, if they still have targets in their range and their gun still works then you should only flank the Char if there is no other possibilities to achieve your objectives, your own dead is almost always predetermined.

Nevertheless you should dare to escape on the principle that the Char cannot follow you any longer, set full speed to the best cover and if possible engage from there.

It is also helpful to have some diversion fire from other players, even if they probably cant cause any damage, the player in the Char will be distracted, which increases the chances of a successful flanking.

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3.4 Hit & Run

A good way to cause damage and to keep yourself out of the enemy fire is the hit & run tactic. All you need is some knowledge of the surrounding cover (where are streets, hills, forests, etc.), knowledge of the tactical situation (from where my comrades are attacking, where are concentrations of enemy units, etc.) and the reverse gear.

The best covers for this tactic are hills but tree lines and forests will do as well. The most important thing is that you look out for a pullback route the enemy can't oversee.

Did you choose a spot bring yourself into position carefully (use **hull down** for hills) and open fire on a target of your choice. Most likely you will be able to shoot some rounds before the enemy will start to search for you - if he did survive at all. Did the enemy discover you finally don't wait for him to open fire. Use your reverse gear to get out of sight quickly. If the enemy can't see you anymore you have plenty of time to choose another spot and you can play the game again.

Note: It's possible that the enemy will approach to your last known position or that he even tries to flank you. Since you can't see each other you don't know where he is coming from and when. Keep your eyes open or you won't be the hunter anymore but the hunted. Don't hesitate to choose a new spot far away if you got the feeling that the allies try to fool you.

3.5 Air defense

If the enemy air sweeps down and strafes at anything they find, then the 88's and infantry will have a hard time to move in to position. The ground troops are forced to deal with this type of threat until friendly air is around in sufficient numbers to drive the enemy air off.

- Without 88's it will be alot harder to deal with Char's and Matty's.
- Without infantry you can't conquer or holding a city.

The PzKfwII C works as an excellent air defense vehicle and if its allowed to work undisturbed from ground troops it can makeup for the missing aircover in the sky with a skillful gunner behind the trigger. In general you can use any tank, but the 20mm cannon makes more beautiful holes than the mg, therefore following tactics examples is explained from the PzKfwII C point of view:

Notice: A good flak gunner does not allow any enemy a second approach at the target that he protects! However the PzKfwII C is often used completely wrong. To obtain the optimal effect, you need to follow these four basic rules:

Rule 1: To open fire at a target that does not move strait towards you is just a waist of ammo!

Rule 2: Always place your tank where the air is likely to concentrate their efforts to – as close as possible, this will ensure that you will be able to open up on them strait in to the front as soon as they approach the target. (88'er, ships, AB's, FB's, etc.)

Rule 3: You should place your tank in an open field with as little objects as possible around, since a tank sitting in the open will attract enemy air to hit the deck and strafe you and will you the opportunity to score an easy kill. This of course is only wise with no ground threats in range to open fire at you.

Rule 4: The smaller the angle of attack from the aircraft towards you, the more you should wait before opening fire. If you are the target the angle will be about 0°, wait until he fill at lest 40% of your view before you open fire.

Timing is crucial here. If you shoot too early most shots will go in front of it. If you open up at the right time he will most likely hit the dirt. If the target for the attack is next to you, the angle will be more then 0°.

In this situation you need open fire a little earlier in front of his flight path or else all the rounds will go behind him. Its more difficult to hit an aircraft that does not attack your tank, but with some training it will be possible.

Tip: Target more above if you use 20mm rounds, but exactly at the target, if you use the mg. The 20mm shells have a high ballistic path and therefore often go under the target. With distance this effect will increase!

3.6 Tank as infantry support

The infantry is the most important unit of the game and only infantry can conquer and hold cities, but infantry is at the same time also the most vulnerable and lightest armed unit.

It does not matter what type of combat you are engaged in, attack or defense its all the same. No matter how many enemy units you have destroyed, no matter how good you are in a tank, without infantry you will be doomed to retreat or die.

Only infantry can contest a city and thereby prevent the enemy to spawn in heavy equipment.

If the infantry can take all crucial flag buildings around an Armybase, only then the fight will in the long run be crowned with success. Tanks are nothing without infantry, infantry is usually nothing without the tanks and because of this, and the highest priority of a tanker must be to aid the infantry attack so that they can conquer the flags.

There are numerous ways to do this and it depends on the local situation, on the strength of the enemy defenders and on the strength of the friendly forces.

Within reason you can use two different methodologies:
Attack with the infantry or make a diversionary attack.

The first case is more complicated and requires a coordinated and well timed execution. The infantry mounts on the tanks or use these as covering and if necessary in co-operation with 8,8cm Flak and/or airplanes. As a result all opposition in the path of the mass attack will be destroyed and the own forces will be inside the town before a counter attack starts.

The second case serves to direct the attention of the defenders to one side of the city by making as much noise as possible, while the infantry sneaks in from another side. This is the by far most frequent methodology. The result is quite unpredictable because of the fact that the mass of the tank-drivers is looking for a nice spot that promise a lot of action, while the infantry tries to sneak to town. It is also recommended that a second wave of infantry is formed up on Opel's at the FB and attacks as soon as possible.

There are almost infinite possibilities and this manual can't cover every aspect of it.

Important is that the tank driver always keeps an eye on his infantrymen and protects them from danger. For example enemy infantry cannot harm your tank at a distance, but probably they can harm your own infantry.

Note: AI plays an important role. They shoot well, never miss an opportunity to send you some bullets and already did slaughter whole attack waves in the past. MG nests, no matter if on ground or on towers, are a big threat for the own infantry. Destroy as many of them as possible. Also see section [3.10](#).

3.7 Tanks in co-operation with 8,8cm Flak

The 88 is not only an excellent defensive weapon, it can be used in an offensive role. It can be placed around an enemy controlled city where it can see the whole area with its very good scope and clear out any threading Chars, that might stop up the attack. The 88 is the best friend a tanker has! As described above, when properly deployed it makes up for the firepower the German tanks lack.

Importantly though is that she is protected from infantry and air raids. A Pzkwfll C (or other tanks) per 88 should be a rule. If you see a lonely 88 turn around and protect it! You are perhaps not at the frontline, but the chances of success for your comrade's rises considerably with a 88 in the back. Additionally the player of the 88 will thank you and also maybe do you a favor later! Further a tanker should always know the positions of the 88's, so that he can move in under the.

3.8 Tank as reconnaissance

With an unknown situation in the area and/or unknown number of enemies it's always recommended to perform recon in the area. Best choice is the fast SdKfz 232 but also the low PzKfz 38(t) is suited.

Reconnaissance should avoid fighting, since this will not only give them away, but also the entire main force is likely to be detected.

Its function is to report in the number, type and position to the main force, but also to find the optimal attack route and to clear out any ambush that might hinder the main force.

3.9 Multi Crew

Multi crew tank can be very effective, a two-team can double the combat capability of a tank. The host of an MC tank is always the driver, while the other one acts as the commander. Depending on the tank the host selects, the driver position and the hull MG will be available to him, the second player will be the gunner and commander.

It is recommended to use voicecom when you multicrew, Battlecom, GameVoice, Teamsound and RogerWilco are among the popular ones. To use the text chat is possible, but the response time will not be the same and the advantage is less.

The clear advantage of an MC vehicle is the split of responsibilities. While the host concentrates on driving, the second player can keep his eyes on the surrounding's and call out any threats to the driver. Also shooting while moving will be easier, since you don't need to fear to hit an obstacle. If possible an MC tank is always preferred to a solo vehicle.

3.10 Combat against the AI

AI don't know mercy. They are a threat to any attacker. The vulnerability of the AI differs from type to type but you can harm it with any kind of weapon. Best is to eliminate AI with the StugIII B since it got a 50mm frontal armor. If this isn't possible try to approach a city from direction NE, SE, SW or NW since AI very often oversees N, E, S and W and most got a limited traverse.

Destroy enemy AI where ever you encounter it! You won't gain points but everyone who got killed by AI once knows about the need to protect his comrades - and himself.

Keep in mind that AI tends to respawn very quickly. Within minutes the AI can be back in service.

3.11 End of the fight, or not?

No matter how good tanker you are, no matter how much time and planning you put in, sooner or later you will be dead meat. Often the entire crew or gunner dies, sometimes only the track, or the engine is damaged, but the tank might still not be useless.

If all crewmembers are dead or your tank is burning you can't do much.

Nevertheless the experience showed that some allied tanks still shots even when the tank is burning.

Each shot, which hits your tank, is a shot fewer to harm your comrades and each shot, which is delivered to your destroyed tank reveals the enemy position. They might not be carefully and leave their cover. In this way you can still be useful to your comrades even if you can't continue the fight any longer. After some time your vehicle will be automatically despawned, but up to then you represent a good ball catch.

If you are stuck you might not be able to engage directly in to the fight, but you can still observe the environment and notify the position and number of enemies. This can help your comrades to go around the opponent. If your tank is disabled, but still can move, you can retreat and try to save the heavily earned points, but you can just as well block the hostile tanks or PAK's, by placing yourself in his path and to block his view. This will of course lead to your own funeral, but it can give your comrades the extra seconds needed to enter a city or to rush for cover.



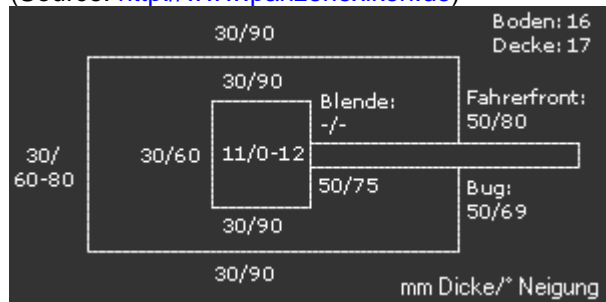
(Source: <http://www.achtungpanzer.com/panzer.htm>)

Front Turret:	14.5/round
Front Upper Hull:	14.5/9
Front Lower Hull:	14.5/round
Side Turret:	14.5/22
Side Upper Hull:	14.5/0
Side Lower Hull:	14.5/0
Rear Turret:	14.5/22
Rear Upper Hull:	14.5/9
Rear Lower Hull:	14.5/6
Turret Top / Bottom:	10/86
Upper Hull Top / Bottom:	10/81
Lower Hull Top / Bottom:	14.5/73 / 5/90
Gun Mantlet:	16/round

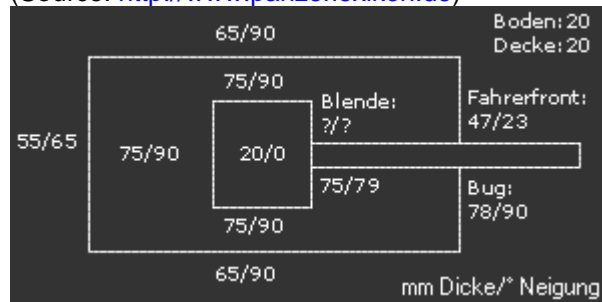
(Source: <http://www.wiitechpubs.com>)

Hull Front:	36@round
Hull Sides:	10+25@0°
Hull Rear:	35@0° & 25@30°
Hull Top:	25@90°
Superstructure Front:	36@22°
Superstructure Sides:	35@22°
Superstructure Rear:	25@30°
Superstructure Top:	20@82° & 90°
Turret Front:	56@0°
Turret Sides:	46@22°
Turret Rear:	46@22°
Turret Top:	30@72° & 90°
Gun Mantlet:	56@round

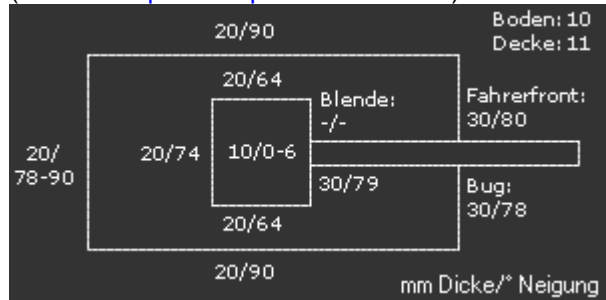
(Source: <http://www.panzerlexikon.de>)



(Source: <http://www.panzerlexikon.de>)



(Source: <http://www.panzerlexikon.de>)



(Source: <http://www.wwiivehicles.com>)

Hull Front, Upper	15@28°
Hull Front, Lower	8+10@35°
Hull Sides, Upper	8@35°
Hull Sides, Lower	8@35°
Hull Rear	8-10@35°
Hull Top	6@84°-90°
Hull Bottom	5@90°
	15@20°
Turret Front	mantlet: 15@20°
Turret Sides	8@30°
Turret Rear	8@30°
Turret Top	6@80°-90°

(Source: <http://www.wwiivehicles.com>)

Hull Front, Upper	20@21°
Hull Front, Lower	20@0°
Hull Sides, Upper	15@0°
Hull Sides, Lower	15@0°
Hull Rear	15@41°
Hull Top	7@90°
Hull Bottom	7@90°
Turret Front	26@24°
Turret Sides	15@26°
Turret Rear	15@30°
Turret Top	7@82°

Appendix 8: Common radio abbreviations

Abbreviation	Meaning
EI, enm inf	- enemy infantry
AI, KI	- artificial intelligence
EA	- enemy air
ET	- enemy tank
ab	- Armybase
fb	- Forward Base, Fire Base
af	- airfield
Matty, Mattie, Matti	- Matilda Infantry Tank MKII (A12)
A13	- Cruiser Tank MK IV (A13 MkII)
vick	- MK IV Vickers
bofors	- 40mm Bofors
Char	- Char B1 Bis
R35	- Renault R35
S35	- Somua S-35
pan/panhard	- Panhard AMD 178
Morris	- Morris CDSW
Bed	- Bedford OY
Laff / Laffy	- Laffy S-20 TL
pzIII / p3	- PzkwIII F
pzIV / p4	- PzkwIV D
pzII / p2	- PzkwII C
38t	- Pzkw 38(t)
88	- Flak 36 8,8cm
Pak	- Antitank gun
ht	- halftrack
109	- Me Bf 109E-4
110	- Me Bf 110C-4
111	- Heinkel He111
Stuka	- Junkers Ju 87B
hurri	- Hawker Hurricane MK I
spit	- Vickers-Supermarine Spitfire MK IA
h75	- Curtis Hawk H75A-3
d520	- Dewoitine D.520
blen	- Bristol Blenheim
egg	- Bomb
rr, rrb	- rail road (bridge)
rtb	- return to base
otw / omw	- on the (my) way
mc	- multi crew
cc	- copy command
rgr	- roger
wtg	- way to go
gj	- good job
S!	- Salute!
w00t	- w00t ;)
ty / thx	- thank you / thanks
vis	- Visual contact
N	- North
S	- South
E	- East
W	- West

In the case that you see an enemy, the unwritten radio rule is to specify the number of enemies, the type and the direction. Indication of the direction can be by mentioning known objects (church towers, forests, bridges, etc.) in the area.

Example:

2 A13 E

Two MkIV A13 to the east.

2 A13 E moving N

Two MKIV A13 to the east moving north.

2 A13 E with EI moving N at W side of river

Two MKIV A13 with enemy infantry on the west side of the river moving north.

Contact should always be as briefly as possible, precise and provide the reader with sufficient information to determine the position (screaming "CHAR!!!" doesn't help anyone and just causes confusion).

If your radio is set up for more than one channel always mention the city you are fighting in or nearby.

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With special thanks to **Lofgren** and Twinrix aka **Derheld** for making the english translations, **Panther5**, ho sacrificed himself for various Screenshots and tests, **Placebo**, my sample reader, Kin Aquila alias **Banabas**, my advisor when working on the Screenshots, and to the Community of www.wwiionline.de, which helped me with some questions! **w00t!**

Naturally a manual cannot cover all aspects of the Panzer-gameplay, the PanzerGuide does not claim to be the complete manual. Im always open for suggestions, ideas, criticism and improvement (in order to develop the Guide even further) as long as they aren't based on speculation, rumors, bugs or exploiting (Bugusing). Particularly the last will never find the way in this Guide!