panzertroops

ADVENTURE GAME RULES

It's 1944: World War II has reached a crescendo in Europe. Rommel was defeated in Africa, and the Allies are now fighting mountain by mountain up the Italian Peninsula. Eisenhower led the Allies ashore at Normandy on D-Day (June 6th), and now the Germans are falling back on the Rhine, pursued by Montgomery's British, Patton's 3rd Army, and much more. But Hitler's Wehrmacht has one last trick in reserve: already they are preparing for the great counter-attack that will be known as The Battle of the Bulge.

Now YOU take command of a combat force during these exciting months of World War II. YOU maneuver troops among towns, fields, woods, and hills. Skillfully deploy your defenses, organize attacks, even lead tank assaults or call for artillery support!

This Panzertroops Adventure Game is your introduction to historical wargaming: relive the past in battles where only toy soldiers are killed, never real people. YOU step into the shoes of a real commander. No prior military experience is needed, just common sense, and you too can take command . . .

Summary of Play

The battle game is played in turns, each of which represents a few minutes of time on the battlefield. Play alternates: first one side moves, then the enemy gets 'defensive fire' shots, then the moving side takes its 'attacking fire' shots. Now roles reverse, and the enemy moves, you take defensive fire, then the enemy takes attacking fire.

Note that whenever a side moves, the enemy gets 'first shot', and then the moving side shoots. This represents the disadvantage of advancing in the face of enemy fire on the modern battlefield.

Movement is done by miniature. You can move all, some, or none of your miniatures each and every turn. Each has a maximum speed in inches, which you can use, or travel less, as you wish. No dice are used in movement.

Shooting is done by a very simple process. Each miniature carries a weapon, which has a firepower value. To shoot, take your firepower value and add the roll of two dice. If the total exceeds the target's defense value, the target is knocked out and killed.

Weapon ranges and movement speeds are all given in inches. Therefore a ruler, yardstick, or tape measure is needed to play the game. The tabletop battlefield itself can be any table or floor area, about 3x3'(cardtable size) is good for starters.

Troop Types & Equipment

Infantry are men on foot. There are two types of infantrymen: line troopers and weapon carriers.

A *Line Trooper* has a rifle or submachinegun (SMG) and hand grenades. Officers are like line troopers, but have a pistol and grenades. In the German Army, some line troopers carry panzerfausts (one-shot anti-tank rockets) and grenades. A panzerfaust line trooper may carry up to three rockets.

Weapons Carriers have a pistol and a heavier weapon, but no grenades. They are still rated as "infantry" and move like them. Weapons include automatic rifle (BAR), light machinegun (LMG), or a Bazooka. However, the light machinegun and bazooka need a second carrier for the ammo, and to help load. The weapon can't fire without both the weapon holder and the ammo carrier.

Heavy Weapons & Crew: these are heavier man-carried weapons, such as the medium machinegun (MMG) on tripod in the Tank Attack set. Heavy Weapons also require a two man crew to function, and aren't as easy to move as infantry.

AT (Anti-tank) Guns & Artillery Pieces: these are large guns that are towed by vehicles, or can be pushed a short distance by their crew. Each piece requires a crew of three men to function. The Tank Attack set includes one AT Gun with crew (including a spare fourth crewman) for each side.

AFVs (Armored Fighting Vehicles) include tanks, tank destroyers, assault guns, armored cars, halftracks, self-propelled artillery, and other armored vehicles. Most AFVs have an AT Gun or Artillery piece, plus machineguns, either in the bow (front of the vehicle's hull), coaxially mounted (beside the main gun in the turret, and aimed with it), or on the roof (on a ring or pintle mounting). Halftracks are a special AFV

type that can transport men and/or heavy weapons in the back, and/or tow AT Guns and Artillery pieces.

Soft Transport includes jeeps and trucks, used to carry men. Trucks can tow AT Guns or Artillery pieces, but Jeeps cannot. None are included in Paint 'n' Play sets, rules are provided just in case you expand your army, and wish to use soft transport.

Turn Procedure

Each turn has six steps:
1) Side A moves
2) Side B shoots defensive fire
3) Side A shoots attacking fire
4) Side B moves
5) Side A shoots defensive fire
6) Side B shoots attacking fire

It is vital that you play each turn in the proper order.

If one side in the game is on the offensive, it is "Side A" throughout the game. If both or neither are on the offensive, the side which set up first is "Side A" throughout the game.

Movement

Basic Rule: each miniature has a movement speed. You can move all, some or none of your miniatures each move step, and each can move up to its maximum speed. Speed of miniatures cannot be accumulated from turn to turn, nor can it be transferred from one to another.

You cannot move a miniature through any other miniature, friendly or enemy. The only exception is infantry, which can move through a wrecked vehicle.

Infantry Speeds: infantrymen can either *Run 6"* a turn, or make an *Assault Move* (careful advance) of 3" a turn. A man can't run two turns in a row, but he can run one turn, assault move the next, then run again, etc. Both line troopers and weapon carriers use these speeds.

Heavy Weapons: men carrying a heavy weapon move 4" a turn maximum, they have no movement options (unlike infantry).

AT Guns & Artillery Pieces can be pushed by the crew 1" a turn, but normally they are moved by vehicle towing, which is much faster.

Vehicles each have their own special movement speed. Trucks have a standard speed of 8", jeeps have a standard speed of 12".

Roads can be used by all miniatures. Infantry and heavy weapons get a 3" speed bonus if they spend the whole move travelling along the road. Half or fully tracked vehicles move double speed on a road, while wheeled vehicles (soft transport and armored cars) move triple speed on a road.

Forests and Rough Ground causes all miniatures to move at half speed. Trucks cannot enter this terrain.

Walls & Hedges can be crossed by all miniatures except wheeled vehicles at a 1" movement penalty.

Buildings cannot be entered by any vehicle, and thus AT Guns and Artillery can only be set up in buildings if they are pushed into them by the crews. This includes wrecked as well as intact buildings.

Hills can be gentle or steep. Gentle hills have no effect on movement. Steep hills cause all miniatures to move at half speed. Note that a steep hill covered with forest or rough ground results in a miniature moving at quarter speed (half of half speed), while a road over a steep hill would result in normal speed for a tank (double of half speed).

Transport & Towing

It takes a half move for men to climb onto a vehicle and/or to hook up an AT gun/artillery piece for towing. It takes another half move to unload men or unhook and deploy a towed piece. This will limit the movement of both the carrying vehicle and the men in it.

A jeep can carry up to 4 men, a halftrack up to 12, and a truck up to 20. A truck or halftrack can tow one AT gun or artillery piece, and ammo for the piece must be carried inside the vehicle, and counts as one many. A heavy weapon with its ammo can be carried inside any vehicle and counts as one man. Infantrymen, including weapons carriers, just count as one man (weapons and ammo are carried at no extra cost in space).

Up to 6 men can climb onto the outside of any AFV other than

SCENARIOS

To create your own battles with *Panzertroops*, you must create a game "scenario", or battle situation. Just select a tabletop or floor area, and lay out pieces for terrain. Books make good hills, paper for woods, small boxes for houses, adding machine paper for roads, etc. You can add 'N' or HO gauge railroad scenery for a more realistic look, and even use green-painted wood for tabletop and hills. Heritage makes Scenosquares 2x2' terrain sections for gaming, ideal for your layouts.

Then, one player decides what troops, or how many points, each side will have, and where they will set up. Then the opposing player decides which side he will take. Each player then rolls the die. The high roller sets up first, and moves first. If you can, block off the view of the two set up areas, so each player sets up secretly, then roll the die to see which moves first, then remove the barrier and start the game.

You can experiment with attacker-defender situations, where the attacker has more points (perhaps a 4-3 or 3-2 advantage), but the defender has good positions. You can have breakthrough battles, rearguard actions, scouting operations, raids, and much more. In some battles the side that kills more of the enemy wins, while in others a specific objective (building, move off the enemy's table edge, etc.) must be achieved, regardless of losses, etc. Any number of possible situations can occur.
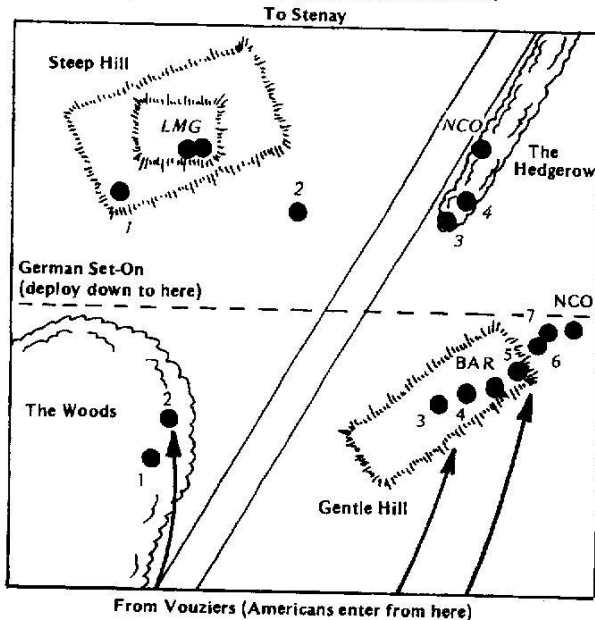
Computing Vehicle Values:

To add additional AFVs to the preceeding list, look for more data from Heritage in future publications, or compute them by yourself from research books. Defensive value representing armor is computed by dividing the armor basis (in millimeters) by 16, and then adding eight. Speed is computed by finding the horsepower to weight ratio (in hp/ton), and then modifying the number for vehicle weight: +1 for 10 tons or less, 0 if 11-19 tons, −1 for 20-39 tons, −2 for 40 to 54 tons, and −3 for 55 tons or more. Round off to the nearest whole number. Point value is computed using the following formula, where G = gun point value, S = speed in inches, M = number of machineguns, F = front armor value, R = side-rear armor value.

$$\text{Points} = G + S + 3M + \{ [(2F + R)/3] - 7 \}^{1.6}$$

SAMPLE GAME
ACTION ON THE STENAY ROAD

The Situation

In the fall of 1944 the Americans were advancing across France. Sergeant McDonald was leading his squad to Stenay, with orders to get at least half his men there (i.e., off the north edge of the battlefield), or kill more Germans than he lost himself. The Sergeant had a squad of eight men, including himself with an SMG and grenades, six riflemen with grenades, and the BAR man who had a pistol sidearm.

To Stenay

Steep Hill
LMG
The Hedgerow
NCO
2
1
German Set-On (deploy down to here)
NCO
The Woods
BAR
2
1
7
5
6
3
4
Gentle Hill

From Vouziers (Americans enter from here)

Meanwhile, Sergeant Schmidt with an understrength German infantry section also had his orders. An SS General's personal art collection was being evacuated from Stenay, and Schmidt had to prevent Americans from reaching the town, or at least inflict more casualties than he suffered. Failure would mean court martial or worse!

The Germans, as defenders, set up first on the north half of the tabletop, while the Americans moved first (Side A), and on their first move would enter the battlefield from the south edge. To reach Stenay a figure had to exit off the north edge of the battlefield.

Battle Plans

Schmidt's actual deployment is shown on the map, with each man numbered or named. Note the commanding position of the LMG on the hill, with the riflemen before it, while other men in the hedgerow shore up the weak left flank.

McDonald decided to feint left and then come in with a strong right punch, using the small hill to screen his advance. The map shows the battle situation after the fourth move, when the Americans reached their final positions and came within range of the Germans.

The Battle Begins

After the fourth American move, troops are in the position shown. The Germans have not moved or otherwise reacted during the first three turns (Schmidt isn't quite awake yet, it seems!).

After the Americans finish their move, the Germans get defensive first. Both the LMG and rifleman 1 are out of range, and cannot hit the Americans in the woods, as they are beyond the 5" maximum range for shooting into woods. Germans 2,3 and 4 are all in range, but Schmidt (the NCO) himself must shoot through the hedgerow, with a range of 5", and therefore can't fire.

German 2 shoots at the American BAR man, rolls an "11", adds his 1 firepower point, and gets 12. The American BAR man, running up the hill, only has a defense of 6, and so is hit. However, he is uphill and thus has hard cover, in relation to German 2. The American rolls for saving and gets an "8", which is just enough to save him.

German 3 shoots at American 5, rolls a "5", adds one for his firepower, gets 6, and American 6 has a defense of 6. This is no hit, but if the advanced rules were used, it would pin him.

German 4 shoots at the American NCO, rolls a "7", adds 1 firepower, which is better than the NCO's 6 defense. The NCO has no cover, and so dies. Loss of the Sergeant would mean a morale check for the Americans, if the advanced rules were in use.

The Americans now return with attacking fire. Riflemen 3 and 4 plus the BAR all shoot at German 3. Rifleman 3 rolls an "8", 4 rolls a "10", and each adds one for firepower, but subtracts two for attacking fire after movement, for totals of 7 and 9 respectively. The German has a defense value of 9, so both shots miss (but the second would pin him, if advanced rules are in use). The BAR man also rolls a "10", but his firepower is 2, and then he subtracts two for moving attacking fire, for a net of 10. This is enough to hit the German, but German 3 has soft cover in the hedgerow, and gets a saving throw. He rolls a "5", which doesn't help him, and so he dies.

The battle continues, with the rest of the Americans firing, then the German move, American defensive fire, German attacking fire, etc.

Outcome of the Battle

In their attacking fire the Americans ultimately killed both Germans 3 and 4. Now in the German move the NCO moves up with an assault move to get into firing position. Alas, this was unwise, since his SMG is still out of range (doesn't shoot more than 5"). The Americans blast away in their defensive fire but miss. But on the next turn the Americans stay put, and in their attacking fire finally kill the NCO. Meanwhile, Americans 1 and 2 have finally gotten to the edge of the woods, preventing Germans 1 and 2, and the LMG team, from moving rapidly to support their crumbling left flank. After that, the American attack force sweeps forward to Stenay, without, alas, Sergeant McDonald, the man who engineered the attack, their one casualty!

This game is typical of Panzertroops, in that a few good maneuvers and a couple sharp firefights decide the game. As you expand your Panzertroops armies with more figures from Heritage you will have larger battles where more strategy and tactics can be profitably used.

killed. Men may jump out and survive. AFV crewmen who escape are infantrymen armed with pistols only. The act of jumping out of a wrecked AFV counts as a running move in the open, and is done during your next movement. Naturally, unloading from the vehicle still takes a half turn, so the figures bailing out can't move more than half a normal run move after bailing out.

To determine how many men survive an AFV wreck, roll a single die once for the crewmen of the AFV, and then a second time for any men riding on it (if a tank) or in it (if a halftrack). Subtract the appropriate amount, depending on the situation, and the result is the number of survivers:

    AFV crew bailing out: subtract three (-3) from die roll
    Halftrack crew bailing out: subtract five (-5) from die roll
    Riders bailing out: subtract one (-1) from die roll

If the result is 0 or less, nobody bails out, all die.

Infantry weapon carriers who bail out can carry their weapons with them. All heavy weapons, AT guns and artillery, and ammo in a halftrack are lost when the bail-out occurs.

Riders and crew of soft vehicles never bail out. If the vehicle is wrecked everything is lost, regardless. While this is not entirely realistic, in the rare cases where a man survived, he was hardly in condition to fight further!

Satchel Demolition Charges

An infantry weapon carrier figure can have one satchel charge, instead of a normal weapon. He can drop this charge at any point during his move, and it will explode in the attacking fire phase. When it explodes, the firepower of 7aps can be applied to any target within 1½" of the drop point, or if soft firepower only is used, it can be split to the normal multiple targets if desired.

If the weapon carrier is hit by defensive fire before he drops the charge, the charge is not dropped, and does not go off. Instead, it falls with the man who was carrying it.

Flame Throwers

An infantry weapon carrier figure can have a flame thrower as his weapon. It has 3aps firepower and 3" range. However, flamethrowers tended to run out of "juice" very quickly. Every time a flamethrower fires, roll one die. If the result is "1" the weapon has run out of juice or clogged, it cannot fire any more in the battle.

Artillery Support

You may have artillery pieces or mortars off the battlefield. If you have an "observer team" on the battlefield, they can call up this artillery by radio, and direct the fire onto the battlefield. This is called "indirect fire."

The observer team for indirect fire consists of an officer trained as an FO (forward observer) and a radioman (infantry weapons carrier with radio and pistol). Both men must be alive and within ½" to function as the observer team.

Indirect fire is called by the observer team on his radio during your movement. Roll both dice: if a "6" or higher results, the call goes through and the fire can arrive. If the result is "5" or less the radio isn't working this turn, no indirect fire can come in, you can try again next turn.

If the radio call goes through, the weapons off battlefield each fire one shot at any point(s) the FO can see, using his line of sight. It is as if the weapons were firing from where the FO sits. Because the FO must direct this fire, each shell must land within 3" of some other shell. Shells can land on top of each other, spaced out in patterns, etc., but never spaced more than 3" apart.

Mortars with limited range are presumed about 10" off the battlefield, in some concealed position, and can therefore fire onto the battlefield up to their range less 10." Artillery pieces off field have unlimited range, and can fire anywhere on the battlefield from off it. AT guns cannot be used for indirect fire, they lack the equipment.

Mortars and artillery pieces can also be used on the battlefield. However, they cannot be used for indirect fire if they have moved from their starting position. Self-propelled artillery AFVs are considered artillery pieces for indirect fire purposes.

Indirect fire arrives on the attacking fire step right after the radio call. It cannot arrive if the observer team was knocked out by defensive fire. Indirect fire can never be used as defensive fire, call-up and adjust is too slow.

If you have two or more observer teams on the battlefield, each can call up separately, and if both get through, you can divide your off-battlefield weapons between them, as you desire.

If all your support teams are killed, you can no longer call up off-battlefield artillery. No matter how much you have off battlefield, you can no longer use it. Only a trained radioman can operate the radio, and only a trained FO officer can direct fire, so you cannot replace observer

team men with other (untrained) figures. However, if you have two or more teams, and each loses a different man, the teams can be combined and make one good team among them.

For morale purposes, observer teams are independent combat groups, unless riding in a vehicle, in which case they are part of that vehicle's combat group.

Morale

To use morale in the game, you must divide all your forces into "combat groups." Each vehicle, including any men currently riding in it or on it, is a separate combat group. Each AT gun or artillery piece with crew (when unlimbered in firing position) is a combat group. In addition, all other men on foot must be in combat groups of 6 or more men, and each group must have a noncom or officer. A group can have any number of men, noncoms, and/or officers, there is no maximum size.

Figures in a combat group must be within 3" of another in the group. If gaps get larger, any movement must be toward reducing the gaps (although figures are not required to make such moves, they can stay put instead).

Whenever a combat group loses an officer or noncom, or reaches half strength, or losses a figure when at or below half strength, it must check morale. For example, a group with 8 figures must check morale when the fourth (half strength), fifth, sixth, and seventh figures are lost. If one of these is the noncom or officer, an extra check must be made when that figure is lost.

A vehicle must check morale whenever it is fired upon by a weapon which could kill it, and the firer rolled a "3" or "4", regardless of whether the shot missed or just immobilized.

To check morale for a group, roll two dice, add or subtract all applicable modifiers, and consult the table below:

Morale Table

6 or more:	good morale, no special effect or result
4 or 5:	group cannot move close to enemy for rest of battle
3 or less:	group broken, cannot move closer to enemy for rest of battle, all firepower values reduced by one (-1--), and will surrender to any enemy now within 3"; if AFV crew or riders on immobilized vehicle, they will bail out and jump off the vehicle immediately

Morale Check Modifiers:
+1 group checking is entirely entlie and/or veteran troops
−1 group checking has green men in it
−3 group checking has no noncom or officer, or is immobilized AFV

AFV Immobilization

If a weapon fires at an AFV and gets a result (firepower + dice roll) exactly equal to the AFV's defense value, the AFV is immobilized. It has lost a track or wheels, and cannot move further in the battle. If morale rules are used, a morale check will be required.

An AFV in hard cover cannot be immobilized, it is "hull down" and the tracks/wheels are protected. All immobilizations are ignored.

Smoke Screens

An AT gun or artillery piece, of 75mm or larger size (including 3" and 17-pounder weapons) can use smoke ammunition. To represent smoke shells, cut out circles 3" in diameter. Most smoke ammunition produced white smoke, so white cardboard is appropriate. For extra effect, glue some cotton to the cardboard.

Smoke ammunition can be fired to any point, like a normal shell. Instead of normal firepower and defense values, simply roll the dice, and anything but a "4" or "10" means the smoke hits and goes off. If a 4 or 10 results, the shot misses, malfunctions, etc., and has no effect.

Once fired, smoke lasts until the end of your same firing step on the next turn. For example, if you fire smoke during your defensive fire, the smoke lasts until the end of your defensive fire on the next turn. Smoke must be fired before normal ammo in the firing phase.

Smoke blocks line of sight and line of fire, and is therefore handy for hiding things.

Bad weather (rain, snow, high winds, etc.) would dissipate smoke so fast it had no effect. If the attacker has announced he is attacking during those weather conditions, neither side can use smoke. Otherwise assume good weather.

Tanks, assault guns, and tank destroyers usually had smoke projectors. These can fire once in a game, and shoot one round of smoke 3" forward.

The amount of smoke ammunition carried by vehicles was very limited. After each smoke round is fired, roll both dice. If the roll is "8" or higher, the weapon has run out of smoke ammo. This rule includes all AT guns, artillery pieces, and mortars moved by vehicle during the battle. Note: Russian tanks did not carry smoke ammo.

panzertroops

PAINTING GUIDE

Heritage Colors are acrylic water-base paints. This means you can thin them, clean up spills, and wash brushes with water. However, once the paints dry, they become permanent and do not wash off. They can be chipped off unless you put a proper protective coating over them.

PREPARATIONS: set up your "workshop" at a well-lighted table or desk. Cover the area with old newspapers to protect the furniture from accidents. Wear old clothes. Have an old bowl or glass or water at hand for cleaning your brush between colors.

You may wish to trim off any metal flash on your figures, including the bottom of the base (to help it stand straight) with a small fire or razor-blade hobby knife, such as an X-acto knife.

THE PAINT TRAY: the paint tray is sealed with a special tape. You can use this tape to close your tray again, preserving the paints. But remember to *wipe the tray top clean* first, since the sticky tape won't seal properly if the paint is left on the top surface. The tray has a central mixing well for preparing stains, washes, and color mixes. Clean this out after every use. Cleaning the tray is done easily with tissues, thrown away afterward. Do not use a good rag or cloth unless you wash it out right away.

Your paint tray includes the following colors: primer (white), ruddy flesh (for skin tones), dark brown, black, metal, and a clear matte protective coating (appearing slightly yellowish). In addition, it has US Uniform Khaki (light tan color), US Uniform Olive (olive drab green), German Sand (greenish-tan), and German Field Grey (blue-grey, known in the German army as "Feldgrau").

PRIMING THE FIGURES: cover every figure with the white primer. Be sure to cover all parts and cracks, even the bottom of the base. Let the primer dry, preferably overnight, before you go further.

PAINTING: once the primer is dry, start painting. You can paint one figure at a time, or set up an "assembly line" where you paint one color on all figures, then the next color on all, etc. Generally, paint the big areas of color first, then put in the smaller details later.

STAIN PAINTING: any color can be "stained" on by adding a little water (just a brushful to a couple brushfuls of paint) to make it flow more. This results in more paint collecting in the depressions of the figure, letting lighter-colored highlights stand out. The detail of the figure is more visible, and the result is more realistic.

DETAILS and small items are best done with full-strength paint. Let stains and washes dry before doing details, to avoid running colors.

WASHES of a little paint with a lot of water are added over all. A tan colored wash would give a dusty appearance, while brown, field grey or black would create a greasy, grimey appearance. Washes are best for veteran troops, giving them a "rugged", weathered, tired look.

BASES of your figures should be painted a stain of green with a heavy wash of brown, khaki, and/or sand.

FINISHING is done after the paint dries overnight. Coat the figure lightly with the clear matte (which appears slightly yellowish in the tray). This will dry clear, and protect your paint job. A clear spray will also work well, such as Krylon matte finish.

BRUSHES must be cleaned thoroughly after each session, using soap and water. If you let paint dry in the bristles, they will never again form a point, and soon fall out. Get into good habits, because you'll soon want a high-quality brush from an art or hobby store, and without proper care an expensive brush is easily ruined.
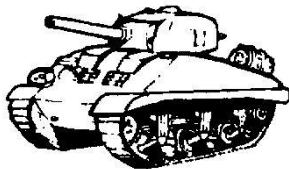
American M4 A2 Medium Tank:
Basic Color: olive with wash of black, add khaki wash for dust and faded look, may add wash of brown too for dirt and mud if desired
Canvas Tarp (on left rear of deck): khaki with olive straps
Towing Cable, Spare Treads on Nose, Treads: metal, add wash of brown and olive on treads for earth-filled effect
Boogie Wheel Background: add heavy wash (nearly a stain) of black over olive for better visual effect.
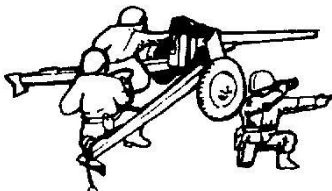
American Infantry Uniform Colors:
Battledress Coat, Puttees (at ankles): khaki
Helmet, Bazooka, Backpack, Entrenching Tool (covered, on back), Canteen Cover, Hip Pouch, Belts: olive
Pants, Shoes, Rifle Stocks: brown
Rifle Barrels, Machineguns, Ammo Belts and Boxes: metal

Riflemen

MMG team

Noncom with SMG

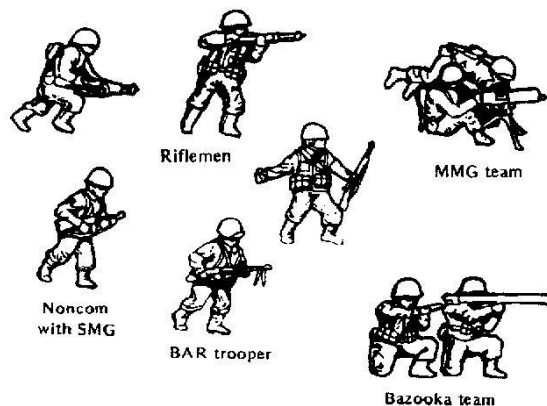BAR trooper

Bazooka team
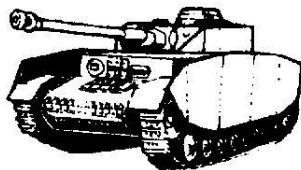
American 57mm Anti-tank (AT) Gun
Basic Color: olive with wash of black, add wash of khaki for dust, and/or brown for dirt and mud
Wheel Tires: black, with wash of khaki and/or brown
Breech, Firing Controls, Details: metal
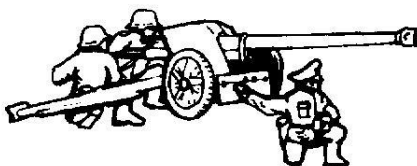*Shells for Gun (held by loader):* black or metal body with red nose

German Panzerkampfwagen IV auf H Medium Tank:

Basic Color: sand, with olive and brown applied in irregular bands and splotches over all, add wash of khaki for dusty appearance, wash of black for grimey, oily appearance

Boogie Wheel Rims, Muzzle Brake (at end of gun barrel): black

Tracks, Spare Tracks (on upper bow armor and turret top front), Tools (strapped to decks): metal, treads themselves add wash of olive and brown for earth caught in track links

German Infantry Uniform Colors:

Basic Dress (Helmet, Coat, Pants): field grey, may wish to add wash of olive for new uniforms, wash of brown or black for a dirty uniform

Blanket Roll: khaki, sometimes olive or brown

Belts, Pouches, Shoulder Straps, and Boots: black

Rifle Stocks: brown

Gas-mask Cannister (underneath blanket roll on back), Rifle Barrels, Machinegun, Ammo Belts and Boxes: metal

German 75mm Anti-tank (AT) Gun

Basic Color: sand, with olive and brown applied in irregular bands and splotches over all, add wash of khaki for dust, black for grime and oil

Wheel Tires, Muzzle Brake (at end of gun barrel): black

Breech, Firing Controls, other Details: metal

Shells for Gun (held by loader): black or metal body with red nose
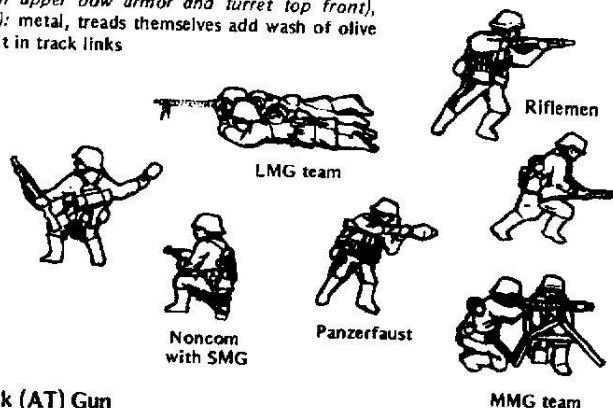
Infantry Assault Set Contents:

Americans: Noncom with SMG, BAR trooper, six (6) riflemen, and one rifleman throwing hand grenade.

Germans: Noncom with SMG, LMG team (gunner and loader), six (6) riflemen, and one rifleman throwing hand grenade.

Note: historically, German squad would have only six riflemen in total (although seven, including grenade-thrower, are included in set).

Tank Attack Set Contents:

Americans: M4 A2 tank, 57mm AT Gun, two (2) riflemen, MMG with gunner and loader, bazooka team, officer, AT gunner, two (2) AT loaders.

Germans: Panzer IV H tank, 75mm AT Gun, three (3) riflemen, MMG with gunner and loader, man with panzerfaust, officer, AT gunner, two (2) AT loaders.

GERMAN ARMY
EQUIPMENT & ORGANIZATION

Infantry

in 1944 a typical full strength squad of German infantry had a noncom with an SMG, one LMG team, and six riflemen (set 7100 or 7101 of Panzertroops). Panzergrenadiers, infantry attached to armored formations, rode mostly in trucks, sometimes in halftracks, and had a noncom with SMG, an LMG team, four riflemen and one SMG trooper. If the squad was riding in a halftrack, one of the troopers usually manned the LMG on the roof over the cab, while the LMG team put their gun on a mount at the vehicle rear. Use 7201 for this combat halftrack.

German Volksgrenadier were hastily raised or second line units, and while some had normal orgaization, some just has nine men with SMGs, while others gave half the riflemen SMGs. German Volkssturm, or militia, used all sorts of organizations, and were often very poor off for weapons. For example, one Volkssturm squad had a noncom with a SMG, an LMG team, three riflemen, two SMG troopers, and one man carrying just one panzerfaust! (set 7102).

In the German Army three squads formed a platoon, commanded by a noncom or officer, with an LMG team and three riflemen for protection. Three platoons formed a company, commanded by a Captain or Lieutenant, with three noncoms and eight other men, armed with rifles, SMGs, carrying radios, etc., as needed (set 7106). A company also had a weapons section or platoon that, for the infantry, had three noncoms with SMGs, two HMG teams, and 11 riflemen. In truck-born Panzergrenadier units, this platoon was larger, with four HMG teams and two or three squads plus a platoon HQ. In Panzergrenadier units in halftracks, it was larger still, with four HMGs, two mortars (usually 81mm, sometimes 60mm), one or two squads of infantry, and the platoon HQ. Halftrack Panzergrenadier weapons platoons did not ride halftracks also, but instead used trucks. Sets 7103, 7104, and 7105 are for these attached weapons groups.

Panzerfausts and Panzerschrecks (German Bazooka) were attached to units as available and needed, with no specific amount authorized, although the Panzerfaust was by far more common. Battalion HQ had more HMGs, 81mm mortars, and sometimes 120mm mortars, usually in groups of two, with one or two such groups given to a company for support in critical operations.

Note: the German MMG and HMG used the same gun, the HMG simply had more ammunition, and used in a more generalized tactical role. Wherever 'HMG' is noted above, 'MMG' may be used instead.

7100	Infantry/Panzergrenadier Squad attacking (15 figures)
7101	Infantry/Panzergrenadier Squad defending (15 figures)
7102	Volksgrenadier/Volkssturm Squad (15 figures)
7103	Company Weapons (MGs & Panzerfausts)(12 figures)
7104	Light (60mm) Mortars & Panzerschrecks (14 figures)
7105	81mm mortar section (14 figures)
7106	Company HQ & Commanders (12 figures)
7110	Infantry Dug-in (12 figures)
7111	Fallschirmjagers (paratroopers)(14 figures)
7122	75mm Anti-tank Gun with crew (2 gun-crew sets)

Panzers (Tanks)

The German Army originally organized their tanks into platoons of five (5), but by 1944 heavy casualties caused them to reorganize into platoons of four instead, and often platoons in the field had even less. Three platoons made a company, and company headquarters had two more tanks, for a total of 14 altogether. Therefore, in larger battles, German tanks should operate in groups of four, or almost four.

Vehicle Data

The following German vehicles are now available in the Panzertroops line. Full game data is given for each. Many additional variations existed, of course, as well as other types not listed here.

Panzer I A (7220): 5-ton tankette, moves 12", armor 9 all around, twin MGs in turret, 21 points, not actively used after 1940.

Panzer II C (7200): 10-ton light tank, moves 15", armor 10 front, 9 side-rear, 20mm AT gun in turret, coaxial MG, 29 points, not used in front line after 1941, but recon versions used throughout the war.

Panzer III D (7219): 19-ton medium tank, moves 17", armor 10 all around, 37mm AT gun in turret, two coaxial MGs, bow MG, 41 points, used 1939-41, replaced thereafter by later modifications.

Panzer III J (7204): 22-ton medium tank, moves 13", armor 11 front, 10 side-rear, 50mm AT gun in turret with coaxial MG, bow MG, 40 points, 1941-43 version, phased out of service in 1944.

Panzer IV D (7205): 20-ton medium tank, moves 14", armor 10 front, 9 side-rear, 75mm light artillery piece in turret, coaxial MG, bow MG, 37 points, early version used in 1939-41 period.

Panzer IV F2 (7206): 24-ton medium tank, moves 12", armor 11 front, 10 side-rear, 75mm AT gun in turret, coaxial MG, bow MG, 37 points, improved version used from 1942 onward through 1945.

Panzer IV H (7206): 25-ton medium tank, moves 11", armor 13 front, 10 side-rear, 75mm AT gun in turret, coaxial MG, bow MG, 44 points, most advanced version of Pz IV, used during 1944-45.

Panzer V G "Panther" (7208): 45-ton medium tank, moves 14", armor 16 front, 11 side-rear, 75mm super-velocity AT gun in turret with coaxial MG, bow MG, and roof MG, smoke projectors, 71 points, introduced in quantity in late 1943, one of the best tanks of the war.

Panzer VI E "Tiger" (7209): 55-ton heavy tank, moves 9", armor 15 front, 13 side-rear, 88mm AT gun in turret, coaxial MG, bow MG, smoke projectors, 70 points. Introduced in 1942, good for its time, but outmoded by later designs, though used through 1945.

Panzer VI B "King Tiger" (—): 70-ton heavy tank, moves 7", armor 18 front, 13 side-rear, 88mm AT gun in turret, coaxial MG, bow MG, roof MG, smoke projectors, 83 points. Most advanced version of the Tiger, introduced in 1944, tank most feared by the allies.

Czech 35t (7217): 10-ton light tank, moves 12", armor 10 front, 9 side-rear, 37mm AT gun in turret, coaxial MG, 29 points. Captured czech tank used only in small quantities and by German allies.

StuG III (7203): 24-ton assault gun, moves 12", armor 11 front, 10 side-rear, 75mm light artillery gun firing forward, 32 points. Later versions added roof MG (+3 pts), or replaced artillery gun with AT gun (+6 pts),or in some, repalced 75mm artillery gun with 105mm artillery gun (+7 pts).

Jagdpanzer V "Hunting Panther" (7211): 46-ton tank destroyer, moves 13", armor 17 front, 12 side-rear, 88mm AT gun firing forward, bow MG, smoke projectors, 77 points. Introduced in late 1944.

SdKfz 124 "Wespe" (7212): 12-ton self-propelled artillery, moves 10", armor 9 all around, 105mm artillery piece firing forward, roof MG, 35 points. Introduced in 1942 and used through 1945.

SdKfz 231 (7202): 8-ton 8-wheeled armored car, moves 13", armor 10 front, 9 side-rear, 20mm AT gun in turret with coaxial MG, 27 points. Some had smoke projectors for 2 points extra. Used throughout the war as the workhorse of recon units.

SdKfz 251/1 (7201): 9-ton halftrack, moves 14", armor 9 front, 8 side-rear, 16 points. Those used as personnel carriers often had a roof MG (+3 points). Introduced in 1940 and used throughout the war as the standard model armored personnel carrier.

AMERICAN ARMY
EQUIPMENT & ORGANIZATION

Infantry

In 1944 an American squad had 7-10 riflemen plus a BAR man with his automatic rifle. In actuality, at least one man normally acquired an SMG, usually tne noncom. In addition, other men would collect extra weapons and equipment, so that unlike the German Army, there really was very little "standard" organization. American armored infantry, riding in halftracks (M-3 A1, set 7265) had a stronger squad, with an SMG noncom, three other troopers with SMGs, four riflemen, two BAR men, and an MMG team. However, this organization was promulgated in 1942, and by 1944 had become considerably weaker.

As with the German army, MMGs, HMGs, and mortars were often attached by higher headquarters, usually in groups of two or four.

American infantry sets in the Panzertroops line include:

7150	Infantry squad defending (15 figures)
7151	Infantry squad attacking (15 figures)
7152	Infantry Company & Platoon weapons (8 figures with wpns)
7153	Heavy Weapons Company wequipment (12 figures)
7154	Company HQ & Commanders (12 figures)
7160	Infantry Dug-in (in foxholes)
7161	Paratroopers (14 figures)
7171	57mm Anti-tank Gun with crew (2 gun sets)

Armored Organization

The American tank platoon had five vehicles. Three such platoons made a company, and the company commander had an HQ section with two more vehicles, for a total of 17 altogether.

Tank destroyers had the same organization, but their higher level units often had armored cars attached, and thus small groups of armored cars often operated with the M-36's and similar vehicles.

Self-propelled artillery (such as the M-7 Priest or M-12 King Kong) were organized in "batteries" of 6 vehicles, the same as standard artillery pieces in the American Army.

Vehicle Data

M-5A1 "Start" (7250): 17-ton light tank, moves 14", armor 11 front, 10 side-rear, 37mm AT gun in turret, coaxial MG, bow MG, and roof MG, 40 points. First used in 1942, this is 1944 reworked model.

M-3 "Grant" (7252): 30-ton medium tank, moves 10", armor 12 front, 10 side-rear, 37mm AT gun in turret, 75mm AT gun in hull firing forward, bow MG, coaxial MG (in 37mm turret), roof MG, 56 points. Introduced in 1942, not used in Europe after 1943.

M-4 A2 "Sherman" (7253): 35-ton medium tank, moves 11", armor 12 front, 11 side-rear, 75mm AT gun in turret, coaxial MG, bow MG, roof MG, 50 points. This is earlier version, introduced in 1942, but still used through the end of the war, most common model.

M-4 A3 "Sherman" (7254): 36-ton medium tank, moves 13", armor 12 front, 11 side-rear, 76mm super-velocity AT gun in turret, coaxial MG, bow MG, roof MG, 58 points. This is later, improved version first introduced in 1944 in limited numbers.

M-24 "Chaffee" (7256): 20-ton light tank, moves 11", armor 11 front, 10 side-rear, 75mm AT gun in turret, coaxial MG, bow MG, roof MG, 46 points. Introduced in 1944, but not successful.

M-41 "Walker-Bulldog" (7258): 26-ton light tank, moves 18", armor 11 front, 10 side-rear, 76mm super-velocity AT gun in turret, coaxial MG, roof MG, 59 points. Introduced after end of WWII.

M-47 "Patton" (7259): 51-ton medium tank, moves 14", armor 16 front, 13 side-rear, 90mm AT gun in turret, coaxial MG, bow MG, roof MG, 82 points. Introduced after the end of WWII.

M-8 "Scott" (7263): 17-ton assault gun, moves 14", armor 11 front, 10 side-rear, 75mm light artillery piece in open turret, coaxial MG, bow MG, 46 points. Used in 1943, and later in Italy only.

T-12 (M-3/75mm) (7264): 12-ton halftrack tank destroyer, moves 12", armor 8 all around, 75mm AT gun firing forward, 31 points. Used in 1942 and 1943 primarily, and later in some parts of Italy only.

M-36 "Slugger" (7272): 31-ton tank destroyer, moves 11", armor 11 all around, 90mm AT gun in open turret, roof MG, 58 points. Powerful tank destroyer introduced late in 1944, very successful.

M-36 B1 "Jackson" (7255): 31-ton tank destroyer, moves 15", armor 11 all around, 90mm AT gun in open turret, roof MG, 58 points. Improved Slugger with better engine, appeared also in late 1944.

M-7 "Priest" (7251): 25-ton self-propelled artillery, moves 14", armor 12 front, 11 side-rear, 105mm medium artillery piece firing forward, roof MG, 48 points. Standard SP gun for army in WWII.

M-12 "King Kong" (7261): 40-ton self-propelled artillery, moves 11", armor 9 all around, 155mm heavy artillery piece firing forward, 42 points. Introduced in small numbers during 1944-45 only.

M-8 "Greyhound" (7263): 8-ton armored car, moves 12", armor 9 all around, 37mm AT gun in open turret, roof MG, 27 points. Standard armored car for American Army throughout the war.

M-3 A1 "White" (7266): armored scout car, moves 11", armor 8 all around, roof MG, carrying capacity similar to halftrack, 15 points. Used in recon units during 1942 and 1943 only.

M-3 A1 "track" (7265): 10-ton halftrack, moves 16", armor 8 all around, roof MG, 20 points. Standard personnel carrier for war.

TURN PROCEDURE

1. Side A moves
2. Side B defensive fire
3. Side A attacking fire
4. Side B moves
5. Side A defensive fire
6. Side B attacking fire

MOVEMENT

3"	Infantry assault move
6"	Infantry running
4"	Heavy Weapons move
1"	AT Gun/Artillery crew push
8"	Truck
12"	Jeep
+3"	Infantry/Hv Weapon road bonus
x2	Tracked vehicle road bonus
x3	Wheeled vehicle road bonus
x½	Forest, steep hill, or rough ground

FIRING

DEFENSE VALUES

6	Infantry running, using road bonus
8	Infantry using assault move
9	Infantry stationary
6	Heavy Weapon moving
9	Heavy Weapon stationary
6	AT Gun/Artillery in position
9	AT Gun/Artillery stationary for firing

(stationary = in place, ready to fire)

FIRING LIMITATIONS
Max Range 5" at/in Forest, Building
Limited Field of Fire Weapon: 30° left or right

ATTACKING FIRE PENALTIES

-2	infantry fire on move (all but grenades, satchels)
-2	vehicle firing on move (except turret weapon)
-1	vehicle firing turret weapon

COVER - SAVING THROWS
Soft Cover: 7 or 11 saves
Hard Cover: 8 or more saves

WEAPON DATA & POINT VALUES

firepower	range	points	weapon name and notes
Basic Infantry & Crew Figures (unarmed)			
—	—	2	green infantryman
—	—	3	line infantryman
—	—	4	veteran/elite infantryman
—	—	+1	noncom or officer rank, including FOs
Crew & Officer Weapons			
0s	5"	1	pistol
Infantry Weapons			
1s	10"	2	rifle
2s	5"	2	SMG (submachinegun)
3s	2"	1	grenades
5ap	3"	5	Panzerfaust (Ger)
Infantry Carrier Weapons			
1s	15"	3	†Light mortar (40-65mm or 2")
2s	10"	3	Automatic Rifle: BAR (US), Bren (UK)
3s	12"	4	†LMG (light machinegun) (Ger,USSR)
0ap	7"	2	Anti-tank Rifle (Ger,Jap,USSR)
4ap	4"	5	†Bazooka (US,UK,Ger)
3aps	3"	4	Flamethrower
7aps	0"	3	Satchel Demolition Charge
Heavy Weapons (all need 2-man crew)			
4s	15"	6	MMG (medium machinegun)
5s	15"	7	HMG (heavy machinegun)
5s or 0ap	20"	8	.50 cal HMG (US, USSR only)
3s	40"	8	Medium Mortar (76-82mm or 3")
5s or 0ap	50"	10	Heavy Mortar (105-120mm or 4.2")
Anti-Tank (AT) Guns (all need 3-man crew)			
0aps	20"	6	15-25mm very light AT Gun
1aps	20"	9	28-45mm light AT Gun (inc. 2-pounder)
2aps	25"	13	50-57mm light-medium AT Gun (inc. 6-pdr)
3aps	30"	18	75-76mm medium AT Gun
4aps	35"	24	75-85mm super-velocity medium-heavy AT Gun (inc. 3" or 17-pounder)
5aps	40"	31	88-94mm heavy AT Gun (including 3.4")
6aps	40"	39	100-128mm extra-heavy AT Gun
Artillery Pieces (all need 3-man crew)			
3s or 0ap	20"	12	direct fire 70-94mm, 25-pounder, or
3s (no ap)	unlimited	12	indirect fire
Artillery Pieces (all need 3-man crew)			
3s or 0ap	20"	12	direct fire 70-94mm, 25-pounder, or
3s (no ap)	unlimited		indirect fire 3.7" light gun or howitzer
5s or 1ap	30"	19	direct fire 100-122mm gun or
5s or 0ap	unlimited		indirect fire howitzer
7s or 2ap	35"	28	direct fire 150mm or larger, or 7.2"
7s or 1ap	unlimited		indirect fire or larger gun or howitzer

KEY
† = Infantry Carrier weapon requires second ammo-carrier figure to operate
US = used by Americans only
UK = used by British and United Kingdom only
USSR = used by Russians only
Ger = used by Germans only
Jap = used by Japanese only

a halftrack. Men riding outside can be shot at as a separate target.

If any vehicle carrying and/or towing is destroyed, all men carried inside and/or on it, and any weapon being towed, is automatically lost.

Firing

All combat between miniatures is by firing. There is no hand-to-hand combat, since in WWII most close combat was fought with point-blank firing and grenades (although it's sometimes done differently in Hollywood!).

To Shoot at the enemy, simply pick your target, measure the range, and roll two dice. Add the dice roll to your firepower value. If the result is greater than the target's defensive value, the target is destroyed (killed, knocked out, etc.). If a miniature has more than one weapons, you select any one weapon to fire. If the miniature is an AFV, all weapons may be fired, rather than just one.

Line of Fire: to shoot at an enemy, you must have a clear "line of fire." This is measured from any point on the body of the man, the center of an AT gun or artillery piece, or the front gun mantlet (base of gun barrel) on a vehicle, to any part of the target. The line of fire is blocked if it passes through any hill, building, or other miniature (friendly or enemy). However, if the firer or target is on a hill higher than the item blocking, the shot can fire over the block.

Field of Fire: vehicles with weapons not in a turret, or on the roof, have a limited field of fire. All AT guns and artillery pieces have a limited field of fire. Limited field of fire weapons can only shoot forward, or up to 30° left or right of forward.

Range: all weapons have a maximum range. In addition, when firing into or through a forest or buildings, maximum range is only 5", regardless of normal weapon range. A miniature in the edge of a building or forest, shooting out, has normal range, but when it fires its position is exposed, and the enemy can return fire at normal range until the miniature moves.

Armored & Soft Targets

All miniatures are presumed "soft" targets unless they have an armored defense value. Most weapons have firepower for shooting at soft targets, noted by an "s" after their firepower. Some weapons have firepower that can destroyed armored targets, noted with an "ap" (Armor piercing ammo) after their firepower. Some firepower is good for both, noted with an "aps" after the firepower. Firepower can only be used against the right kind of target.

Armor Location: armored vehicles often have weaker side and rear armor. Such vehicles have separate armor defense values, one for front, another for side and rear. Side armor shots are allowed only if you are firing directly at the hull side, or within 30° of it. Rear shots are all those behind the side. If the vehicle is in hard cover (hull down) side and rear is based on the turret facing, rather than the hull, if there is a difference.

Defensive Fire

This fire represents shooting at the enemy while he is moving. In theory it can occur any time during the enemy move. When making defensive fire, you can "claim" your shot at any time and place during the target's move. If the target didn't move, you can still claim a shot at it. If you destroy a target in the middle of its move, the target is destroyed at that point, it never arrives at its final destination.

Note that you can shoot at vehicles loading or unloading during the move, and catch them in either state, depending on when you want to fire.

Attacking Fire

If your miniature moves, and then uses attacking fire, its accuracy suffers due to shooting on the move. There are various penalties, depending on who is firing:

−2 infantry firing anything except grenades or stachel charges
−2 vehicle firing anything except weapon in rotating turret
−1 vehicle firing weapon in rotating turret

Important Note: all heavy weapons, AT guns, and artillery pieces cannot shoot attacking fire directly after they move. However, if the weapon just rotated in place, it can still fire, with no penalty. There is never a movement penalty for rotating in place.

Cover

Forests, rough ground, and hedges provide soft cover.

Buildings, walls, AFVs (including wrecks) and higher elevation provide hard cover. Higher elevation gives hard cover because it means vehicles will be "hull down" and men harder to see.

A miniature cannot have both soft and hard cover; if both apply, the miniature only gets hard cover.

Soft Cover Effect: if a non-vehicle miniature is in soft cover, each time it is "destroyed" by a shot, it is allowed a special "saving roll"

with two dice. If the roll is 7 or 11, the cover saves the miniature. Any other result and the miniature is destroyed despite the cover. Soft cover never saves vehicles, they get no benefit from soft cover.

Hard Cover Effect: if any miniature is in hard cover, each time it is "destroyed" it has a saving roll, and 8 or higher saves it, while 7 or less means it is destroyed after all.

Soft Targets in AFVs: men riding in a halftrack, with their heads poking over the top to fire, or any vehicle crewman firing a roof machinegun, is a soft target with hard cover. If a crewman firing a roof machinegun is killed, the roof gun is out of action (i.e., the crew was scared and won't try it again, even if the gun still functions!). Men firing from a halftrack can be killed if they poke their heads up. Men in armored vehicles can only poke their heads up or down during their movement and their defensive fire. Once they are up, they must remain up until they have a new chance to go down again.

Multiple Targets

When firepower is used against a *soft* target, a weapon need not use all its firepower at one target. Instead, firepower can be split, with some at one target, and some at another, provided at least one point of firepower is used against each. Thus a weapon with 4 firepower points could shoot at up to 4 targets (1 point at each), while a 1 firepower point weapon can only shoot at a single target.

The only limitation on splitting firepower is that all targets must be within 3" of the first target. That is, they must be within a circle of 3" radius or less. This represents the "beaten area" of machineguns and the bursts of shells.

Armor piercing fire is always against a single target, it cannot be split up. Firepower with "aps" may be split only if used against all soft targets.

Replacing Crews & Reusing Weapons

If a crewman of a heavy weapon, AT gun or artillery piece is killed, any other infantryman or crewman can replace him. Similarly, when any figure with a weapon is killed, another figure can pike up the weapons. When a figure becomes a crewman or picks up a weapon, he must abandon all his old weapons and equipment. To represent this, remove the old figure, and bring the previous "dead" figure back to life. When weapons and equipment are voluntarily abandoned, no other figure may use them later.

Due to lack of familiarity and easy jamming, you cannot capture and use enemy weapons.

Total Destruction of Weapons: if you kill a soft target with a firepower advantage of 3 or more (that is, your firepower plus dice is 3 or more greater than target defensive value), all weapons of the target are also destroyed. If any crewman of a heavy weapon, AT gun, or artillery piece is killed this way, the weapon itself is also knocked out. Surviving crewmen can still fight as infantry, but will only have pistols.

Whenever a vehicle is destroyed, it is permanently and totally knocked out. However, the wreckage remains on the battlefield, and can be used as hard cover.

ADVANCED RULES

These additional rules can be used once you are familiar with the standard game. They are especially interesting in larger battles, where you expand your Paint 'n' Play set with additional sets or individual figure and vehicle packs from Heritage's extensive line of *Panzertroops*. Not only can you fight larger battles, but you can even link your battles into one long "campaign" game as the allies fight across Europe and into Germany.

You can use some or all of these advanced rules as you desire. Generally, the only difficult and complex rule is that about morale. It is sometimes hard to remember which figure belongs to which combat group! A painted number on the underside of each base can help here considerably.

Pinning Fire

If a non-vehicle soft target is fired at, but not killed, it may be "pinned down." It is pinned if the firing result equals or is one less than the defense value. For example, if the defense value of a miniature is 7, then a firing result of 6 or 7 will pin it down.

When a miniature is pinned down, it is unable to move on its next movement opportunity. Pinning cannot be accumulated, so if a miniature is pinned twice before its next movement opportunity, the second pinning has no extra effect. A miniature pinned by defensive fire stops right where it is.

AFV Crew Bail-Out

When an AFV is destroyed, all the crew and riders aren't always