

WARGAMES RULES
FOR
ARMOURED WARFARE

**AT COMPANY AND BATTALION
BATTLE GROUP LEVEL**



1950 TO 1985

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INTRODUCTION

These rules replace our previous set spanning the period 1950-1975 which up to now have been the standard set used by wargamers world wide and in addition have been used in a derivative form by the U.S. Army for both tactical experiment and training. They incorporate much feed-back from military users and the latest unclassified technical and organisational information available at the time of writing. We expect to update this with free amendment sheets during the life of the set.

As in the case of the previous set, this one uses alternate movement to speed up play and capture some of the flavour of a fast moving tank battle requiring rapid decisions, while still making full provision for all the fringe areas such as communication, engineering, air attack and defence, obstacle clearance, field fortifications, artillery support, target acquisition, terrain, weather, limited visibility conditions, and the reaction of troops to combat stress. The main differences, apart from technical update, are an increase in time scale to allow more movement during each bound and so encourage manoeuvre, an increase in the number of fire and manoeuvre options available to individual on-table elements, and a method of dealing with artillery and air support which is much closer to real life practice. In spite of the apparent increase in complication, the game is now faster still. As an illustration of this, a test game played the day before writing this between a British force of a tank squadron, infantry company and recce and ATGW detachments in defence supported by an affiliated artillery battery and occasionally by other batteries of the same regiment, against an attacking Warsaw Pact tank battalion, armoured infantry company, recce elements and massed pre-programmed artillery was completed after prolonged heavy fighting in some four hours.

Since our original set was first written, the small 1/300 and 1/285 model tanks and infantry have taken over almost entirely from the previously almost universal 1/76 scale, and all our own play is in fact with these. It IS possible to use the larger models with these rules, but the smaller ones give a far better visual impression, are just as detailed and are available in far greater variety.

The period covered by the rules sees the introduction of anti-tank guided weapons, helicopters, optical and laser rangefinders, mechanical and electronic fire control computers, night vision devices, and efficient APDS, APFSDS, HESH and HEAT ammunition for tank guns. We presume throughout that a player will have a general knowledge of the weapons he elects to use and so include performance details only. We are confident that these are reasonably accurate, having cross-checked many independent sources. We have not accepted manufacturers' brochure figures or tests carried out under ideal peace time conditions as representative, but have made the utmost possible use of operations research studies and actual combat accounts. Figures arrived at by the same methods in the previous set were not in fact significantly queried by military users.

Do not be put off by the thickness of this book or apparent complications. The thickness is because it is complete, having dealt with all possible situations and not just the easy ones, not because of excessive complication. The 10,000 odd civilian users of the earlier version have sent in an average of rather less than one postal query per month between the lot of them, and our public demonstrations at shows have amply proved that complete beginners and youngsters can pick up a copy of the rules and immediately play effectively without help from us. If you lack confidence in your own ability, start by playing with a platoon, then promote yourself to company commander, and then to battle group commander, as you acquire familiarity. You will find the thick card ready-reference sheets we include will suffice for nearly all of your play without much referring back to the main rules.

Finally, we would like to express our thanks to all those that wrote in with suggestions or provided information, especially a number of serving officers of the Australian, British, Canadian, and by no means least, U.S. armies, and to pay tribute to Chris Tofalos and Terry Bebbington's gallant bands of Manchester and Walsall play testers.

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MODEL, TIME AND DISTANCE RELATIONSHIPS

METHOD OF PLAY

In order to increase the pace and tension of the game, these rules, like their predecessors, substitute alternate moving for the previously more fashionable simultaneous moving to strict written orders. This goes some way to reproducing the real-life practice of moving in bounds between successive fire positions, and helps in sorting out which of confronting elements shoots first. It is still necessary for each unit to be given orders at the start of the game which can be modified later if desired, but these can be much more general, as can be seen from the special section dealing with them.

During your turn, which we call a bound, you first test your troops' reaction to events during the opponent's latest bound and deal with area fire, then fire first aimed fire shots at targets exposed during the enemy bound, then move, fire second aimed shots at targets available at that time and evaluate suppressive fire. Halted elements will almost invariably get the first accurate shot at a moving enemy. The sequence is described more fully in a special section later on.

If you play to a time limit, remember that both sides must be given an equal number of bounds. When measuring delays, count your own sides bounds only.

TIME SCALE

Each bound can contain movement or area fire that would take 100 seconds in real life. However, aimed fire engagements tend to be short, sharp and intermittent, so you only get 30 seconds worth of aimed fire. Each bound partly overlaps with the enemy bounds preceding and succeeding it and may also incorporate a variable amount of delay, so one friendly plus one enemy bound can be taken as totalling an average of 5 minutes.

GROUND SCALE

All distances in the rules are given in metres.

The ground scale we recommend for 1/300 or 1/285 models on a normal sized table is to take 1 inch measured on the table as equivalent to 50 metres in real life, or 1mm as 2 metres. If you are playing with those sizes of model on an especially small table, you may prefer to take 1 inch as 100 metres, or 1mm as 4 metres. If you prefer larger models, and have ample space, you can take 1 inch as 25 metres, or 1mm as 1 metre.

Whichever scale you choose, you will probably find that you quickly get used to measuring on the table with an ordinary expanding rule and mentally translating. If not, you can mark up a wooden lath with the scale you prefer, then measure with that.

TROOP SCALE

Each figure or weapon represents one real man or weapon. The figures and models used can be of any scale from 1/300 to 1/72, but we heavily recommend those of 1/300 or 1/285 that have now been almost universally adopted. 1/285 is the American standard. The models are exceptionally accurate and detailed, but packaged in inconvenient numbers that do not fit in well with real life organisations, and the range is limited except in the case of American and Russian vehicles. 1/300 is the British standard, is more variable in accuracy, but is sold in singles, and covers the vehicles, other ground combat elements and tactical aircraft of all the major powers.

CHOICE OF NATIONALITY

Unlike World War II wargamers, players are not restricted to armies of the major weapon producing states. Both western and Russian weapons have been exported all over the world and many minor states use both, sometimes with an added mixture of World War II army surplus. Details of such armies can be found in the Institute for Strategic Studies annual paperback, *The Military Balance*. Alternatively, you can invent fictitious armies either using existing vehicles and weapons or inventing your own. Our points value system will stop the latter getting out of hand. We have several such armies, the main pair being the Mohicans, who being "Red" Indians prefer soviet bloc equipment, and the Fenians, from Fenris, a country rather similar to Germany, who use mainly western European equipment and a tactical organisation rather similar to that of the French. The Firewater River dispute has provided many interesting hours of such contentious entertainment as the Otdogsburg Incident and the Battle of the River Sludge. Come and see future instalments at the Aldershot Army Show!

PLANNING YOUR ARMY

CHOICE OF TROOPS

Each small group of figures or vehicles is called an element, each type of which has a points value. Unless the game is part of a map campaign, elements may be freely chosen up to a maximum points value agreed by both players or fixed by competition organisers, except for the following constraints.

- Elements must be combined into units which either exactly reproduce the organisation and equipment of their real life prototypes at the time the battle is supposed to take place, or in the case of fictitious armies, are consistent with an organisation which has been properly worked out and written down.
- Any specialist anti-tank elements nominally centralised under battalion or higher level control and in excess of two for each infantry company present on the table have their points cost doubled.
- There must be at least one element on the table for each element based off it.

POINTS VALUES OF INFANTRY ELEMENTS

These include all types of element that could be found within an infantry rifle platoon whether in fact part of such a platoon or not. They can be:

| | |
|---|----|
| Obsolete rifle group of 5 or 6 men with bolt-action or early self-loading rifles, submachine gun, hand grenades and hand thrown or rifle projected anti-tank grenades. Fires once per bound as either rifle group or AT grenade | 3 |
| LMG group of 2 or 3 men manning bipod MG firing full power ammunition. Fires twice per bound as bipod MG | 6 |
| LAW group of 2 men manning obsolete light anti-tank weapon such as PIAT or bazooka. Fires once per bound | 8 |
| Rifle group of 3 or 4 men with self-loading rifles, hand grenades, modern LAW such as M.72 and possibly projected grenades. Fires once per bound as either rifle group or LAW | 10 |
| Infantry group of 4 men with self-loading rifles, hand grenades, LAW and a magazine-fed bipod LMG firing reduced power ammunition. Fires either once per bound as LAW, or once as bipod MG and once as rifle group | 15 |
| MAW group of 2 men manning medium anti-tank weapon such as Carl Gustav or US 90mm. Fires once per bound | 10 |
| Light ATGW group of 2 men manning man-portable light anti-tank guided weapons system with one sight unit and three missiles. Fires once per bound. Cost if using 1st generation missiles such as SS.10, Entac, Vigilant, Mamba, Bantam, Snapper or Sagger, or if using Dragon | 30 |
| Cost if using modern missiles such as Milan, or Spigot, but not Dragon | 50 |
| Light mortar group of 2 men manning light mortar such as British 2 inch. Fires once per bound in direct fire only | 7 |
| Light AAGW group of 2 or 3 men manning man-portable anti-aircraft guided weapon system such as SA.7, Redeye or Blowpipe. Single throw-away launcher if part of infantry platoon, otherwise three, but only one shot per bound | 30 |

POINTS VALUES OF INFANTRY SUPPORT WEAPON ELEMENTS

These include all elements that could be found within an infantry battalion manning weapons less mobile than those above, but still man-portable over long distances. They will always have a crew of at least 2 men, usually 3, sometimes 4 or more. They can be:

| | |
|---|----|
| Sustained-fire MG of normal calibre on tripod or wheeled mount | 8 |
| 0.50 or 12.7mm HMG on wheeled or tripod single AA mount | 10 |
| 57mm recoilless anti-tank gun | 8 |
| 73mm, 75mm, 80mm, 82mm or 90 mm recoilless on wheeled or tripod mount | 15 |
| Medium mortar from 60mm to 82mm calibre | 15 |
| Manpack flame thrower | 12 |

POINTS VALUES OF HEAVY OR VEHICLE MOUNTED WEAPONS

These include all army weapons that are permanently mounted on vehicles and also those weapons capable of being ground fired which rely on vehicles or animals for transport and can be man-handled only slowly and for limited distances. They can be:

| | |
|---|-----|
| Vehicle mounted MG | 5 |
| Vehicle mounted or multiple AA 0.50 or 12.7mm HMG | 10 |
| 14.5mm HMG | 12 |
| 20mm and 23mm autocannon | 15 |
| 25mm autocannon | 20 |
| 27mm to 35mm autocannon or 20mm Gatling | 25 |
| 40mm auto-grenade launcher | 12 |
| 60 or 81mm AFV gun-mortar | 15 |
| AFV multiple smoke projector installation or 2in. smoke mortar | 5 |
| AFV flame thrower | 20 |
| 4.2in. and 107mm heavy mortars | 20 |
| 120mm heavy mortars | 25 |
| 160mm heavy mortars | 30 |
| 240mm heavy mortars | 35 |
| Russian 73mm in BMP and BMD, and AFV mounted 75mm, 82mm and 90 mm recoilless | 15 |
| 105mm to 107mm recoilless | 20 |
| British 120mm recoilless | 25 |
| AFV mounted light ATGW system with one or two missiles ready to fire sighted by operator under armour, but needing to be reloaded by exposed personnel from up to four spares carried internally: | |
| Cost if using 1st generation missiles, such as Sagger on BMP or BMD | 30 |
| Cost if using modern missiles, such as Milan, Sagger B or Spigot | 50 |
| Vehicle mounted or transported light ATGW system with one sight unit and up to six missiles ready to fire plus an equal number of reloads: | |
| Cost if using 1st generation missiles such as SS.10, Entac, Vigilant, Mamba, Bantam, Snapper or Sagger | 40 |
| Cost if using modern missiles such as Milan or Spigot | 60 |
| Vehicle mounted or transported heavy ATGW system with one sight unit and up to fourteen missiles, at least four of which are ready to fire or reloadable from under cover: | |
| Cost if using 1st generation missiles such as SS.11 or Swatter | 60 |
| Cost if using modern missiles such as Shillelagh, Swatter B, Harpon, TOW or Spandrel | 75 |
| Cost if using modern missile with at least 4,000 metre range such as Swingfire or HOT | 80 |
| If the real life quantity of ready or reload missiles is less than above, the real figure must be used in the game. This does not justify a cost rebate. | |
| 37mm to 45mm AFV, anti-tank or AA guns | 25 |
| 57mm AFV, anti-tank or AA guns | 30 |
| US WW2 75mm AFV gun, as in Sherman and M.24 | 30 |
| Russian 76mm AFV or anti-tank gun, as in PT.76 and SU.76 | 35 |
| British 76mm AFV or anti-tank guns, including 17pdr, 77mm and those in Saladin and Scorpion, French 75mm in AMX.13 and EBR, German 75mm/L48 as in Pz.4, US 76mm as in Sherman, M.10 and M.41, and Russian 85mm as in T.34/85 and ASU.85 | 40 |
| US 90mm AFV guns as in M.48, M.47 and JpzKan, British 84mm 20 pdr, French 90mm smoothbore in AMX.13, EBR and AML.90, Swedish 90mm in IKV.91, and Russian 100mm AFV, anti-tank and field gun as in T.54, T.55 and SU.100 | 50 |
| French 105mm smoothbore AFV gun as in AMX.10 variants and US 75mm smoothbore AFV gun | 55 |
| Russian 122mm AFV gun as in JS.3, T.10, ISU.122, M.1974 and D.74 towed artillery piece, and US 120mm AFV gun as in M.103 | 60 |
| French 105mm rifled AFV gun in AMX. 30 | 65 |
| British 105mm rifled AFV gun in Centurion, Leopard.1 and M.60, and Russian 115mm smoothbore AFV gun in T.62 | 70 |
| British 120mm rifled AFV gun as in Chieftain and Conqueror | 85 |
| German and French 120mm smoothbore AFV guns as in Leopard.2, AMX.32 and M.1, and Russian 125mm smoothbore AFV gun as in T.64 and T.72 | 100 |
| Extra cost for any but 75mm, 115mm, 120mm and 125mm smoothbores if provided with APFSDS | 15 |
| Extra cost of providing AFV gun with proportion of smoke ammunition | 5 |

| | |
|---|-------|
| 70mm, 75mm, 76mm, 95mm or 3.7in. pack howitzers or infantry guns | 25 |
| British 25pdr, US and Italian 105mm, and Russian 122mm M.1938 howitzers | 30 |
| British, German and French 105mm, and Russian 122mm D.30 howitzers. | 35 |
| British 5.5in., US 155mm in M.109, and Russian 152mm M.1943 howitzers. | 40 |
| Russian 152mm in ISU.152, M.1973 and D.20 towed, US 155mm in M.109A1, and French, German and Israeli 155mm howitzers. | 45 |
| Russian 130mm gun, US 155mm gun, FH.70 155mm howitzer and US 8in. howitzer in M.110. | 50 |
| Russian 180mm gun and 203mm howitzer, and US 175mm gun and 8in. howitzer in M.110A2 | 60 |
| Czech M.51 and US M.21 salvo rocket launchers | 35 |
| Russian BM.14 or BM.24, and US M.91 salvo rocket launchers | 40 |
| French RAP.14, German LARS and Russian BM.21 salvo rocket launchers | 50 |
| French Rafale, US and German LRRS and Russian BM.25 salvo rocket launchers | 80 |
| Single launcher for heavy rocket such as Frog, Sergeant, Corporal or Pluton | 95 |
| Extra cost to provide non-rocket artillery with rocket assisted ammunition | 10 |
| Extra cost to provide artillery with bomblet or scatter mine ammunition. | 25 |
| Extra cost to provide artillery with CLGP ammunition | 35 |
| Extra cost to provide artillery with SADARM or gas ammunition | 55 |
| Extra cost of single nuclear warhead or shell | 1,000 |
| Light AAGW system with several missiles such as SA.7, SA.9, Blowpipe or Chaparral ready to fire mounted on AFV | 50 |
| Point defence AAGW system with SA.8, Rapier, Crotale, Roland or similar. | 100 |
| Area defence AAGW system with SA.6, Hawk or similar. | 150 |

POINTS VALUES OF ARMoured FIGHTING VEHICLES

The points cost of an AFV is the combined value of all its vehicle mounted weapons, its degree of armour protection, its level of mobility, and of any special equipment carried. Infantry elements or infantry support weapon elements carried by the vehicle are not included, even if their weapons can be fired from the vehicle as well as from the ground.

Armour classes are defined in a later section. Their costs are as follows:

| | | | | | |
|---------------------|----|----------------------|----|--------------------|-----|
| Class I | 20 | Class V | 45 | Class IX | 80 |
| Class II | 25 | Class VI. | 50 | Class X | 100 |
| Class III | 30 | Class VII. | 55 | | |
| Class IV. | 40 | Class VIII | 60 | | |

| | |
|--|----|
| Partial spaced armour denoted by the suffix "s" increases armour cost by | 10 |
| More complete spaced or special armour denoted by "S" increases it by | 20 |
| The absence of a turret for the main weapon reduces armour cost by | 5 |

Mobility classes and costs are as follows:

| | |
|---|----|
| Wheeled AFV | 0 |
| Half-tracked AFV | 0 |
| Very fast tracked AFV, capable of more than 59kph (37mph) on good roads | 20 |
| Fast tracked AFV, capable of 43kph (27mph) to 59kph (37mph) on good roads. | 10 |
| Medium speed tracked AFV, capable of 25kph (16mph) to 58kph (36mph) on good roads | 5 |
| Slow tracked AFV, capable of less than 25kph (16mph) on good roads. | 0 |

POINTS VALUES OF SOFT TRANSPORT

| | |
|---|-----|
| Animals to mount an infantry element, carry an infantry support element, or pack or tow a heavy weapon or vehicle, together with drivers, limbers and vehicles. | 2 |
| Jeep type ¼ tonne or ½ tonne vehicle, with or without trailer | 5 |
| Truck up to 1 tonne capacity | 8 |
| Larger lorry or specialised artillery tractor. | 10 |
| Section assault boat | 1 |
| Landing craft or river patrol boat | 50 |
| Hovercraft. | 250 |

The costs of any permanently mounted weapons and special equipment must be added to the basic costs. All weapons normally employing vehicle or animal traction must be provided with it except when dug-in in a static defensive role.

