INTRODUCTION

This Introduction provides a guide to the army listing you have purchased. We believe them to be the most comprehensive yet available. They include vehicle details including armour values. Although these are based on the wargame Manoeuvre Group they can be converted back to the equivalent thickness of Rolled Homogeneous (Steel) Armour (RHA) to allow use with other wargames rules.

Manoeuvre Group is a game that on table models at most, a company battle group. These listings go up to divisional level. There is a reason for this. Some resources you may want to use, artillery, specialist engineering etc are held at this level and this level of detail allows you to pick realistic amounts of such kit for your scenario. Besides you may want to have a surprise raid on divisional HQ. Blocking forces such a reconnaissance groups are held at divisional level.

In case you are not a Manoeuvre Group fanatic, the following is a guide to the data presented.

Organisations

At the squad level we have broken the element down into fire teams to suit the rules. The number of men in the squad is correct so you could re-organise the squads if you need to, or if you are not using our rules.

Weapons Data

Terms and Abbreviations

- **A** Automatic Response System
- **AA** Anti Aircraft
- **AAGW** Anti Aircraft Guided Weapon
- **AB** Airburst
- **ABMS** Artillery Battle Management System
- **AC** Auto cannon
- **ADAD** Air Defence Alerting Devices
- **AEV** Armoured Engineering Vehicle
- **AFV** Armoured Fighting Vehicle
- **AGL** Auto grenade Launcher
- **Amph** Amphibious
- **AP** Armour Piercing
- **APC** Armoured Personnel Carrier
- **APCBC** Armour Piercing Capped Ballistic Capped
- **APDS** Armour Piercing Discarding Sabot
- **APFSDS** Armour Piercing Fin Stabilised Discarding Sabot
- **APFSDSDU** Armour Piercing Fin Stabilised Discarding Sabot Depleted Uranium
- **APHE** Armour Piercing High Explosive
- **APU** Auxiliary Power Unit
- **ARV** Armoured Recovery Vehicle
- **ATGW** Anti Tank Guided Weapon
- **ATG** Anti Tank Gun
- **A/T** Anti Tank
- **Aux Gen** Auxiliary Generator
- **Aux Tanks** Auxiliary Fuel Tanks
- **AVLB** Armoured Vehicle Launching Bridge
- **BB** Back Blast
- **BE** Base Ejection (smoke shell)
- **BMS** Battle Management System
- **Bn** Battalion
- **Bty** Battery
- **CB** Counter Battery
- **CE** Chemical Energy
- **Chg** Chain Gun
- **CGS** Company Headquarters
- **CLGP** Cannon Launched Guided Projectile
- **CO** Commanding Officer
- **Coy** Company
- **Cu** Cupola
- **Cx** Coaxial
- **DZB** Dozer Blade
- **ECM** Electronic Counter Measures
- **FC** Fire Control
- **FDF** Final Defensive Fire point. Pre-defined priority target for an Artillery barrage
- **FLIR** Forward Looking Infra Red
- **Gen** Generator
- **GL** Grenade Launcher
- **GPS** Global Position System
- **GS** Ground Surveillance Radar
- **Gun L** Gun Launcher
- **HE** High Explosive
- **HEAT** High Explosive Anti Tank
- **HESH** High Explosive Squash Head
- **HMG** Heavy Machine Gun
- **HGP** High Ground Pressure
- **HP** High Pressure
- **ICM** Improved Conventional Munitions
- **IFV** Infantry Fighting Vehicle
- **IINS** Image Intensifier Night Sight
- **IINV** Image Intensifier Night Vision
- **ILL** Illumination Shell
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>Inf</td>
<td>Infantry</td>
</tr>
<tr>
<td>IRB Smk</td>
<td>Infra Red Blocking Smoking</td>
</tr>
<tr>
<td>IRJ</td>
<td>Infra Red Jammer</td>
</tr>
<tr>
<td>IRNS</td>
<td>Infra Red Night Sight</td>
</tr>
<tr>
<td>IRNV</td>
<td>Infra Red Night Vision</td>
</tr>
<tr>
<td>KE</td>
<td>Kinetic Energy</td>
</tr>
<tr>
<td>LAD</td>
<td>Light Anti Armour Disposable</td>
</tr>
<tr>
<td>LAW</td>
<td>Light Anti Armour Weapon</td>
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<tr>
<td>LBR</td>
<td>Laser Beam Rider</td>
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<tr>
<td>LD</td>
<td>Leadership</td>
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<tr>
<td>L/D</td>
<td>Laser Designator</td>
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<tr>
<td>LGP</td>
<td>Low Ground Pressure</td>
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<tr>
<td>LLTV</td>
<td>Low Light Television</td>
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<td>LOS</td>
<td>Line of Sight</td>
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<tr>
<td>LPG</td>
<td>Low Pressure Gun</td>
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<tr>
<td>LRF</td>
<td>Laser Rangefinder</td>
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<tr>
<td>LS</td>
<td>Laser Sensor</td>
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<td>LSW</td>
<td>Light Support Weapon</td>
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<tr>
<td>M</td>
<td>Manual Response</td>
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<tr>
<td>MAD</td>
<td>Medium Anti Tank Disposable</td>
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<td>MAW</td>
<td>Medium Anti Tank Weapon</td>
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<td>Max</td>
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<tr>
<td>MBT</td>
<td>Main Battle Tank</td>
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<tr>
<td>MG</td>
<td>Machine Gun</td>
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<tr>
<td>MICV</td>
<td>Mechanised Infantry Combat Vehicle</td>
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<tr>
<td>Min</td>
<td>Minimum</td>
</tr>
<tr>
<td>MLRS</td>
<td>Multiple Launching Rocket System</td>
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<tr>
<td>MMR</td>
<td>Millimetric Radar</td>
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<tr>
<td>MR</td>
<td>Mine Resistant</td>
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<td>OP</td>
<td>Observation Post</td>
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<td>OT</td>
<td>Open Top</td>
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<tr>
<td>PC</td>
<td>Platoon Commander</td>
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<td>Pen</td>
<td>Penetrator</td>
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<tr>
<td>PT</td>
<td>Precursor Tip</td>
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<tr>
<td>R</td>
<td>Radio</td>
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<tr>
<td>Recce</td>
<td>Reconnaissance</td>
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<tr>
<td>RCL</td>
<td>Recoilless Rifled Gun</td>
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<tr>
<td>Rds</td>
<td>Rounds</td>
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<tr>
<td>RG</td>
<td>Rifle Grenade</td>
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<tr>
<td>R/IR</td>
<td>Radio Infra-Red</td>
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<td>RPG</td>
<td>Rocket Propelled Grenade</td>
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<tr>
<td>SAW</td>
<td>Squad Automatic Weapon</td>
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<tr>
<td>SFMG</td>
<td>Sustained Fire Machine Gun</td>
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<tr>
<td>SIR</td>
<td>Scanning Infra-Red</td>
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<tr>
<td>SL</td>
<td>Stress Level</td>
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<td>Smk BE</td>
<td>Smoke Base Ejected</td>
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<tr>
<td>Smk Gen</td>
<td>Smoke Generation (types as for smoke discharges)</td>
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<tr>
<td>Smk WP</td>
<td>Smoke White Phosphorous</td>
</tr>
<tr>
<td>SP</td>
<td>Self Propelled</td>
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<tr>
<td>SPAA</td>
<td>Self Propelled Anti Aircraft</td>
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<tr>
<td>TD</td>
<td>Tandem Warhead</td>
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<tr>
<td>TI</td>
<td>Thermal Imager</td>
</tr>
<tr>
<td>TID</td>
<td>Thermal Imager Driving</td>
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**Smoke Discharges (types as below)**

-1 Basic smoke not effective against thermal imaging or FLIR or Radar Guided, is effective against lasers.

-2 IR Defeating smoke effective against thermal imaging, FLIR and lasers, not effective against Radar guidance.

-3 IR Defeating Smoke and decoy flares. Effective against thermal imaging, FLIR, IR guidance systems and lasers.

-4 IR Defeating Smoke and decoy flares, with chaff aerosol. Effective against thermal imaging, FLIR and anti tank guided weapons using millimetric radar, IR guidance systems and lasers.

**Endurance** - This is a typical amount of time a vehicle is expected to run for without re-fuelling if used continuously. Clearly this is a bit arbitrary but it is useful if planning a campaign, how short a time a unit is capable of operating before it needs to withdraw to re-fuel.

**Armor Penetration**

Armour is categorised by classes 0 to 20 (or higher if required) of Equivalent Rolled Steel Homogeneous Armour (RHA). Guns by the thickness of RHA they can penetrate at the given range (technically the thickness at which 50% of the rounds will penetrate).
For those of a mathematical bent Nominal RHA thickness 'Tc' for each class 'C' being defined as:

Class 0 = Soft skin (technically 7 mm or less RHA).
Armour classes 1 to 20 are defined by:

\[ Tc = 8 \times \left(\frac{1.3333}{C-1}\right) \text{mm of Equivalent RHA} \]

Where \( C = \text{Armour class} \).

This gives nominal RHA thickness bands of:

<table>
<thead>
<tr>
<th>Class</th>
<th>mm RHA</th>
<th>Class</th>
<th>mm RHA</th>
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<tbody>
<tr>
<td>1</td>
<td>8</td>
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<td>60</td>
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<td>13</td>
<td>252</td>
<td>20</td>
<td>1891</td>
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<tr>
<td>7</td>
<td>45</td>
<td>14</td>
<td>337</td>
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</table>

Example - a tank with a turret front armour equivalent to 143 mm of RHA would be Class 11 armour (nearest to class 11 at 142mm of RHA).

Amour Classification

Armour is classified by its ability to resist Kinetic Rounds (Solid Shot) and its ability to withstand Chemical Energy rounds (Shaped charges). This classification will also include any effects of Explosive Reactive Armour (ERA).

Note Chemical Energy rounds produce significant “Splash” of metal and flame which more easily damages externals even if they fail to penetrate. In addition a chemical round’s effectiveness increases when their penetration greatly exceeds the armour they are penetrating. With Kinetic rounds excessive penetration has little impact, the round goes straight through whatever. Hence engaging light armour with a MBT Gun, it is better to use a Chemical Energy round than a Kinetic Energy round.

Guided missile data gives the minimum range (warhead arming distance) as well as the maximum range.

Creating an Army List to play with Maneuver Group

Don’t start with a company battle group, a platoon is plenty. You can have a quick but still interesting game cheating and going down scale. You can play with a squad as one sides force. However at this level most fire teams will be two men so their leadership casualties will mount quickly. If you do play at this level the squad leader becomes the equivalent of a Platoon leader in the proper game. DON’T TRY MIXING this level and the normal game, it’s too complex and the game breaks down.

The forces shown are their establishment. Rarely in the real world will they achieve this. For game purposes its acceptable to add or subtract an element from a platoon to get the balance of forces right. Note no unit should have a command element and less than three elements reporting to it, although for infantry this can include the command elements squad. If you do the game falls down as it’s too easy to remove suppressions. If the scenario demands you have this formation, increase the leadership of the command element to compensate. Not ideal but it is better to do this than not to.

Scenarios

The division lists gives lots of scenario options. A covert raid on a mortar battery protected only by its own troops. A raid either by partisans or Heli/paras on the rear security troops protecting a bridge. Divisional reconnaissance troops delaying the advance of a task group. Use the list to dream up new approaches.

Last word

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# British Armoured Division 1991 to 2000

The collapse of communism in Russia saw the dismantling of B.A.O.R on the Rhine down to a single Armoured Division. The Division only being a administrative formation Controlling signals, 1,000 to 1,500 tons of supply a day and medical requirements.

A Brigade is a independent combat formation, able to operate without the need to deploy a division and its support.

## Armoured Division

**Company HQ**
- CO & 100 admin staff in L/Rovers & trucks Main Cmd Post
- XO & 100 admin staff in L/Rovers & trucks
- Secondary Cmd Post (for moving or lost of main Cmd Post)

## Divisional Signal Regiment

- **1st Squadron** in trucks
- **2nd Squadron** in trucks (secondary Comms Post)
- **3rd Squadron** in trucks (secondary Comms Post)

**Note** Secondary Comms Post & Radio Relay (ie for moving or lost of main Comms Post)

## Reconnaissance Regiment

**Regt HQ Squadron**
- 6x Sultan, with Cmd teams of CO, XO, ALO,
  - 1x AOP in Warrior MAOV, 1x Spartan,
  - 2x Supply Trucks, 1x Samaritan Ambulance
- Fitter Troop with 1x FV-432, with REME teams
  - 1x FV-434, 1x Sampson,
  - 1x Heavy Recovery truck Foden

## 2 x Armoured Reconnaissance Squadron each with

**Squadron HQ Troop**
- 2x Sultan, with Cmd team of CO, XO,
  - 1x AOP in Warrior MAOV, 1x Spartan,
  - 1x Samaritan Ambulance, 2 Supply Truck
- Fitter Section
  - 1x FV-432, with REME teams, 2x FV-434
  - 1x Sampson,
- Anti Tank Troop 4x Striker
- Support Troop 4x Spartan with GS Radar
- **1st Reconnaissance Troop** 4x Scimitar
- **2nd Reconnaissance Troop** 4x Scimitar
- **3rd Reconnaissance Troop** 4x Scimitar
- **4th Reconnaissance Troop** 4x Scimitar

## Divisional Aviation Regiment

**Regt HQ Squadron**
- **HQ Troop** with Cmd teams of CO, XO, ALO, Operating in the forward base in trucks & L/Rovers
  - Signal Troop 4x trucks
  - Stores Troop 4x trucks
  - Material Transport Troop 4x heavy trucks
- **2x Utility Squadron**
  - **HQ Troop** Cmd teams of XO in trucks & L/Rovers
  - Operating in there forward arming & refuelling point
  - 1x Tanker Section of 4 tankers
  - Flight of 4x Gazelle (The CO in one of the Gazelles)
  - Flight of 4x Lynx (2 Lynx armed with TOW-2A 71E)

## Divisional Medical Regiment

**Regt HQ Squadron**
- 2x Sultan, with Cmd teams of CO, XO,
- 2x Samaritan Ambulance, 2x 1 ton L/Rover, 2x trucks
- Signal Troop 4x trucks
- Medical Stores Troop 4x trucks
- Fitter Section FV-432 with REME teams, 1x FV-434
  - 1x Heavy recovery truck Foden

## Forward Field Hospital
- 8x surgical teams & staff for up to 200 beds

## Armoured Field Ambulance Squadron

**Squadron HQ Troop** 2x Sultan, with Cmd teams of CO, XO,
- 2x Samaritan Ambulance, 2x 1 ton L/Rover, 2x trucks
- Fitter Section 1xFV-432 with REME teams, 1x FV-434
  - 1x Heavy recovery truck Foden
- Armoured Ambulance Troop 1xFV-432Cmd, 4x FV-432
- Armoured Ambulance Troop 1xFV-432Cmd, 4x FV-432
- Armoured Ambulance Troop 1xFV-432Cmd, 4x FV-432
- Dressing Station 6x 1 ton L/Rover Ambulances
  - 6x personnel trucks
  - 6x equipment carrying trucks
Wheeled Field Ambulance Squadron
Squadron HQ Troop 4x L/Rovers with Cmd teams of C O, XO
- Fitter Section 1xFV-432 with REME teams, 1xFV-434
  1x Heavy recovery truck Foden
- Wheeled Ambulance Troop 1x 1 ton L/Rover cmd, 4x 1 ton L/Rover Ambulances
- Wheeled Ambulance Troop 1x 1 ton L/Rover cmd, 4x 1 ton L/Rover Ambulances
- Wheeled Ambulance Troop 1x 1 ton L/Rover cmd, 4x 1 ton L/Rover Ambulances
- Dressing Station 6x 1 ton L/Rover Ambulances, 1 cmd
  6x personnel trucks
  6x equipment carrying trucks
Note the Armoured field ambulance squadron pick up casualty from the task group and delivers them to their dressing station, these are collected by the Wheeled Field Ambulance Squadron and delivers them to their dressing station and finally to the field hospital or directly to field hospital by helicopter.

3x REME Equipment Support Battalion
Battalion HQ Company
Close Support Company with
- Forward Repair Group (REME Workshop) with FV-434 or Sampson, FV-432 carrying a REME team
  these repair on-site in as safe area as possible
Note this Company operates in the forward areas of a Brigade.
For game purposes. Repair any vehicle with 2 hours or less work
- Medium Repair Group (REME Workshop) with FV-434 or Sampson, FV-432 carrying a REME team
Note these repair recovered vehicles that can not be repair by the FRG and operate behind the FRG.
For game purposes. Repair any vehicle with 8 hours or less work

General Support Company
This company undertakes major repairs & battle field replacements as well as supporting the CSC

Note this operates in the rear of a division to minimise vulnerability and to maximise productivity.
For game purposes. Repair any vehicle with 24 hours or less work

2x Close Support Logistic Regiments each with
Regt HQ squadron Cmd Troop CO,XO & Admin staff
- Signal Troop 4x trucks
- Stores Troop 4x trucks
- Fitter Section 1xFV-432 with REME teams.
  1xFV-434
  1x Heavy recovery truck Foden

3x Brigade Support Squadron each with
Squadron HQ Troop Cmd team in L/Rovers
- Fuel Troop 3x Tankers Section of 4x Tankers,
  1x Drops truck Section of 4x trucks
- IRG troop 4x Section of Drops trucks of 4x trucks,
  1x Tanker Section of 4x Tankers,
- C.S Troop 5x Section of 4x 8ton trucks
- 1x Material Handling Equipment Section (MHE) of 4x Heavy trucks & articulated trucks
Note Each of the Brigade Support Squadron are attached to a armoured brigade (1 delivers as 1 Reloads)
THIS AS BEEN REPEATED in the Armoured Brigade

Divisional Support Squadron
Squadron HQ Troop Cmd team in L/Rovers
- Divisional stores troop 3x Stores Section of 4x trucks
- C.S Troop 1x Drops Section of 4x trucks
  2x Tankers Section of 4x Tankers
  1x Bowers Section of 4x water bowers
  1x Material Handling Equipment Section of 4x Heavy trucks & articulated trucks
Note MHE Section transports Bulldozers ect.
- Divisional IRG Troop 1x IRG Section of 4x trucks
  1x ERG Section of 4x trucks
Note CS is Combat Support
IRG is Immediate Replenishment Group.
ERG is Emergency Replenishment Group
Note the ERG is for troops in combat and running out of ammo.
General Support Logistic Regiment
Regt HQ squadron Command Troop CO,XO & Admin staff

2x Artillery support Squadron
Squadron HQ Troop Cmd team in L/Rovers
- A- Troop 3x Fuel Section of 4x Tankers
  3x Drops Section of 4x trucks
- B-Troop 3x Drops Section of 4x trucks

Supply Squadron
Squadron HQ Troop Cmd team in L/Rovers
- Combat Supply Troop 12x articulated trucks
- Divisional Logistic Recovery Group REME Depot
  for vehicle maintenance, operating Heavy recovery trucks Foden
- DSA group Main Supply Depot in building & bunkers

Tank Transporter Squadron
Squadron HQ Troop Cmd team in L/Rovers
- Tank Transporter Troop with 17x Tank Transporters

Note General support logistic regiment supplies the artillery

Military Police Detachment
For guarding key military check points & traffic management.

NBC Troop Detachment 10x Fuchs with Decontaminations teams

Armoured Engineering Regiment
Regt HQ Squadron 2x FV-432, with Cmd teams CO,XO
- Signal Troop 4x FV-439 (signal version of the FV-432)
- Stores Troop 4x Heavy trucks
- Fitter Section 1x FV-432 with REME teams, 2x FV-434,
  3x Field Squadron each with
Squadron HQ Troop 2x FV-432, with Cmd teams of CO,XO
- Fitter Section 1x FV-432 with REME teams, 2x FV-434
3x Armoured Engineer Troop each with
Troop HQ
- 1x FV-432 carrying TC, 2x NCO, Radioman,
  2x Fire teams SAW of 2 men
- 1x 51mm mortar with 12rds ILL, flare WP-Smoke
  2x trucks carrying a Bar minelayer, mine scraper & pallets of other engineering materials.
- 3x FV-432 Section each carrying
  1x Engineering infantry squad of 9 men in
  1x fire team SAW team of 2 men & 3 rifles
  1x fire team of 1 LSW & 3 rifles or
  3x LAW-80 A/T MAD, off route mines
- 1x Field Support Troop with
  Troop HQ 1x FV-432 carrying TC, 2x NCO, Radioman,
  1x Engineering team of 5 men rifles
  5x CET-180
  3x AVRE Chieftain
  1x truck, 1x Digger

Field Support Squadron
Squadron HQ Troop 2x FV-432, with Cmd teams CO & XO
- Fitter Section 1x FV-432 with REME teams,
  1x FV-434
  1x CRARRV
- Bridging Troop with 3x AVLB Chieftain
- Plant Troop with 1x Crane, Tractors & Diggers
- Resource Troop with 3x Cranes,
  3x 8ton trucks with
  4x Pioneer Squads of 9 men plus equipment

Note this unit carry’s out engineering at division level.

Divisional Depth Fire Regiment
Regt HQ Battery 6x Sultan, with Cmd teams of CO, XO
- 4x FV 432 FACE/Counter Battery Radar
- Fitter Section 1x FV-432 with REME teams, 2x FV-434
- 1x MCV-80 Warrior 512
- Meteorological Troop 4x trucks AMETS Radar
- RPV Troop 9x RPV launches 3x RPV on each truck
- 2x MLRS Battery
  Battery HQ Troop 2x Sultan, with Cmd teams of CO, XO
  9x MLRS each with 12 rockets
- Battery resupply Troop of 15x Drops vehicles

Note Ready for use 12 rockets with ICM Bomblets, Minelets,
  Range 10-32km, A rocket beaten zone is 500m x 500m
  ICM Bomblet become a nuisance mixed minefield were it falls