

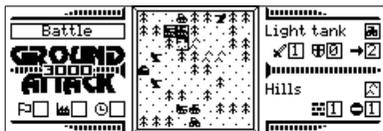
## ON TO BATTLE

When both players have given their orders, it is time to watch the battle. In a two player game, both players will watch this together. The battle is split into an attack phase and a movement phase.

In the attack phase, you will see the battle map. In a one-player game this is the same as the orders map, showing only those enemy units in sighting range. In a two-player game, the map shows only those units known to both players.

Battles are evaluated in random order. In each attack, the attacking units will be highlighted, and the cursor will move to the square being attacked. This will flash for a moment, and then the result of

the attack will be shown. If the unit is destroyed, an explosion will briefly appear and then the unit is gone; if the unit survived, it will remain. A message will also appear



A battle scene on a Series 3. Two player units are attack an enemy target together.

briefly at the bottom right of the screen. It may be that attacking units or the target are not in sight. In this case, the empty square is highlighted but the unit itself is not shown.

When all battles are done,

## BATTLE RESOLUTION

The exact way an attack is calculated depends on what battle rules you selected at the start of the game. In all rules, the total attack strength of all units attacking the target is calculated; then the target's defence is calculated. Then the 50% failure test for unseen targets is first applied; on failure no damage is done. Otherwise, if the attack exceeds the defence, the unit is destroyed. If the defence exceeds attack, it survives. If attack and defence are equal, the outcome is chosen at random.

Attack strength is calculated by adding together the attack

strength of each attacking unit, modified by the distance each unit is firing. Units are only at maximum strength when firing into adjacent squares; at each further square the attack strength decreases by one, down to one point at maximum range. In Textbook and Blitzkrieg rules, the attack is left at that. In Trench and Chaos rules, the attack will be a random number between 0 and the calculated attack strength.

Defence strength is the defence rating of the defending unit, added to the defence rating for the terrain in which it stands. So a bunker in the forest has a defence rating of

## THE END GAME

The game ends when one side is without a command bunker. That side loses the game. It is possible to have a draw, if both sides happen to destroy the enemy command bunker on the

same turn, but this is unlikely if either side is making any attempt at defence.

At the end of the game, all units on the map are revealed to the players. You are free to look

movement takes place. The map is hidden at this time. Movement is also in random order; if both you and an enemy want to occupy the same strategic position, no player is favoured over the other except by chance. You may also find that trees or hills have slowed your units down too; there is a 1/3 chance that a unit fails to ascend a hill on each attempt, and a 2/3 chance that it will fail to get through a forest square. But note that faster units may make as many attempts as they have movement points remaining, so for example, a fast scout moving one square to an adjacent forest has about a 70% chance of getting there.

5. In Textbook and Trench rules, the defence will be left as it is. In Blitzkrieg and Chaos rules, the defence will be a random number from 0 to the calculated defence strength.

So in the Textbook rules, outcomes can often be calculated by the player, with only attack order and the possibility of attack from unseen units thwarting your expectations. In Blitzkrieg, defensive lines are of little value, while the Trench rules allow forces to come into closer contact without being quickly shot to pieces. The Chaos game rules out all certainties!

around, using the *Location info* option to identify units. But the game goes no further: you must now exit the program or start a new game.



## INTRODUCTION

Over the next thousand years, nations and empires rise and fall, both malignant and benign, and many changes come over the face of the earth. Technology waxes and wanes, and the climate itself unleashes great upheavals. But one thing remains constant, and that is humans' thirst for warfare.

In *Ground Attack 3000* you take

on the role of a general directing ground forces in a battle to destroy your enemy's command base, and to protect your own. You are given full authority over not only your forces' movements, but their very nature. A range of different battle units are at your disposal, each type with its own strengths and weaknesses, and your initial

army is supplemented throughout the game by reinforcements that you request.

Choose and use your forces wisely, and victory is yours to take. Fail in your mission, and you will suffer the ultimate disgrace for a military leader: defeat.

## INSTALLING THE GAME

*Ground Attack 3000* runs on Psion handheld computers. The installation process depends on

the machine you are using. The game archive has a file *Readme.txt* included, which gives

system requirements and full installation instructions.

## A NOTE ABOUT CONTROLS

The game makes extensive use of the Psion's own menu system, accessed using the Menu key (or the silkscreen button on stylus-equipped machines). Each menu option has a shortcut key, shown when you look at the menu. You

might want to remember the keys for options you use often, as they are not further specified in the manual.

Occasionally an extra shortcut is provided on a more convenient key like Enter, Esc or Space.

These are not shown on the menu, and will be mentioned where they apply. Stylus-equipped machines will have extra gestures and on-screen buttons, which are mentioned where appropriate.

## STARTING A GAME

When you run *Ground Attack 3000* for the first time, you will see the settings screen for a new game. To see it at other times, start a new game by selecting *New game* from the *File* menu, or *New File* from the system screen. There are three settings:

*Human vs...*; who the players are. You can play against a friend or against the Psion. Choices are *Human*, *Easy Psion*, *Fair Psion* and *Hard Psion*.

*Battle rules*: there are four



Game setup on a Series 3.

styles of game you can choose from: *textbook* is the default, *blitzkrieg* gives priority to attacks, *trench* to defence, and *chaos* introduces randomness to both attack and defence so that no outcome is ever certain.

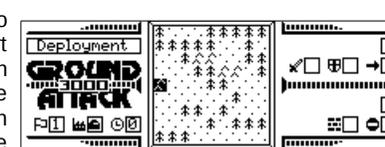
*Production*: the number of turns it takes to produce a new unit for

reinforcement. Options are 3, 6 or 9. The longer it takes to produce a unit, the more carefully you have to think about taking risks with your forces.

To change a setting, move the cursor bar up or down with the cursor keys to highlight it and press *Space*. The setting will change to the next option. On machines with a stylus, tapping on an option will highlight it and change it. When you are happy with the options, press *Enter* or tap the *Proceed* button.

## INITIAL DEPLOYMENT

The first thing you need to do is to deploy your units. You start the game with nine units, which you need to deploy on your side of the map: player 1 starts on the left, and player 2 on the



Beginning deployment on a Series 3.

right. The choice of units is yours, except for the first unit you deploy, which is your command bunker.

The unit you are about to deploy is pictured on the informa-

tion panel, in the box next to the factory icon. There is a cursor on the map. To place the unit, move the cursor with the cursor keys, and press *Space* to deploy. If you press *Enter*, the information panel is updated with details of the square and the unit (if present) on which the cursor sits. On machines with a stylus, tapping once on a square moves the cursor there and updates the information panel, while tapping again deploys the unit there. Notice that during initial deployment you can only use the first few columns on your side of the map.

Once you have deployed a unit, you are asked to choose the next unit, after which you get to deploy it. After you deploy your ninth unit, you are asked to choose a tenth unit. This will take some turns to



Selecting the next unit on the Series 3.

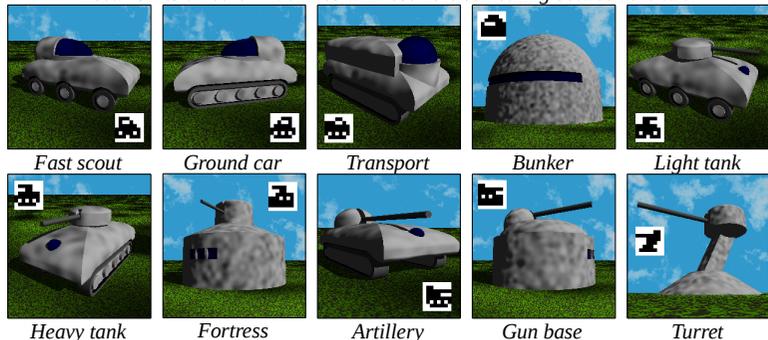
produce, so you are not asked to deploy it now.

At any time while deploying on the map, you can obtain information about the map squares and the units already placed there. Just navigate to the square and select the *Location Info* option from the *Deploy* menu (shortcut *Enter*).

The ten types of unit each have three statistics, which are useful to know. The statistics are *Attack*, *Defence* and *Movement*, and each is a number from 0 to 3. The total statistics of every unit add up to 3, making each one equally valuable.

*Attack* is the maximum amount of damage a unit can deal out. It also specifies the firing range of the unit. As the range of a shot increases, its damage decreases, so a unit with an attack rating of two can cause two damage to an adjacent unit, or one damage to a unit two squares away.

Artist's impressions of the different units, each with the Series 3 map graphic for that unit inset. Units on other machines will resemble something between the two.



*Defence* is the maximum amount of damage a unit can absorb without being destroyed. If the defence value is greater than the damage dealt, the unit survives. If it is less, the unit is destroyed. If it is equal, there is a 50% chance that the unit is destroyed. Defence is bolstered by some types of terrain.

*Movement* is the maximum number of squares a unit may move in a given turn. Actual movement is affected by terrain.

These stats are usually specified in the form (*attack/defence/movement*),

e.g. (2/1/0) for a static unit with two attack and one defence. Units with no attack strength usually have a special capability or purpose. The ten unit types are these:

**Fast scout** (0/0/3): the name explains it all. The fastest unit available, the fast scout carries equipment that can see three squares away, instead of the usual one. But it is very vulnerable and has no attack capability.

**Ground car** (0/1/2): this is also a scout unit. It is not as fast as the fast scout, but it has heavier armour to protect it against attack.

**Transport** (0/2/1): this carries equipment for reinforcements, allowing new reinforcements to be deployed adjacent to the transport wherever it is on the map. Transports are slow but heavily defended.

**Bunker** (0/3/0): this is your

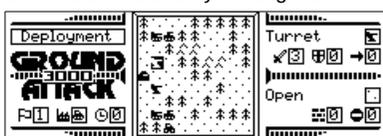
command bunker. Without a command bunker you have lost the game. It is the most heavily defended unit on the map, and takes a lot of killing. But it is static and cannot itself attack other units, so it will eventually succumb to attack by massed enemy units. Reinforcements can be deployed next to a bunker. Note that you can have more than one command bunker; the enemy must destroy all of them to beat you.

**Light tank** (1/0/2): these are fast attack vehicles. They are good for chasing down and taking out scouts, but are vulnerable to attack when out in the open.

**Heavy tank** (1/1/1): slower than the light tanks, these pack the same punch but are more heavily armoured. Heavy tanks can go up against offensive enemy units, especially under cover of terrain.

**Fortress** (1/2/0): these are heavily defended buildings with mounted guns. They take a lot of damage and, while their firepower is not great, they are good for holding off enemies for a while.

**Artillery** (2/0/1): mobile artillery have a good range and fire powerful volleys against enemy units. But their lack of defence makes them vulnerable; sending them too close the enemy is a big risk.



Deployment almost complete on a Series 3. A turret has been highlighted, and its stats and its location's stats shown on the right.

**Gun base** (2/1/0): this base is a defensive building with a large mounted gun, serving a similar purpose to the fortress. While they are not as heavily armoured, they are not defenceless, and their

guns have a greater range and power.

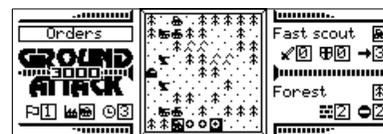
**Turret** (3/0/0): this is simply a large, powerful static gun. It cannot move and has no defence of its own, so it is vulnerable to at-

## GIVING YOUR ORDERS

After both sides have deployed their units, you will be able to issue orders to them. You will see your units laid out on the battle map. You will also see those enemy units that come within sighting range of your own forces. Most units can only see into the adjacent four squares, though scout units can see three squares away.

Units may be given both attack and movement orders. Attack orders can be given to any unit with an attack strength of one or more, movement orders to any unit with one or more movement points.

To give a unit an attack order,



Giving orders to move the fast scout at full speed (perhaps unwisely), on a Series 3.

move the cursor to the unit and select *Give attack order* from the *Orders* menu. You are now in attack mode. Move the cursor to the unit you wish to fire at, and select *Attack* (shortcut *Space*). On stylus-equipped machines you can tap on your own unit once, tap the *Attack here* button, and tap on the enemy twice to attack it. You will see a small circle flash and then remain over the target unit.

You are still in attack mode; you can change your mind and select another target. Or you can select the attacking unit as a target, which cancels the attack. To leave attack mode select the *Done attacking* option from the *Attack*

menu (shortcut *Esc*). You can then issue attack orders to other units. Note that if you select a unit that already has attack orders, the target circle will appear to remind you what the unit is attacking.

You may only attack units within firing range (which is equal to attack strength). If you want to attack more distant units, you need to move towards them.

To give a unit movement orders, move your cursor to the unit you want to move and select *Give movement order* from the *Orders* menu (the shortcut *Space* applies when not already in attack or movement mode). You are now in

movement mode. Move the cursor to a square adjacent to your unit and select *Move here* from the *Movement* menu (shortcut *Space*).

On stylus-equipped machines, tap once on the unit, tap the *Movement* button, and tap twice on the adjacent square. A circle will appear in the destination square.

Some units can move more than one square in a turn. To move further, simply move to the second square away from your unit and choose *Move here* as described above. Fast scouts may move to a third square. You are free to change direction during these longer moves, but a unit may only be given a route as many squares as it has movement points.

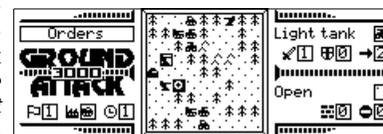
To change your mind about a movement order, move back to the previous square along the route and select *Move here*. The

tack when enemy units get close. But its firepower is second to none, making it very difficult for an enemy to approach it openly.

last movement square will be cancelled. Movement orders must be issued and cancelled one square at a time; the computer will not calculate or cancel an entire route for you.

To leave movement mode, select *Done moving* from the *Movement* menu. Any movement circles for the current unit will disappear, and you are free to give further movement or attack orders.

You can switch freely between movement and attack modes without selecting *Done attacking* or *moving* by using the menu shortcuts for the *Give attack* or *movement order* options (*Psion-F*



Giving a turret an order to attack a threatening light tank on a Series 3.

or *Psion-M*, using *Ctrl* on machines with no *Psion* key); you must make sure the cursor is on the unit you wish to move or attack with first.

## Firing Where There's No Enemy

You can fire at absolutely anything, not just at an enemy. Some units can fire further than they can see, and if you suspect that an enemy lies in a square beyond sighting range, you can still fire at it, though the chances of hitting a target is reduced if the target is unseen. You may fire on your own units too. You may want to do this if you had earlier built (deliberately or otherwise) a static unit that now blocks your progress.