62 ND CENTURY COMBAT

http://www.replacementdocs.com

HEAVY



ACTIVISION.

REBUILT FROM THE BATTLEGROUND UP



Required.

Now forgotten are the days of the Alliance, when all the Leagues on Terra Nova joined to defend their planet against Earth s invasion. After four cycles of terrible war, Earth at last acknowledged the independence of her former colony and withdrew to the gate world of Caprice. Some 30 cycles later the solidarity found during the War of the Alliance has withered and Terra Nova is fractured by conflict between its nations. But now Terra Nova is once more threatened from without, and again the Leagues must unite to defend their world against the encroaching yoke of Earth s dominion.



CONTENTS

Minimum	System Requirements					
Install:	ing Heavy Gear II					
Inst	allation Instructions					
Title Screen Button Functions						
Auto	pplay					
Heavy G	ear II: Strike Recon Field Survival Guide					
I	Main Menu					
II	Single Player					
	Training Missions					
	Campaign					
	Historical					
	Instant Action					
	Military Trideo Device					
	Squadmates					
III	Gear Lab					
	Threat Value					
	Gear Lab Summary Screen					
	Modification Screens					
	Weapons					
	Attributes					
	Perks/Flaws					
IV	Multiplayer					
	Setting Up a Multiplayer Game: Basic Steps					
	Multiplayer Game Types					
	Selecting a Connection					
	Server Selection					
	Player Creation/Selection					
	Lobby					
	Changing Lobbies					
	Select Game Screen					
	Create Game Screen					
	Game-Specific Fields					
	Launch Screen					
	Editing the Game					
	Score Screens					
V	Game Options					
	Graphics					
	Sound					

		Control Configuration	٠	•	•	•	•	•	•	•	•	•	•	•	.54
	VI	Your Gear													.57
		HUD (Heads Up Display)													.61
		Advanced Radar Techniques													.64
		Tactical Combat													.64
		Tactical Map Commands Flowchart													.65
		HUD Tactical Commands													.68
		HUD Tactical Commands Flowchart													.69
		Squad Command Hot Keys													.70
		Stealth													.70
App	endix	A: Character Compendium													.71
	Lieut	tenant Keiji Kage													.71
	Lieut	tenant Boyden Wallis													.72
	Lieut	tenant Juno Vesping													.73
	Serge	eant Antoine Maillaux													.74
	Sous	-Caporal Morgausa Temple													.75
	Solda	at Leo Sobec													.76
	Helen	ne Del Pulciano													.77
App	endix	x B: Gears													.78
	Black	k Talon Gears													.78
	North	hern Guard													.84
	Soutl	hern MILICIA													.89
	Badla	and Gears													.95
App	endix	C: Weapons													.98
	Proje	ectile Weapons													.98
	Miss	ile Weapons													.99
	Indi	rect Weapons													.100
	Fner	ou Weapons													101

Appendix D: The Fury Dropship	02
Credits	04
Customer Support	0.1
Software License Agreement	0.9
Appendix E: Keyboard Controls	112
Steering/Throttle	112
Reticle/Weapons Control	112
Targeting	112
Radar Control	112
Movement	112
HUD Controls	113
Squad Control	113
Network Chat	113
Camera Control	
System Controls	
Appendix F: Control Configurations	114
CH Joystick	114
Thrustmaster Joystick	110

MINIMUM SYSTEM REQUIREMENTS

The minimum system requirements for Heavy Gear II can be found in the game s Technical Help file, accessible from the Heavy Gear II title screen and in the readme.txt found at the root level of the CD. The readme.txt contains the most recent information about the game.

INSTALLING HEAVY GEAR II

Please make sure your computer system is 100% Windows 95/98 compatible. Heavy Gear II is not compatible with Windows 3.1 or other operating systems.

To operate best, Heavy Gear II requires that your system have the latest drivers for your CD-ROM drive, sound card, and 3D video card, as well as any other peripherals you want to use (e.g., joysticks).

If you have any problems running the program, older, non-DirectX 6.1-compliant sound or video drivers are the most likely cause. If you need help on how to obtain the latest sound and video drivers, check out our Technical Help file accessible from the Start menu or the Heavy Gear II title screen which displays shortly after inserting the Heavy Gear II CD into your CD-ROM drive. Just press the More buttons then the Help button for the Tech Help file. We have supplied a list of major computer hardware companies and their telephone numbers, listed under Vendor List. The Tech Help file has a lot of other helpful information on installation and system setup, as well as game-specific technical help.

INSTALLATION INSTRUCTIONS

- 1. Before installing, close all other applications.
- 2. Insert the Heavy Gear II CD into your CD-ROM drive and wait a few moments until the Heavy Gear II title screen appears. (If the title screen does not appear, please refer to AutoPlay on page 7.)
- 3. Click the Install button to begin the installation process and then follow the on-screen instructions.

After Heavy Gear II setup is complete, your computer will install the Microsoft DirectX 6.1 and DirectX Media drivers if you do not already have them. When the DirectX installation is complete, you will need to restart your computer for the new drivers to take effect. For more information on DirectX and DirectX Media, see the Technical Help file.

After rebooting, you can run Heavy Gear II by choosing Programs/Heavy Gear II/Heavy Gear II from the Start menu or by clicking Play on the CD title screen.

Note: If you experience problems while running the IAS Speaker Setup, please consult the Technical Help file for more information.

TITLE SCREEN BUTTON FUNCTIONS

Install/Play — Installs the game. Once the game has been installed, this button will change to Play. Click this button to play Heavy Gear II.

More — Click this button to access the Help, IAS Speaker Setup, Customer Support, Activision Web Site, and Uninstall.

 $\operatorname{Exit}-\operatorname{Click}$ this button to close the title screen and exit Heavy Gear II.

Free Internet Play on MPlayer.com - This button takes you to the MPlayer Web site allowing you to meet other players and participate in sponsored events.

Activision Web Site - If you have Internet access, clicking this button will take you to Activision s Web site.

Registration — Please register your copy of Heavy Gear II by completing the Registration Card and returning it to Activision at the address supplied.

Customer Support - Click this button to view information on how to contact Activision.

IAS Speaker Setup — See the Technical Help file for information on how this utility adjusts your sound setup.

Help - Click this button to view the latest technical information not found in this manual

Uninstall — Click this button to remove Heavy Gear II files from your computer.

AUTOPLAY

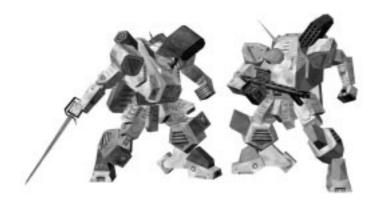
If the Heavy Gear II title screen does not appear, try performing the following steps:

- Double-click on the My Computer icon on your desktop or right-click on the icon and choose the Open option.
- 2. Select the Refresh option located in the View pull-down menu.
- 3. Double-click on the Heavy Gear II CD icon in the window or right-click on the icon and choose the AutoPlay option.
- 4. After the Heavy Gear II splash screen appears, click on the Play/Install button.

If the AutoPlay feature does not function, please check the following:

- Make sure the CD is clean and properly placed in the CD-ROM drive.
- 2. Your CD-ROM driver may not be optimised for use with Windows 95/98. To verify this, perform the following steps:
 - a. Open the Windows 95/98 Control Panel folder and doubleclick on the System icon.
 - b. Click on the Performance tab. If any of your hardware drivers are not fully optimised for use with Windows 95/98, they will be listed here with an explanation of the exact problem and suggestions on how to fix it.

HEAVY GEAR II: STRIKE RECON FIELD SURVIVAL GUIDE



SECTION ONE: MAIN MENU

This is the Main menu for Heavy Gear II. From this screen you ll be able to access the main areas of the game, including where game options are modified.

- ¥ Single Player: For information on this option, go to page 9.
- Y Multiplayer: For information on this option, go to page 30.
- Y Game Options: This allows you to change your settings for graphics, sound, and control configuration (see page 51).
- ¥ Quit Game: Click here to exit Heavy Gear II.
- Y Credits: Click here for a list of the individuals involved in making this game.



SECTION TWO: SINGLE-PLAYER

As a Heavy Gear squad commander, you are responsible for the safety of your team and the completion of your objectives. Your tour of duty begins on Terra Nova and moves into Caprice space, eventually landing on the planet itself. Due to the strategic location of Caprice, it is imperative that you gain advance knowledge of enemy strengths, weapons and planned attacks. The following stages will enlist you as a Heavy Gear



commander. These are the options in the single-player menu: Campaign, Historical, Training, and Instant Action.

Note: Game movies may be skipped by pressing the spacebar. You may also press Ctrl + C to skip in-game movies which run at the beginning of the single-player campaign missions.

TRAINING MISSIONS

We strongly recommend that you play through the training exercises first, in order to become familiar with the game and its many features. Many helpful instructions for gameplay are given in the training missions which supplement the information given in this manual. Select Training to access several training options. Select the first option and then press Launch. Follow the instructions you are given.

CAMPAIGN

- 1. Select Campaign in the Heavy Gear II Single Player menu.
- 2. Enter your name and select the chassis that you would like to pilot from the pull-down list. Details of each chassis will be displayed in the window on the left. Choose carefully. You will be exclusively piloting this chassis throughout the single player game. (See Appendix B for descriptions of the Black Talon Gears.) After entering a name and choosing a chassis, click Register to finalise your choices.
- If desired, select New Pilot to create an additional character, or click Del Pilot to remove a character from the game.

- 4. Click Load Game to load an auto-saved game from this screen (if you have saved games).
- 5. When you are ready to proceed to the drop site, select
 New Game to begin your campaign. After you we been informed
 of the current circumstances, select Launch to start your
 first mission

HISTORICAL

- 1. Select Historical from the Heavy Gear II Single Player menu.
- 2. Choose a mission from the list of available missions then press the Continue button.
- 3. Assemble your squad by selecting Squad Detail. Choose up to four computer-controlled pilots.
- Customise the Gears in your squad, as well as your own Gear. (See Gear Lab on page 12 for a complete breakdown of Gear weapons and attributes.)
- 5. Press Launch to begin the mission.

INSTANT ACTION

- From the Heavy Gear II single player menu, click on Instant Action.
- Assemble your squad by clicking on the lightning buttons to select up to four computer-controlled pilots in addition to yourself. (To de-select, click on the lightning bolts again.)
- 3. Customise the Gears in your squad (see Appendix C for a complete breakdown of Gear weapons and their attributes). Your squad is called Player Squad. To customise the Gears, first select a chassis from the pull-down menu. There are different categories of chassis: light, medium, heavy, and assault. Then select a variant (the default selection is the standard variant). See the detailed instructions in the next sections for more information.
- 4. Assemble the enemy squad (up to five Gears) by clicking on the lightning bolts in the enemy column.
- 5. Customise the enemy Gears.

Note: To bring a squadmate or enemy Gear into the Gear Lab, you must activate the indicator to the right of the pilot s name and press Modify Gear. (See the Gear Lab section on page 12.)

- 6. Choose the number of enemy waves you will face.
- 7. Change the terrain type for the map you prefer to play.
- 8. Click the Launch button to start the game.

MILITARY TRIDEO DEVICE

The Trideo device is a 3D communications computer that links you to Gear technicians, squadmates, and intelligence agents in the field. You will use it to review mission briefings, select your team, and customise your Gear and your squadmates variants. When the Trideo display comes online, review the current mission briefing. Along with your objectives, the briefing includes



suggested routes to the target areas and warnings of enemy activity and their firepower capabilities. This information is based on intelligence reports submitted by Terra Nova Intel agents and Helene Pulciano, our Liberati adviser. The target locations are accurate; however, the additional intelligence may be limited in scope, so be prepared to improvise in the field.

SQUADMATES

As commander, you have at your disposal a group of Gear pilots who can often accompany you on missions. These Gear pilots are referred to as squadmates.

After studying and evaluating the mission briefing, click Squad Detail to bring up the pilot assignment screen. You can choose up to ten pilots on this screen. To view additional information on any pilot, click on the pilot's



name to display his or her bio information. For a complete description of each character, see Appendix A: Character Compendium. To select a squadmate for the assignment, click on their picture. If the picture has a number on it, it has already been selected. To change squadmates, you must first deselect them by clicking on their picture (to make the number disappear). Then, click on the picture of the replacement you desire. Every squad modification affects the current squad threat value. (See the Threat Value section on page 13.) Clicking Accept confirms your choices and returns you to the Briefing screen.

Operations Update #1: Special Forces Command will not reinforce your squad with new pilots if you suffer casualties in the field. Although reinforcements may be found along the way, you should depend only on your original roster.

Your squadmates are specialists with certain Gear chassis. Their favourite chassis variants are selected when you choose your team.

Note: You cannot modify your squadmates equipment in the Gear lab (although you can view each Gear s detailed summary screen).

SECTION THREE: GEAR LAB

This is the place in the game where you can examine all aspects of your Gear, modify its structural components, change ordnance and ammunition, as well as strengthen (or weaken) certain abilities in order to maximise your threat value allotment.

When you go to the Gear Lab, you will see the summary screen of the Gear you have selected in the pre-mission screen. This section explains the various components of the Gear Lab and their functions. You are encouraged to experiment. You can modify any area of a Gear by selecting the item you d like to change and then clicking Modify Item, which takes you to the Modifications screen for that item.

When you are finished modifying your variant, be sure to type in a new name for it and select Accept in order to save. The new variant will then be available on all variant pull-down menus for that chassis.

Note: In most single player modes, the ability to switch chassis is removed. It is unusual for characters in the Heavy Gear universe to switch the Gear they pilot. Single player pilots may only adapt their existing chassis by making new variants thereof. However, in Instant Action and multiplayer modes, this restriction is removed to allow players to experiment with different chassis.

THREAT VALUE

Understanding how threat value works is extremely important in this game. Each of the various components of a Gear has an added value, the sum total of which is called threat value. This number is really just an indication of the relative power of that Gear. Many elements are factored together to make that final calculation.

When Current Squad Threat and Max Squad Threat are displayed on the screen, they are used to determine if your squad is within the boundaries allowed by the game. Your current threat total is the total threat value of all Gears in your squad. (You can easily adjust this by changing your squadmates' variants, taking fewer squadmates, or customising your own Gear). Your max threat total is the maximum allowable threat value for that mission. If your Current Squad Threat is less than or equal to the Max Squad Threat, you will be able to launch the mission. If your Current Squad Threat is greater than the Max Squad Threat, you will be unable to launch.

A Gear's threat value is actually an average of three other totals:

Offence

This total is (mostly) derived by adding weapons, the ammo for those weapons, and some pertinent perks that directly affect offensive capabilities.

Defence

This total is (mostly) comprised of the items in the Attributes box in the summary screen (sensors, armour, movement rates, etc.).

Miscellaneous (Misc)

This is the catch-all category, garnered from everything not relating to the first two totals, but is mostly comprised of perks and flaws.

If you keep two totals fairly low, you can typically move up the other total and still maintain a respectably low total threat value (since it s an average of the three totals). Or, alternatively, you can keep them all at about the same level and evenly spread out your capabilities.

GEAR LAB SUMMARY SCREEN

The Summary screen displays all the different areas of a Gear's capabilities.

Chassis

You can click on this button and pull down a menu listing the four weight classes of Gear chassis in all games except single player. Selecting a category displays a menu of all available chassis within that weight category. You can then change the chassis at will. When you do so, the picture of the Gear will change to reflect that choice, and the variant pulldown menu will also change to show



all available variants for that chassis.

Variant

Click on the button next to the variants name to display the info. The pull-down menu displays all available variants for the chassis you currently have selected. This list includes all standard variants, as well as any player-created variants you have made. Additionally, you can click in the name field of the variant and change it as you wish. When you accept the variant after making changes, it will be named according to your wishes. Any time you modify a standard variant the name of the new variant will automatically be changed to Custom Config. This is a temporary placeholder name that ensures you don't save over the standard variant. You can leave the name as Custom Config, if you desire, but you are encouraged to change it.

Note: You can only change your variants name on the summary screen. Furthermore, any of the other modification areas will not allow you to change the name until returning to the Lab Summary screen.

Weapons Column

Your Gear s weapons are listed in the Weapons column. When you click on a weapon, the weapons description is shown in the Item Description box so you can understand the relative power and efficiency of each weapon. Each weapon has a label below it indicating the hardpoint where it is mounted to your Gear.

A hardpoint is a reinforced location on your Gear's skeleton that can take the pounding caused by repeated firing of a weapon without being damaged. Available hardpoints include collar, shoulder, hip, and back points. Also available are hand-held and grenade positions.

Hand-held weapons include any weapon carried and fired from the Gear s hands. Grenade weapons consist of belts or bandoliers of grenades that the Gear grabs and throws when needed.

Attributes Column

This column shows most of the defensive capabilities of a Gear which include sensors, manoeuvrability, armour, fire control, and movement speeds.

Sensors: This rating (-5 to 5) indicates the relative ability of a Gear to detect and interpret information in the field, as well as the presence of special sensors on the Gear such as thermographic, ultraviolet, magnetometric, etc. (See page 22 for more details.)

Maneuver: This rating (-3 to 3) is the relative manoeuvrability of a Gear. Lower numbers indicate poor manoeuvrability, -3 being ponderous and tank-like; higher numbers indicate better performance in the field, +3 being closer to a motorcycle. (See page 24 for more details.)

Armour: This rating (1 to 25) is the relative thickness of the armour plating on the Gear. Each increase in rating number increases the protective value of the armour. (See page 24 for more details.)

Fire Control: This rating (-5 to 3) indicates the Gear's ability to process fire control information and assist the pilot with acquiring and firing at targets. Very low numbers indicate almost no assistance whatsoever (-5 means no HUD at all); high numbers (+3) provide leading reticles, relative target speed and headings, and more. (See page 24 for more details.)

Movement Speeds: The Gear's primary and secondary (if available) movement maximums are displayed here. The primary movement system is always walking, but the secondary movement system (SMS) can be different from one Gear to another (it is typically skating). The maximum values are displayed in kilometres per hour (KPH). (See page 26 for more details.)

Perks and Flaws Column

These are the special abilities and/or shortcomings of the Gear. Perks are always positive in effect (i.e., jump jets or reinforced front armour), while flaws are deficiencies in the chassis design (like exposed auxiliary systems or fragile chassis). Flaws are always shown in red, while perks are displayed in blue. (For more detailed information, see page 27.)

MODIFICATION SCREENS

Any area of the Gear can be modified by first selecting the item you d like to change and then selecting the Modify Item button which then moves you to the appropriate modification area (Modify Weapons, Modify Attributes, or Modify Perks/Flaws) as described below.

If you want to leave the Summary screen without saving any changes, click Back to go back to the previous screen.

If you decide you no longer need or want a variant you ve created, select the variant and click Delete to permanently remove it from your Variant list.

Modify Weapons

Use this screen to add, subtract, change ammo loadout or hardpoint position for a weapon. To modify any weapon or hardpoint, you must first select the weapon to modify, then select Modify Item.

This brings up a picture of the weapon and automatically changes the weapon menu to the appropriate category and weapon name. It also displays the current ammo loadout for the selected weapon (if the weapon uses ammunition).

Projectile: This includes all the various slug throwers in the game.

Energy: This contains all the beam and energy weapons. It also includes all the vibro hand weapons.

Indirect: These are all the weapons that can lob projectiles/warheads over intervening obstacles.

Missile: This lists all the guided and non-guided self-propelled warhead weapons.

(For details on weapons, see the Weapons section on page 20.)

To change a weapon, select the weapon to be changed, switch to the weapon category desired, and then click on the new weapon name. The weapon abbreviation is automatically updated in your Weapons column with the new selection.

The weapons full description is detailed in the Item Description box to help you make smart decisions when outfitting your Gear.

Once you have finished modifying your weapons, choose Accept to return to the Summary page with changes intact, or Back, to go back to the Summary screen without saving any changes to the weapons.

After you have selected a weapon, you can now adjust your ammunition loadout. Remember that each round adds threat value to your total; don't automatically maximise your ammo load or you may suddenly find yourself with a threat value that exceeds the mission requirements.

Hardpoint Selection Menu

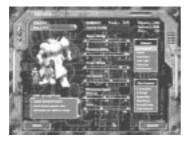
You can also change the hardpoint for each weapon. This is easily done by pulling down the hardpoint menu beneath the weapon you are currently modifying, and selecting one of the available hardpoints for that weapon. You can have any number of hand-held weapons, but remember, it takes longer to switch hand-held weapons than it does to cycle between chassis-mounted weapons. And tenths of seconds can really matter in the midst of a firefight

Note: You cannot assign a weapon to any hardpoint already selected (except for hand-held and grenade). Any attempt to do so will result in an error message telling you that the hardpoint has already been selected.

To remove a weapon completely, just select the weapon and press the Remove Item button.

Modify Attributes

To modify an attribute of a Gear, first click on the Attributes column, then Modify Item, which will bring you to the Modify Attributes screen. This screen details most of the defensive structures of your Gear you can modify any or all of these as desired, but your defence threat total stays the same. Maximising all your values can add up very quickly. (For details on



Attributes, see the Attributes section on page 22.)

Once you re finished modifying your Gear s attributes, choose Accept which takes you back to the Summary page with changes intact. Choosing Back takes you back to the Summary screen without saving any changes.

From top to bottom, the sliders are as follows:

Sensor Rating: As you move the slider left and right, items will appear/disappear on the Sensors list to the right of the scroll bar. These items are added/subtracted on your Gear and directly affect your ability to gather information on the battlefield. Clicking on any item in the Sensor list displays a detailed description in the Item Description box so you can familiarise yourself with its abilities.

Manoeuvrability: As described previously, this rating affects your manoeuvrability and acceleration/deceleration speeds.

Armour Rating: One of the most important defensive statistics in the game. This represents the sheer mass of material your vehicle uses to prevent damage.

Fire Control: Moving the slider left and right affects the Fire Control value in the same way that the Sensor Rating affects the Sensor list. Again, items can be directly selected on that listing to get a full description of the item.

Movement Speed: Your Gear's primary movement system (Walking) cannot be set to below 6 KPH, but you can slide your secondary movement system (SMS) to zero if desired. If you do so, it will be deactivated completely and be unavailable in combat. However, remember that doing this may significantly reduce your threat value

Modify Perks/Flaws

This section allows you to fine-tune the modifications to your Gear variant and give it a true personality.

Modifying perks and flaws is very similar to modifying weapons. You merely select the perk/flaw to change, then click Modify Item. Choose the perk or flaw category to select from, and select a perk or flaw to add to the selected slot



19

To remove a perk or flaw entirely from your Gear, just select the item and press Remove Item.

Choose Accept to return to the Summary page with changes intact, or Back to return to the Summary screen without saving any changes.

Remember that taking a lot of flaws without perks will do you little good. Choosing flaws can be used to offset threat value points that you ve added by choosing other perks, but cannot be used to reduce the overall threat value of your Gear. Therefore, if you take flaws that total more than the total of all the perks you've added, you are crippling your Gear with no benefit to your variants threat value. (For details on perks and flaws, see the Perks/Flaws section on page 27.)

Some perks or flaws have ratings. These appear in the form of a scrollbar located below the Perk/Flaw listing. The scrollbar pointer can be dragged to change its rating. The higher the value, the better the perk or the more detrimental the flaw. The lower the numbers, the lower the positive or negative effect of the perk or flaw. A description of the effects of the rating appears toward the bottom of the selection for each perk or flaw you set. Make sure you read the description so you can fully understand the effects of the perk or flaw on your Gear variant.

You can carry up to a total of six weapons at one time on any of the hard points on your Gear s chassis. The only hard point that does not have a fixed location is the handheld hard point. The handheld hardpoint allows you to guickly discard an empty weapon and grab another.

Heavy Gear weapons fall into four basic categories, as explained below. See Appendix C: Weapons for specifications of each weapon.

Operations Update #2: A Special Forces commander should be aware of discarded weapons on the battlefield. When your own weapons are depleted, using the weapon of a fallen enemy may save your life. If you have room in your pack, you can also store salvaged weapons for later use. Your Gear can carry up to ten total weapons.

Projectiles

This class of weapons uses a chemical explosive to propel one or more projectiles. These weapons take a variety of forms, from single barrel guns to rotating multi-barrel Gatling-type weapons. Most modern projectile weapons include an autoloader and/or a belt-feeder mechanism. The basic design has not changed much over the years, but they are lighter and more efficient then ever. The actual



designs vary widely, although almost all are composed of advanced heat-dissipating alloys or composite materials. They are rugged, adaptable, and effective, and for this reason have been used by the military for the past few millennia.

Energy/Advanced Weapons

There are three classes of advanced weapons: Lasers, Magnetic Accelerator Cannons, and Particle Accelerators.



Laser weapons: They fire a beam of coherent energy using traditional High-Energy laser techniques. Most battlefield lasers are cumbersome, specialised weapons; their efficiency is impaired by the presence of atmospheric dust and water vapour. However, lasers have pinpoint accuracy and there is no lead time, therefore, an acquired target is generally a dead target.

Magnetic Accelerator Cannon: It uses a system of electromagnets to launch projectiles at an extremely high velocity. This reduces lead time and flattens the trajectory, thereby improving accuracy. The shells are shaped out of composite or plastic, with a metal skirt to grip the magnetic field. The Railgun uses magnetic accelerator technology to propel small projectiles at high speed. It is power-intensive, requiring a dedicated capacitor bank to provide a steady stream of energy. Thus, the number of shots is limited by the energy it contains. But the ammunition is very easy to store since the individual shells are quite small.

Light and Medium Particle Accelerator: Another high-energy weapon, this emits beams of atomic particles at almost the the speed of light. Like the Railgun, it requires a massive amount of energy.

Indirect Weapons

Indirect Weapons are low-velocity weapons that lob warheads in an arcing overhead trajectory. Examples of these are mortars and grenade launcher s



Mortars

Rocket/Missile Launcher's

Rocket Launcher's consist of high-explosive, shaped-charge warheads propelled by rocket motors, such as Rocket Packs and Anti-Tank Missiles. Missiles are actually guided rockets. directed by wire, laser, or radio transmitters.

Missiles generally pack warheads which cause areaof-effect explosions. These explosions will damage all objects within a certain radius. Use caution when using missiles or rockets and remember that their use may affect more than just your target.

Guided missiles or mortars can be locked onto a



Rocket Pack

21

target by first selecting that target, then aiming at that target until the target is within the locking circle. Once the target is within that circle, the targeting reticle is adjusted on the target until you hear a tone indicating lockon. At that point you can fire and forget.

Vibro Weapons

There comes a time when every Gear pilot has no alternative but to engage in hand-to-hand combat. Vibro weapons contain small sonic generators that produce high-speed vibrations to assist in cutting through armour. Vibro weapons are also considered energy weapons.



ATTRIBUTES

Sensors

Every squad needs at least one Gear to act as the eyes and ears of the entire unit. Increased sensors can enable a Gear to detect a wider range of enemy movement. Although you can choose to outfit your entire squad with high-sensor equipment, you may want to elevate this attribute in only a few of your Gears. (Remember, you can only do this in Instant Action and multiplayer modes.)

Operations Update #3: An advanced sensor system also includes all lesser features. For example, a (5) rated system includes Magnetic Resonance and all systems listed from 5 back to -5.

Unlike giant combat vehicles such as Striders, Gears are smaller and quicker, equipped with sensor and stealth systems supporting a wide range of tactics. Gear pilots must not forget that two battles are always raging at the same time: one involving firepower and marksmanship, the other, an electrical battle where pilots receive a steady stream of data through their HUDs (Heads Up Displays). The information given to the pilot is reduced to simple, easy to assimilate data that can be quickly used in combat situations. The information retrieved from the sensors on the Gear is processed by the advanced systems of the Neural Net and then delivered to the pilot.

However, sensors have a down side, since many models emit infrared or electronic frequencies that can be detected by the enemy. To hinder this detection, pilots can equip their Gears with electronic counter measures (ECM) and stealth systems. Keep in mind that just as in other offensive or defensive attributes, sensor systems add or subtract from a Gear's total threat value.

The following table describes the various sensor systems available during the Gear customisation process. When choosing sensors, also remember to take the mission terrain into consideration.

Strength Sensors Description

			DODOLIPOION
Weakest	-5	No Sensors	
	-4	Cameras	Basic cameras.
	-3	Low-light	Light-magnified optical sensors that can function in extremely low light.
	-2	Infrared; Ultraviolet	Infrared: high-bandwidth optical sensors usually coupled with infrared lights. Ultraviolet: low-bandwidth optical sensors usually coupled with ultraviolet lights.
	-1	Radar	High frequency, radio wave system that identifies surrounding objects; radar waves are easily detected by enemy sensors.
	0	Laser Rangefinder	Laser-based system that calculates an objects range.
	1	Thermographic	Heat sensor that creates visual images from an objects ambient heat.
	2	Ultrasonic	Sound-based sensor that uses sound waves to paint an electronic picture of the surroundings (similar to how a bat sees its environment); there is also a limited ability to identify an objects composition.
	3	Motion Detection	Advanced motion sensor that can track the slightest movements.
	4	Ladar	Laser-based radar that is more accurate and less likely to be detected.
Strongest	5	Magnetic Resonance	Magnetic sensors that can identify objects of different metallic compositions. These sensors also have a limited ability to analyse the structural integrity of targeted objects.

Manoeuvrability

This category rates your Gear s ability to make quick, stable turns, and negotiate unpredictable surfaces. As in the previous category, you should consider the mission terrain.

Operations Update #4: To fully maximise your Gear s potential, you will be required to operate the Gear in many different environments. The most challenging of these is outer space. Only Gears specially equipped with the perk Zero-Gravity Systems will be able to function in space. A specially designed cockpit allows extended operation in the space vacuum. Ceramic alloys are also used to coat the outer skin of the Gear, preventing damage from micrometeorites and hazardous radiation. Air processors maintain a correct breathing mixture for the pilot. The feet of the Gear are treated with advanced polymer adhesives which allow the vehicle to maintain traction on any object. Thrusters have been installed to enable the pilot to operate the Gear in three dimensions. The basic thruster can provide forward and reverse thrust. Manoeuvring thrusters mounted all over the Gear provide full pitch, yaw, and roll. To detach yourself from an object, simply command your Gear to jump and the thruster controls will automatically activate.

Armour Rating

Although Armour is a defensive attribute, it has a direct impact on your Gear s overall ability to move and manoeuvre in military offensives. Thus, if you are preparing for a light recon mission, and the intelligence reports do not indicate heavy enemy resistance, you should outfit your Gear with light armour. However, if you are getting ready for a firefight against heavily armed opponents, you will need more substantial protection.

Operations Update #5: Although your Gear is constructed with the most advanced composite materials, it is not indestructible. Even with heavy armour, you may go down after receiving one or two well-placed shots. It is your duty to construct a well-balanced combat machine that has the capability to hit hard and elude return fire.

Fire Control

m2 ---

A Gear s ability to acquire and destroy a target is not entirely dependent upon the skills of the pilot. Beyond the actual weapon systems, a Gear s combat ability is determined by a complex system of computers and electronics: the Fire Control system. At the heart of this system lies the Gear's Neural Net Processor. While the Neural Net is not actually sentient, it is still very advanced and displays an uncanny intelligence. When a pilot is engaged in combat, the Gear s Fire Control system means the difference between success and failure. For example, a pilot aiming at an opposing Gear s head has to rely on his or her own Gear to successfully carry out that command. An advanced Gear may target the sensitive sensor cluster while a lesser machine would shoot anywhere near the head. In addition to a greater ability to cause damage, better Fire Control systems offer the pilot additional tools for combat. The following table demonstrates the installed systems based on relative Fire Control strength:

	Fire		
	Contro	l HUD Interface	Description
Weakest	-5	Basic HUD	Basic sensor information and Gear damage status.
	-4	Speed Readout Compass	Notes the current movement system and travelling speed. Current orientation.
	-3	Weapons Readout	Summary of installed weapons systems, including available ammo and damage status.
	-2	Locking Reticle	Aiming interface including weapons status such as weapon lock.
	-1	Enemy Range	Distance to the currently targeted object.
	0	Enemy Speed (Relative)	Summary of the current target s relative approach speed.
	1	Enemy Identification	Detailed information on the targeted enemy, limited by the Gear s databanks.
	2	Leading Reticle	Specialised reticle that pinpoints where to aim if the target maintains its current speed and trajectory.
Strongest	3	Enemy Armour	Information on the current target s damage.

Operations Update #6: An advanced Fire Control system also includes all lesser features. For example, a (2) rated system includes Leading Reticle and all systems listed from 2 back to -5.



Movement

A Gear needs a balance between firepower and speed, depending on the combat conditions. Review your mission briefing to determine this balance, and remember that increased manoeuvrability adds to the total threat value of your Gear. Your Gear s movement characteristics can be adjusted in the following categories:

Walk

Your Gear can duplicate human movements including walking, running, strafing (side-skipping), and jumping. However, as a mechanically constructed humanoid, a Gear s top speed is limited in these areas. To compensate for this limitation, wheels or tracks provide secondary movement that produces at least 50% more speed than running. When you customise your Gear s movement, you should consider the terrain in the upcoming mission. If you expect to operate primarily over rocky, uneven surfaces, your values should favour walking over wheeled movement.

Secondary Movement System (SMS)

Wheels or tracks provide excellent maximum speed on smooth surfaces such as asphalt or hard-packed dirt. On these surfaces, manoeuvrability is less of an issue. However, wheels have limited clearance and stability. Use wheeled movement only if the mission terrain is relatively level.

Note: Your Gear cannot crouch, lie, strafe, or jump while in SMS mode.

PERKS/FLAWS

This category serves as the great equaliser. As you complete your Gear customisation, you may find that your total threat value is too high for the individual Gear, or for the entire squad. Or, you may have extra value points that can be used to upgrade your Gear. In either case, use Perks/Flaws to fine-tune your Gear. Once again, consider your upcoming mission and terrain when increasing or decreasing specific attributes. The following Perks/Flaws are available:

Perks

- $\mbox{$\Psi$}$ Ammo/Fuel Containment System: The ammo and fuel bays are reinforced and can take more abuse than normal.
- ${\tt Y}$ Backup Communications System: Secondary communication system that activates when the primary one is destroyed.
- \mathbf{Y} Backup Fire Control: Secondary weapon control system that activates when the primary system is destroyed.
- ¥ Backup Life Support: Secondary life support system that activates when the primary is destroyed. Note: Life support system functions separately from the zero-gravity system.
- ¥ Backup Sensors: Secondary sensor system that activates when the primary is destroyed.
- ¥ Easy to Modify: The vehicle is designed in such a way that it is much easier to repair in the field and requires considerably less time to modify.
- $\ensuremath{\mathtt{Y}}$ ECM: The Electronic Counter Measure system jams opponents sensors and communication capabilities.
- ¥ ECCM: The Electronic Counter-Counter Measure system provides sophisticated electronic tools to defeat ECM systems.
- ¥ Emergency Medical: Automated medical system prevents crewmembers from becoming unconscious due to wounds.
- ¥ Haywire Resistant: The vehicle is resistant to electrical disruption and electrical-based weapons.

- Y Jump Jets: Short-burn rockets that propel the vehicle through large jumps. These do not give true flight or hover capabilities.
- Y Manipulator Arm: This arm can pick up and manipulate objects. Manipulator arms are very nimble and as functional as a human arm; this perk cannot be removed.
- ¥ Reinforced Armour: Armour reinforcement on one or more facings of the vehicle. Only three facings can be used at one time.
- \mathbf{Y} Reinforced Chassis: Reinforced structure that allows the vehicle to take more punishment in battle.
- Υ Reinforced Crew Compartment: Additional armour around the crew compartment which gives more protection to the crewmembers.
- $\mathbf{\hat{y}}$ Rugged Movement Systems: These movement systems are reinforced and can take more damage than the normal ones.
- $\mbox{$\Upsilon$}$ Shielded Weapons: Armour protection for vehicular weapon systems.
- Y Sniper Systems: Additional targeting systems that allow more accurate long-range attacks.
- Y Stealth: A combination of many different systems that makes the vehicle more difficult to detect with sensor systems.
- $\mbox{$\Upsilon$}$ Submersible: The vehicle is specially equipped to be submerged under water.
- Y Zero-Gravity Systems: Booster pack, magnetic boots, and vacuum seals on the suit that allow for extra-vehicular outer space travel. This perk also includes life support.

Flaws

- \mathbf{Y} Defective Active Sensors: The vehicles active sensors can cease functioning in a random manner.
- $\mbox{$\Psi$}$ Defective Fire Control: Weapon control systems can cease functioning in a random manner.
- $\mbox{$\Psi$}$ Exposed Auxiliary Systems: Certain auxiliary systems are in exposed locations of the vehicle and are more susceptible to damage.
- Υ Exposed Fire Control Systems: Weapon control systems are exposed and more susceptible to damage.
- ¥ Exposed Crew Compartment: Crew compartments are not reinforced, thus leaving the crew less protected from enemy attacks.
- $\mbox{$\Psi$}$ Exposed Movement System: Movement systems are exposed and more susceptible to damage.
- $\mbox{$\Upsilon$}$ Fragile Chassis: The vehicle's chassis is fragile and susceptible to damage.
- Υ Hazardous Ammo/Fuel Storage: The vehicle's fuel storage and/or ammo bays are poorly designed and less capable of withstanding damage.
- $\mbox{$\Psi$}$ Large Sensor Profile: The vehicle is very visible to sensor systems.
- \mathbf{Y} Haywire Vulnerable: The vehicle is highly vulnerable to electrical attacks.
- ¥ Weak Facing: Front, rear, left, or right facings of the vehicle is susceptible to damage from attacks because it is not protected by reinforced armour.

SECTION FOUR: MULTIPLAYER



SETTING UP A MULTIPLAYER GAME: BASIC STEPS

Here are the basic steps you would need to play a multiplayer game via LAN or the Internet. Each of the screens or options mentioned in these steps are described in detail later in this section.

TCP/IP LAN Or Internet?

Select the appropriate option based on whether you d like to play with others over the Internet (which requires that you connect to a server), or play with others locally over a network (LAN). Then select Continue to move on.

Create/Select a Player Profile

If you don t already have a player profile created, you ll have to create one. In the field titled Player Name, enter a name for your pilot. In the field titled Player Info, feel free to add any remarks or information about yourself/playing style. Select OK to save your player profile and move into the game lobby.

If you already have a Player Profile and you d like to bring it into a multiplayer game, simply highlight it and select Continue.

Start a Multiplayer Game

You should now find yourself in the multiplayer lobby (for more information on all the options, see the Lobby section on page 35). Select Create Game to go to the Game Setup screen. If you have already created a game it will be stored in the Game List screen. If you d like to create another game type, select New.

Setup: At the Game Setup screen, choose the game you want to create and set up your game options as follows:

- Enter the name of your game in the Multiplayer field. Once your game is created, its name will be listed in the multiplayer lobby, so choosing a name that best describes your game will be helpful in attracting the type of players you want.
- 2. If you want, enter a password in the Password field. This will require other players to enter this password in order to join the game. This is useful if you re trying to keep your game limited to select individuals, rather than leaving it open to the public.
- 3. Set your maximum threat value in the Max Threat Value window. A threat value is a number that indicates how powerful a Gear is. If you enter a high threat value here, you open your game to people who may have extremely powerful Gears. If you enter a low threat value here, you restrict your game to more balanced, and perhaps more strategically constructed Gears. (For more information, see the Threat Value section on page 13).
- 4. Select the type of multiplayer game that you d like to create: Deathmatch, Duelist, Steal the Beacon, Strategic, or Capture the Flag. For more information, see page 33.
- 5. Once you have selected the game you d like to create, set up the game-specific options, which are explained in detail beginning on page 40.
- 6. Select the terrain/map that you d like to play in. There are many different maps listed, and some are particular to some scenarios such as outer space. If you are worried about frame rate, select a smaller map. Brief accounts of these terrains/maps can be seen in the Briefing frame when any of the terrains/maps is selected.
- 7. Set weapon restrictions, if you want. Doing this prevents anyone from entering your game with the selected weapon types. For example, if an opponent s Gear is equipped with a Heavy Panzerfaust, and you ve created a game with rocket weapons restricted, the opponent won t be able to join your game with that weapon it will be stripped from the Gear as it enters the game.

8. You can also change other multiplayer settings, depending on which game type you select (i.e., Max Players, Time Limit, Kill Limit, and Custom Gears). These options are explained in the game-specific sections of this manual, starting on page 40). When done, select OK to go to the Launch screen.

Launch: At the Launch Screen pick the gear you want to use and select from the options that follow:

- 1. Select the type of Gear chassis you d like to use.
- 2. Select the Gear Variant.
- If you need to edit your multiplayer game from the lobby, select Game Setup.
- 4. If you we set Custom Gears to on, selecting Modify Gear will take you to the Gear Lab where you can customise your Gear. If you we set Custom Gears to off, this option will be unavailable.
- 5. When you and the other players are ready, select Launch to enter the game.

The options mentioned on the steps above and all the information appearing on these screens are explained in detail in the next sections in this chapter.

MULTIPLAYER GAME TYPES

There are five kinds of games that can be created and played.

Duelist: These are one-on-one games fought in a small arena to one of three possible victory conditions: Death, First Critical, and Time Limit (see page 40).

Deathmatch: These are the traditional free-for-all warfare games where it's pilot against pilot and everyone's trying to rack up kill points (see page 41).

Steal the Beacon: This is a deathmatch-style game where the objective is to find and hold a beacon for a cumulative amount of time. Of course, for every second that you hold the beacon, you run the risk of someone trying to kill you so they can grab the beacon themselves (see page 42).

Strategic: These are team games fought with the goal of destroying the other team and their base (while defending your own base). The buildings on your base contain strategic elements and can be destroyed or protected by the team (see page 43.)

Capture the Flag: Yet another type of team game where each team seeks out the enemy base, steals the enemy flag, and takes it to their own base for points (see page 44).

SELECTING A CONNECTION

When you choose to play against other human players, you are presented with two options for connection: Internet or TCP/IP LAN.

Choosing Internet allows you to connect to one of the Activision game servers to find other players. To do this, you need an active Internet connection: modem, cable modem, ASDL line, or other means of Internet connection.

Choosing TCP/IP LAN allows you to play with other players on your local network, as long as this network supports TCP/IP connections.



To make the selection, just click on the option you want and then select Next. To go back to the Main menu, just press Back.

SERVER SELECTION

If you choose to play via an Internet connection, the next screen you will see is the Server Selection screen. This screen displays the available servers to which you can connect.

Each server is displayed by name, number of players connected, and ping. You can sort each of these columns by clicking on the header of that column. (For example, you can alphabetically sort all names by clicking on the Server Name button. You can then sort the list in reverse by clicking the button again.)



Ping is a value created when your computer sends a packet out

across the Internet (a measure of how long it takes an information packet to reach the server and then return a round trip). The ping time is displayed in milliseconds and is a good indicator of connection speed. The lower the number, the better. You are usually better off choosing a low ping server.

Once you determine which server to use, just select it by clicking on the name and then press Next. To return to the Server Selection screen, press Back.

PLAYER CREATION/SELECTION

In order to play a multiplayer game, you must first pick a name for your pilot. When you come to this screen for the first time, the Player Info box is automatically displayed so you can enter your player information. Thereafter, it is only displayed if you click New or if you delete the last remaining pilot name from your list.

Player Setup Box

Player Name: Enter a name of up to 19 characters or select a name from the list of names you already created.

If you have multiple pilot names, select the name you desire from the list of names, and press Continue to connect to the lobby. (As usual, Back will move you back one screen.)



You can delete pilot names by clicking Delete, and you can edit a pilot's info by clicking Edit.

Player Info: In this box you can enter miscellaneous information about you that other players can see when they look at your info in the game lobby. Common information displayed here is league affiliation, quotes, personality info, e-mail addresses, or just a simple taunt to other players.

OK/Cancel: Clicking OK accepts all info currently entered. Clicking Cancel rejects any changes made and closes the window without making any alterations.

LOBBY

The Lobby screen is the central hub from which you can access or create the games. Here you can see the games that are created and chat with those players. Additionally, you can move from here to other game lobbies if you're looking for other players or more variety.

The upper-left window lists all the players in this lobby. Rightclicking on a player s name will display the following options:

Mute: By selecting this option, the selected player is muted. Anything that he types in the chat window is no longer displayed until you choose to un-mute that player.



Info: This opens the player s Info window which contains details about that player.

Whisper: By selecting this option, you can open a private communication channel with that player. Anything you type in the chat window will be coloured a dark blue, indicating that you are whispering to the selected player. You can easily go back to public chat by deselecting the player. Until you do so, however, everything you type will only be viewable by the selected player. You can only whisper to one player at a time.

Player List

The Player list contains the names of all the players in the lobby and has numbered fields explained below. These fields are sortable by clicking on the headers.

(M)ute: A dot in this column next to the player's name indicates that you have muted that player. If there is no mark, any communication entered by that player will display in your Chat window.

Player Name: This field displays the names of the players.

Ping: As described on page 34, this is an indication of each player's ping time when connecting to the lobby. To avoid lag and to ensure the best gaming experience, try to play with or against people that have low ping times.

When a game is selected, the Player list changes from Players in Lobby to Players in Game. Ping values are always shown as N/A when viewing players within a game. To view ping times of players within a specific game, you must first join that game.

Game List

You can host a game by pressing the Create Game button, or you can join a game by first selecting a game in the Game List window, and then pressing the Join Game button.

Game Name: The name selected by the game s host for the game he or she created.

Game (L)ocked: This column is marked with a dot when a game is password protected. Any player trying to join that game will have to enter the correct password to gain access.

Game in (P)rogress: A dot in this column indicates that this game has already been launched. Most games, such as Deathmatch, Capture the Flag, and Steal the Beacon can be entered in progress. The only types of games that cannot be joined in progress are Strategic and Duelist games. Trying to join that kind of game after it has been launched will bring up a chat window message that says Session is Closed, and you will not be able to join that game.

Game (C)losed: A dot in this column indicates that this game already has the maximum number of players in it and cannot be joined.

Note: The host of a game sets the maximum number of players when creating the game.

(#) Current Number of Players: The number in this column shows how many people are currently playing in a particular game.

Style: This is the type of game being played. The key below shows the types of games that can be played and their abbreviations:

¥ DUEL: Duelist

¥ DEATH: Deathmatch

 Υ CTF: Capture the Flag

¥ STB: Steal the Beacon

¥ STRAT: Strategic

Note: When a game is selected from the list of already-created games, a field will come up above the game list window displaying the game name for confirmation of your selection. Additionally, if that game has a password associated with it, you will see a password entry field to type the password into for verification.

Of course, the chat window is also available. Any text you wish to enter can be typed in the text entry area at the bottom of the window. Text is colour coded for ease of reference:

- ¥ Light blue: Normal conversational text
- ¥ Dark blue: Whispered text
- ¥ White: System messages
- Y Green: Team-only text
- ${\tt Y}$ Red: Alarm messages (generally used to indicate things like Session is Closed). Alarm messages are usually accompanied by an alarm sound to attract your attention.

CHANGING LOBBIES

If you wish to find other players, press the Change Lobby button on the Lobby window which takes you to a screen that displays all the lobbies currently available

Your current lobby is always displayed in the Current Lobby field. However, you can select one of the other lobbies in the list by clicking on it and then pressing Continue to move to it. (Back will take you to the Lobby screen you just left.)

Information columns on this table include:

(X) Lobby Closed: Some lobbies will already have their maximum player count filled. You cannot join those lobbies. If they do not have a dot in this column, then you may join the lobby.

Lobby Name: These are all the various lobbies you can join.

(#) Current Number of Players: This is the number of players currently in the lobby.

SELECT GAME SCREEN

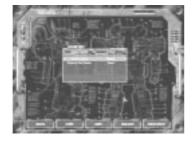
If you have previously created multiplayer games (previously hosted a game), then all the settings from your previous games will be saved for quick access on this screen.

To quickly host a game that you've set up previously, select the game name and press Continue to create the game.

To edit a game you've set up previously, select the game name and press Edit. Similarly, you can delete previous games by selecting them and clicking Delete.

To set up a new game from scratch, just click New.

As usual, you can click Back to return to the lobby without creating a game at all.



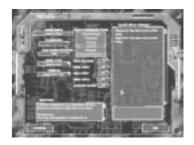
CREATE GAME SCREEN

If you decide to host a game, you may want to take the time to understand this window completely. Some areas on this screen are common to all game types, while others are game-specific.

These are the fields common to all game types:

Game Name: This is where you (the host) will enter the name of the game you re creating in the Game List window on the Lobby screen.

Password: This field is optional. Here you can enter a password if you want your game password-protected. If you do not enter a password, then the game is public (open) to all players and anyone will be able to join.



39

Max Threat/Player: This is the maximum threat value you're allowing per player on a team. Each player can take a Gear variant into the game only if it does not exceed this threat value. For example, if the limit is 1500 and someone tries to take a 1650 threat value variant into the game, they will not be able to launch into the game. They will have to change the variant so it is under your limit.

Game Type: The five different types of games are listed here. When you click on one of the types, the game-specific options will be displayed.

Terrain: The choice of map or arena (for Duelist games) in which the players will be fighting. The smaller the map, the faster the players will find each other. if you are concerned about the game s frame rate, choose a smaller map.

Briefing: A description of the arena or terrain is displayed here to give you more information on the kind of game you are creating.

Weapon Restrictions: You may, as the host, decide to disallow various types of weapons, as follows:

 Υ Melee Weapons: All the hand weapons (vibroblade, vibrorapier, vibroaxe, and vibrosword) that can do great damage in close quarters.

Note: This restriction does not disallow punches. Hands are an integral part of these Gears and punching is always available to players.

Y Projectile: All the slug throwers in the game. Some of the weapons included here are the autocannons, machine guns, rifles, and such.

- Υ Energy: The beam and energy weapons (i.e., gatling lasers and particle accelerators).
- Υ Indirect: These weapons can fire over intervening objects. They are all the mortars, grenades, and grenade launcher s.
- ¥ Rockets: The dumb warheads that don't lock onto an enemy but must be manually aimed (the rocket packs and incendiary rocket packs).
- Y Guided Weapons: The few weapons that are fire and forget in the game. Some examples are the Anti-Tank Missile and the Anti-Gear Missile.

GAME-SPECIFIC FIELDS

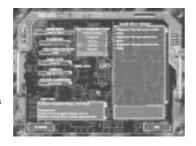
The following fields are only displayed when the game type is selected.

Duelist (Duel)

These are one-on-one games fought in a small arena. There are three possible victory conditions: Death, First Critical, and Time Limit. This game type accommodates two players.

Victory Condition: There are three possible victory conditions for which you can battle.

Y Time Limit: This game goes until the timer expires. (Time is set in the Game Time Limit field. See page 41.) Opponents continue to respawn after death until the time limit expires. In other words, this is much like a one-on-one deathmatch fought in a duelist arena.



- $\mbox{$\Psi$}$ First Critical: The duel ends as soon as one of the combatants suffers any hit to a critical system.
- ¥ Death: The struggle continues until one opponent is destroyed.

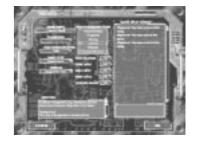
Game Time Limit: Regardless of which duelist victory condition is chosen, a time limit can be set on a game. Failure to achieve the victory condition (when using a Death or First Damage condition) results in a draw when the timer expires without the condition being met. Setting the timer to a low value prevents Death or First Damage games from being long, drawn-out hiding games.

Deathmatch (Death)

These are the traditional free-for-all warfare games where it's every pilot against another and everyone's trying to rack up kill points.

Max Players: This is the maximum number of players allowed in this game. This game type can accommodate up to ten players.

Time Limit: Click on this button to set the length of the game (in minutes). You can choose 5, 10, 15, 20, 25, and 30. There is also the INF option, which stands for infinite. This means the game will continue forever (or until the last player quits the game). INF is the default setting for this field.



Kill Limit: This button allows you to set an upper limit on the number of kills that any one player can make before the game ends. The player that reaches that kill limit first will be announced as the winner of the game. Kill limits can be set from one to twenty kills. Also available is INF (infinite) which allows the game to continue without limit. INF is the default setting for this field.

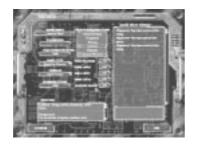
Custom Gears: This button can only be set to on or off. Setting this to on allows players to use customised Gear variants. Setting this field to off indicates that players can only select standard variants.

Steal the Beacon (STB)

This is a deathmatch-style game where the objective is to find and hold a beacon for a cumulative amount of time. Of course, for every second that you hold the beacon, someone else is trying to kill you so he or she can steal the beacon from you.

Winning Score: This is the total score that a player must accumulate in order to win the game. Actions that create points in Steal the Beacon are holding the beacon, killing a beacon holder, and killing enemies while you are holding the beacon.

Max Players: This is the maximum number of players allowed in this game. The maximum number of players this game type can accommodate is ten.



Time Limit: Click on this button to set the length of the game (in minutes). Choices of 5, 10, 15, 20, 25, and 30 are available as well as INF, which stands for infinite. This means the game will continue forever (or until the last player quits the game). INF is the default setting for this field.

Kill Limit: This button allows you to set an upper limit of the number of kills that any one player can make before the game ends. The player that reaches that kill limit first will be announced as the winner of the game. Kill limits can be set from one to twenty kills. INF (infinite), also available, allows the game to continue without limit.

NOTE: INF is the default setting for this field.

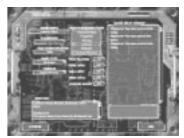
Custom Gears: This button can only be set to on or off. Setting this to on allows player to use customised Gear variants. Turning it off allows players to only select standard variants.

Strategic (STRAT)

Strategic games are team games fought with the goal of destroying the other team and their base (while defending your own base). These buildings contain strategic elements and can be destroyed or protected.

The goal of a Strategic game is to try and destroy the other team and their base while defending your own. Each team s base has numerous critical buildings including but not limited to:

¥ Ammo Dump: Allows for unlimited reloading of a Gear's weapon and is activated by standing on it.



- ¥ Repair Bay: Allows unlimited repair of Gears and is activated by standing on it.
- Y Turrets: These turrets automatically defend the base against all intruders. Turrets are indestructible and can only be deactivated by destroying the headquarters.
- ¥ Headquarters: Destroying the headquarter s building instantly deactivates all turrets of that base.
- Y Guard Tower: This building, although it may not have a real function, must also be destroyed by a team that wants to eliminate its opponent.
- Y Communication Array: Allows all players on a team to share all sensor information from each of their tactical maps for a better overall tactical viewpoint. When this building is destroyed, the entire team loses the use of the tactical map and the team captain loses the ability to send squadmate commands. Guard this building with your life.

When a team loses all of their buildings, they lose their ability to respawn. There will also be a message sent to every other player that the team s base has been destroyed. When every member of the team has been killed, the other team wins.

Max Players: This is the maximum number of players allowed in this game. This game type can allow a maximum of ten players.

Time Limit: This button can be clicked to set the length of the game (in minutes). You have these options 5, 10, 15, 20, 25, and 30, as well as INF (infinite or until the last player quits the game). INF is the default setting for this field.

Kill Limit: This button can be clicked to set an upper limit of the number of kills that any one player can achieve before the game ends (from one to twenty). The player that reaches that kill limit first will be announced as the winner of the game. Also available is INF (infinite) which allows the game to continue without limit. INF is the default setting for this field.

Num. Lives: The maximum number of times a player can be respawned before being ejected from the game. This allows a host to create a last man standing type of game. Whenever a player is killed the number of times indicated in this field, he or she is eliminated from the game. This means that if 1 is selected as the number of lives, then the first time a player is killed, they are ejected from the game. Number of Lives can be set from one to ten, or INF (infinite), which is the default setting.

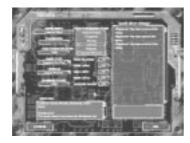
Custom Gears: This button can be set to on or off. Setting this to on allows player to use customised Gear variants, and turning it off allows players to only select standard variants.

Friendly Fire: This button can only be set to on or off. If on, players are allowed to damage their teammates; off, teammates cannot cause damage to each other.

Capture the Flag (CTF)

Capture the Flag is a team game where each team seeks out the enemy base, steals the enemy flag, and returns it to their own base for points.

Winning Score: This is the total score that must be accumulated by a player in order to win the game. The actions that create points in Capture the Flag are killing enemies while holding the enemy flag, killing an enemy that is holding your flag, capturing the enemy flag, and returning your own flag to your base after an enemy has dropped it.



Max Players: The maximum number of players allowed in this game is ten.

Time Limit: Click on this button to set the length of the game (in minutes). You have a choice between 5, 10, 15, 20, 25, and 30 minutes as well as INF, which stands for infinite (the game will continue forever, or until the last player quits the game). INF is the default setting for this field.

Capture Limit: The number of times a team needs to capture the enemy flag before the game ends. Capture Limit can be set from one to twenty.

Custom Gears: This button can be set on or off. Setting this to on allows the players to use customised Gear variants. Setting this field to off indicates that players can only select standard variants. If you d like to make the game play more like the traditional paper-based game, set this to off.

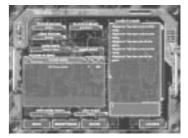
Friendly Fire: This button can only be set to on or off. If on, players are allowed to damage their teammates; off, teammates cannot cause damage to each other.

LAUNCH SCREEN

Once you have either hosted a game or joined a game, you will wind up on the Launch screen and be ready to start playing.

There are two terms you should become familiar with on this screen: host and team captain .

The Host: Indicated by an H next to the player name. This is the player that set up the game. The host has the ability to kick players out of the game, as well as to change limited game settings.



The Captain: Only available in team games, the captain of the team (indicated by a C next to their name) has the ability to kick a member of his or her team out of the game. He or she can also set threat value variations for individual team members in order to better divide the threat value allocations in Strategic or CTF games.

Note: A host can also be a team captain. If the host leaves the game, the first person to join that game becomes the host. If the captain leaves the game, the next person down the list of player names becomes the captain.

There's a lot of additional information here. Here's a quick breakdown from the top of the screen to the bottom:

Player Chassis: This pull-down menu allows you quick access to the list of Gear chassis you can select for the game. For more complete information on a chassis, go to the Modifications Screen (see page 16).

Player Variant: All the available variants for the chassis selected in the Player Chassis field are listed here and can be selected by using this pull-down menu.

Note: If the Custom Gear option has been set to off, only standard variants will be displayed here. In other words, any player-created variant will not appear on this menu if Custom Gear is set to off.

Camo Pattern: Each player can select a camo (camouflage) pattern for their Gear from this menu before launching. In a team game (Strategic or Capture the Flag), only the team captain can select a camo pattern. The camo pattern will mark every member of the captain s team.

Game Name: The name that the host entered for this game is selected here.

Game Setup: Any player may click this button and go to the Game Setup screen to review current game settings. Only the host can change game settings after the creation of the game, and even the host has limited editing powers after the game has been created. (See Editing the Game on page 47.)

Players in Game: This list shows all the players in the game and their current status. The fields of this table are described below:

- Game in Progress: If this column has a dot in it, then the
 player has already launched into the game. If the game is a
 synchronised launch game (Duelist or Strategic), then this
 dot only indicates that the player has pressed the Launch
 button and is now ready to launch. Once all players in a
 sync launch game are ready, then the game begins.
- ¥ Player Name: As usual, this is the name of each player in the game. If a player's name is right-clicked, then options will become available (much like in the Lobby screen). See the Right-Click Options description on page 48 for more information.
- ¥ (P)ing: This is the ping value for each player in the game.
- Y (TV) Threat Value: This is the current threat value for each player. As a player changes his or her variant configurations, this number will change. Threat value information has different meanings for different games, and is fully described on page 48 in Threat Value Limits.
- ${\tt Y}$ (T)eam Number (team games only): This column only appears when a team game is being played and displays the team number the player is assigned to (either one or two).

Remaining Threat: This is the amount of threat value remaining to an individual or team. Again, see Threat Value Limits on page 48.

Team Chat Mode: This chat option, located directly below the chat box, is available only in Strategic and Capture the Flag games. Players can set the option to Public to chat with everyone in the lobby or to Team to confer only with teammates.

Clicking the Stats button moves the player to that game's score screen. If the game hasn t started yet, then this screen will have no information available. However, if players are joining a game already in progress, they can take a look at the game statistics of the players already in the game and get an idea of the relative skill levels of those players.

The Launch button takes a player directly into the game, or signifies readiness to enter the game (in the case of a sync launch game). The Back button takes the player directly back to the Lobby window.

EDITING THE GAME

Changes to Game Setup

The host of a game can press the Game Setup button and change only a few fields after a game has been created. If the host wants to make large sweeping changes (like changing threat value totals, or game types), he or she has to recreate the game from scratch.

These are the settings that the host can change:

- ¥ Terrain
- ¥ Weapon Restrictions
- ¥ Time Limit
- ¥ Kill Limit
- ¥ Number of Lives
- ¥ Friendly Fire (Team Games Only)
- ¥ Winning Score
- ¥ Capture Limit (CTF Only)

Right-Click Options

Players have different right-click options depending on their role within the game. From the launch screen, these options are accessed by right-clicking on a player name.

Info (all players): Clicking here brings up the standard player info. However, in a team game, this also allows the team captain to modify the Threat Value field so that a team's total threat value is not necessarily evenly divided between all team players. Thus, a captain can give one player 2000 points to take a heavy artillery Gear, while giving another player 300 points for a light, fast scout. In those team games, players can view the threat max set by their captain by pulling up the info box, but cannot modify it themselves.

Whisper (all players): Exactly as in the lobby, players can set the Whisper mode so they can privately talk with one another. Again, you can only whisper to one player at a time.

Kick (only host and team captains): The host can kick any player out of a game. A team captain can only kick players out if they are on the captain's team. Once a player is kicked from a game, he or she cannot re-enter the game, so kick players carefully.

Captain: A host can select a player and make them a team captain. Although the host starts off as the team captain, he does not have to stay a captain and can make another player his team's captain, if desired.

Threat Value Limits

Threat values vary between the two types of games: individual and team. Individual games include Duelist, Deathmatch, and Steal the Beacon. Team games include Capture the Flag and Strategic.

Threat values are handled differently for each of these game types and are described below:

Individual

Each player has a maximum threat value set by the host. The Remaining Threat field shown at the bottom of the player list is only applicable to you, the player that joined this game. In other words, if the maximum threat value is 1500 and you choose a 1650 threat variant, then the Remaining Threat field will show -150, so you can see that you are over the limit.

If your threat value exceeds the maximum threat value set by the host, you will not be able to launch into the game.

Team

The host sets a maximum threat per player in the Create Game screen. That value is multiplied by the number of players in the game and divided by two (since there are two teams). For instance, if the host set up a maximum of 1000 points per player, and there are nine players in a game, the maximum threat value for each team would be 4500. This allows a team with fewer players to have a little more threat value per person to play with. If the teams are even in number, then each side gets the same maximum threat value per player. The captain for each team can divide up the team s threat value any way he or she sees fit, but the total threat value of the team must be less than or equal to the set maximum threat value in order to launch into the game.

In the bottom left of the screen there are two fields. Threat Left (PLYR) shows how many threat points you have remaining. Threat Left (TEAM) shows how many threat points your team has left. Each player in a team game can see their own maximum threat value by pulling up their own Info box.

The current total of the team is displayed in the Remaining Threat field. If that value is negative, then the team cannot launch into the game until variants are changed to bring the total team threat equal to or less than the maximum threat allowed.

SCORE SCREENS

There are three variations of the Score screen shown after completing a multiplayer game: the basic screen with the player names, the Team 1 and 2 Score screen, and the Steal the Beacon screen. Most games use just a single table to indicate the scores generated during the game, described below:

Basic Scoring Information

Player Name: This is the name of each player that played in the game. Players are kept on this list for ten minutes after they exit the game before they are deleted. This allows other

players exiting the game to get an idea of how they did against the players that quit before them.

(K)ills: How many kills the player has accumulated while playing in this game.

(D) eaths: How many times the player died during the game.

(S)hots Fired: How many times the player fired at an opponent.



 $(\mbox{\ensuremath{\mbox{H}}})\mbox{its}$ Scored: How many of the shots fired actually hit the target.

Ping: The player's ping value.

Steal the Beacon Scores

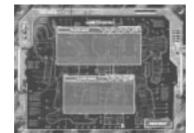
When the game being played is Steal the Beacon, a second table is also shown to give additional information to the regular individual table.

Player Name: Shown here again in order to reference each row of scores.

(H) olding the Beacon: This is the number of points the player scored by holding the beacon during the game.

(K)illing the Beacon Holder: Points scored by the player for killing the holder of the beacon.

Score: This is the total of the two fields described above. The player with the highest score in this column is the winner of the game.



Capture the Flag Scores

The only other time there is an additional table is when the game being played is Capture the Flag. That additional table (and team scores) are described below:

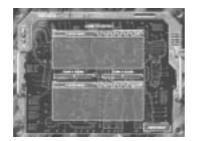
Team 1 and 2 Scores: This shows the total scores for each team in the game. The team with the higher score is the winner. Scores are accumulated by each player and are displayed in the box below.

Player Name: This is shown here again in order to reference each row of scores.

(T)eam Number: This is the team number the player was on (either one or two).

Kills while (H)olding an Enemy Flag: Points accumulated for killing enemy players while holding the enemy s flag.

(K)illing an Enemy Flag Holder: These are points gained by killing an opponent that was holding your team's flag.



(C)apturing a Flag: These points are accumulated each time you capture an enemy flag.

(R) eturning Your Flag: These points are accumulated by returning your own flag to its base.

Score: This totals up each player's individual scores so you can compare players against each other. Remember that the team's total is displayed above and is a sum of all the individual player scores displayed below.

SECTION FIVE: GAME OPTIONS

The Game Options screen can be accessed in one of two ways: either by clicking on Game Options on the Main Menu splash screen, or by pressing Esc at any time while in the game shell (before you enter the simulation).

Main Menu: This button returns you to the Main menu splash screen of the game. It's a quick and easy way to shortcut your way through screens rather than having to back out of each of them.

Graphics: This takes you to the Graphics Options screen where you can adjust many of your video card options, as well as screen resolution and graphic driver choices.



Sound: Clicking here allows you to access slider bars where you can adjust various sound options.

Control Config: This button takes you to an area where you can adjust peripheral device settings, keyboard commands, and sensitivities.

Quit Game: This button will take you completely out of the game and back to your Windows desktop.

GRAPHICS

This screen allows you to modify the various graphics attributes of the game when launched. Those attributes are described below:

Special Effects — Full/Reduced/Low: Special effects are the various smoke trails, explosions, dust effects, the number of channels for sound effects, and weapon effects in the game. Setting these to low may increase the performance of some systems but will reduce the intensity of the effects. Also, setting this to low will reduce the number of ambient sounds that will be played at one time.



Shadows Full/Reduced/Off: These settings affect the shadows cast by vehicles (including Gears) and buildings. The reduced setting reduces the resolution of the shadow (making it blockier), but can increase game performance. The off setting turns shadows off completely.

Specular Lighting On/Off: Most vehicles have specular highlights cast by environmental lights. Specular highlights are the shiny, metallic look you see as you rotate around an object. Since this effect performs better on some cards than others, you have the ability to turn it off, if desired.

Detail Texture On/Off: Detail textures are high resolution textures that come into play when you get close to an object. A real world description of this effect is to stand about 20 feet from a white stucco wall. When you look at it from there, you mostly just see a white wall. But as you walk closer, you begin to see the stucco bumps on the wall and see more detail. Detail textures do the same thing in our game. They are not used everywhere, but are on most Gears and vehicles.

Trilinear Filtering On/Off: This option will only appear if your card supports trilinear filtering. (Many cards do not — contact your card manufacturer if you re not certain.) Trilinear filtering diminishes the mip-map banding effect you see in the distance when using bilinear filtering. However, since it can cause diminished performance of your system, it may be turned off, if desired.

Video Display Drivers: Systems that have only one video card will not be able to do anything to this button. However, systems with multiple video cards can click on this button and pull it down to reveal a list of all available video cards on

the system. You can then select the desired card to use when launching the game.

Screen Resolution: This menu polls your system to find out what resolutions can be used with your video card. The resolutions available will be shown on the list. Choose the one you want and then launch the game to see the differences. Colour-bit depth is also displayed on this menu. For instance, 640x480x16 indicates 640x480 screen resolution with 16-bit colour depth. 640x480x32 indicates 640x480 screen resolution with 32-bit colour depth.

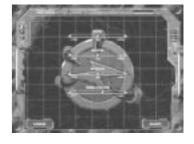
Note: Higher resolutions will have a greater frame rate impact and will affect the game s performance. Further, a number of video cards may produce graphic anomalies at higher resolutions or colour depths. If you are worried about this, choose a lower resolution

SOUND

This screen allows you to adjust slider bars to change sound options within the game.

Music: Adjusts the music volume within the sim portion of the game. The range goes from 0 (off) to 100 (full volume). The current percentage of full volume is shown in the centre of the slider.

Dialog: Adjusts the dialog volume within the sim portion of the game. The current percentage of full volume is shown in the centre of the slider.



Effects: Adjusts the sound effects volume within the sim portion of the game. The current percentage of full volume is shown in the centre of the slider.

Shell: This adjusts the volume of the buttons, background sound, and pilot voices in the shell portion of the game. The current percentage of full volume is shown in the centre of the slider.

CONTROL CONFIGURATION

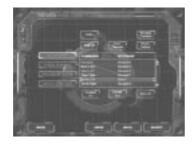
This section allows you to fully customise all controls within the game. You can also load and save key sets for future use or to swap with friends.

Since there are many possible commands within the game, the list of commands is broken into four categories.

Movement: This covers most of the forward, backward, left, right, throttle, crouch, and other movements possible for the Gear.

Targeting/HUD: These commands are centred around aiming, locking onto a target, and manipulating your Gear's HUD.

Squad/Network: This menu contains most of the squad shortcut keys, as well as network taunt quick keys.



Miscellaneous: This menu contains all the other commands that don't fit elsewhere including camera controls, console display keys, etc.

Changing Your Key Commands

To actually change keystrokes, you should first click on the command you wish to change. Then it's a two-step process: 1) Click Change Key to let the software know you want to change the command, and 2) press the key (or joystick, mouse, rudder input) to enter that input in place of the current key. Thus, you can easily change the forward command to your joystick forward/back axis (Y-Axis) by first clicking Forward, then the Change key, and then moving your joystick forward and back a couple times.

Additionally, some controls can have their sensitivity settings adjusted for better control, or they can be inverted.

To adjust the sensitivity of a control, simply select the command and then slide the control on the slider bar to the desired position. To decide if you like the setting, just jump into an Instant Action game and check it out. If you want to adjust it further, just come back and move it a bit.

Invert On/Off: Some users want to invert a control so it acts more like game controllers they're used to (for example, first-person shooter fans typically want their mouse to look up when they move the mouse forward, and look down when they move it backward, while flight sim fans want the cursor to dive when they move the mouse forward, and climb when they pull it

back). You can invert the control easily by selecting Invert On. Pressing this key inverts the vertical axis on your mouse or joystick. Press the button again to return to the original setting.

Other keys on this screen can assist you in changing settings:

Reset Default: If you are not satisfied with the settings and want to go back to the standard default set and start again, simply click this button and the original settings will revert.

Change Key: This is the button you click in order to open the command. Once you click this button, the next input you give the software will change the current command to that new input.

Key List: Another way you can change a command is by using the Key List button. Simply select the function you wish to change, then press the Key List button. A box will appear containing a list of binding options to choose from. Click on the new command to select.

Reverse Function: When this button is pressed, the selected command is reversed.

Load: Already existing control sets can be loaded by clicking this button and then selecting a control set from the available list.

Save: If you like the settings you've made, then you can name the control set and save it for future use by clicking this button, entering a name and clicking Save.

Accept: If you like your settings and want to use them in the game, then click Accept to use those settings and return to the previous screen.

Back: You can leave this screen without making changes by clicking Back. Beware! Any changes made will not be saved to your current input set if you choose Back instead of Accept.

Avoiding Key Reassignment Conflicts

Sometimes, when changing key commands, you will create conflicts with other keys. These are easily resolved, using the highlighting system shown here and the buttons below the command list.

For instance, if the Forward command was changed to E, this causes a conflict with the Nearest Enemy command in the Targeting/HUD category (which was preset to E).

That information is displayed by showing you the conflicted keystroke in the red box below the command list (Nearest Enemy) and by highlighting in red the category that the conflicting command is in (in this case, Targeting/HUD).

The four buttons below the conflicted box can often solve the issue completely without using the highlighting system above.

Undo: A key change can be undone by simply hitting this button. There are multiple levels of Undo available, so you can back up changes many, many levels if you want to work backwards through multiple changes.

Clear Conflicted: This key will change the conflicting key to none so that it no longer conflicts with the command you currently have selected. You'll still need to change that keystroke to something else, or else it won't be available to you at all when you launch to the sim, but this can quickly prevent a conflict in the meantime.

Clear Selected: This changes the currently selected command to none. This is the only way to empty a command completely. Empty commands will not be available when you launch the sim.

Clear All: To clear all commands to none in order to create your own ultimate key set, click this button.

Note: If you are still having problems with your joystick or other peripherals, please contact the manufacturer for updated drivers or support.

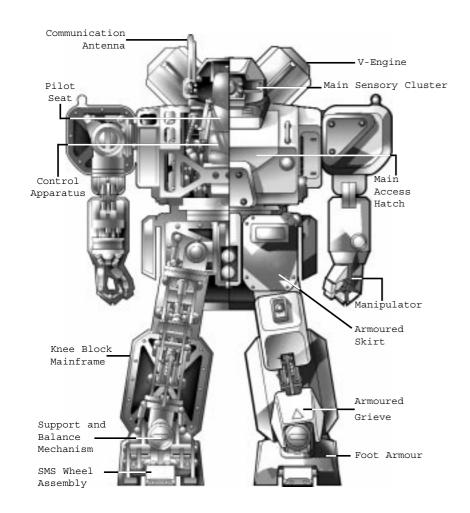
SECTION SIX: YOUR GEAR

Any rookie pilot fresh out of the academy can run and shoot, but it takes an experienced commander to take advantage of his or her abilities on the battlefield. The first step is to study and understand the features and capabilities of a Heavy Gear. Become familiar with your Gear s electronic systems and mechanical components, and review the Gear s controls. It will take many combat hours to learn these controls, but eventually, you will be unable to tell where the human pilot leaves off and the Gear begins. At that point your Gear will reach its potential on the battlefield, and you will achieve unqualified success as a Strike Recon Commander.

The Heavy Gear is the most advanced IFV (Infantry Fighting Vehicle) to enter land combat in the past millennium. Designed with an infantry soldier s flexibility and the resilience and

firepower of an armoured vehicle, the Heavy Gear offers maximum protection for its human pilot, while providing a massive payload of armour and weaponry. The following sections provide a brief, top-to-bottom tour of a Gear s internal and external systems.





Cockpit

Every Gear carries one pilot in its torso. A sturdy flight seat occupies the centre of the Gear s chest cavity.

Control Apparatus

All Gears are equipped with control sticks and throttles. Each pilot can customise the controls and corresponding commands to their preferred method of control.



Information Display

To deliver information to the pilot, a Gear uses virtual reality technology with a special laser crystal screen mounted inside a slightly enlarged helmet. This system relays a 3D image that effectively removes all sight barriers from the pilot s view, giving the pilot a feeling that they are the Gear. The Gear s internal processors then take data from all sensor inputs (radar, motion detectors, etc.) and compiles all the information as overlays in the VR helmet. This makes battlefield information simple to read and instantly available. Audio is transmitted through multiple external microphones. The Gear s neural net will process the sound and feed all vital audio information via the pilot s VR helmet.



Sensor Systems

A Gear supports multiple sensors, many of which are digital Omni-cameras in the area of the Gear s head. Depending on the Gear s configuration, these sensors process information that is channelled to the pilot via the virtual reality display. Although these sensors transmit individually, the Gear s CPU (central processing unit) processes the transmissions and delivers a single virtual image to the pilot. The CPU s sub-processor commonly referred to as VISUP, Eye-Brain, or Vision Chip instantly performs this function.



Power Plant

Your Heavy Gear uses an advanced, compact internal combustion power source called the V-Engine. The core is a support axle composed of high-strength alloy steel. This configuration includes two drive shafts delivering equal horsepower. The V is a compact engine that is rugged, easy to manufacture and repair, and capable of running smoothly on a variety of fuels. With a relatively small number of moving parts, this engine is perfectly suited to the Heavy Gear.



Armour

The average Gear is protected by several centimetres of composite armour. Because the armoured plates are designed to provide maximum flexibility, some areas have limited power to stop attacks. A skilled enemy will exploit these weak points, so a Gear pilot must learn to use stealth, quick movements, and lightning attacks to avoid presenting an easy target.



Secondary Movement System

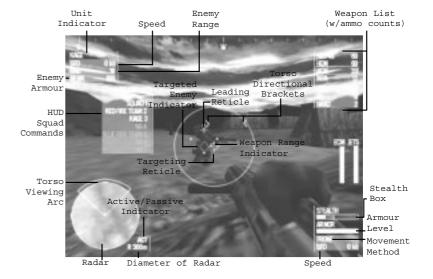
A Gear can walk, run, jump, and move sideways (strafe), however to reach maximum land speed, it must use a Secondary Movement System, such as wheels or treads. These systems are placed under the machine s feet and powered by generators attached to the V-Engine s drive shaft. Because of low ground clearance, the SMS is only useful on hard-packed sand or dirt, or concrete surfaces.



HUD (HEADS UP DISPLAY)

Due to improved virtual reality links between machine and pilot, you have the opportunity to meld your human abilities with the Gear s computer enhanced electronics. Although the modern Gear traces its evolution to seemingly primitive mining and construction vehicles, the shell you don today is a direct response to the demands of modern combat, stealth, and navigation. Your field orientation begins with the Heads Up Display, or HUD, a virtual reality interface that connects you to the outside world.

Rather than place additional hard shell displays in front of the pilot, the HUD projects all tactical information at eyelevel. Important information about the Gear, such as weapon status, damage displays, and the combat situation including target information and squadmate commands, are all displayed on the HUD. The amount of information displayed by the HUD is directly related to the fire control and sensor capabilities of the Gear (see HUD Functions on page 62 for detailed descriptions of the individual subsystems and Sensors for complete system descriptions).



HUD Functions

- Υ Unit Indicator: The name of the unit you currently have targeted.
- Υ Enemy Range: Enemy speed and range so you can more accurately gauge shots and make smarter weapon selections.
- ¥ Radar: Radar radius is adjustable and noted on the display. ACT indicates Active setting; PAS indicates passive setting. Enemies show up on radar as red dots, friendlies as green dots, and neutral targets are grey.
- ¥ Weapons List: Displays all available weapon systems and their ammo loadout. The current weapon is highlighted.
- Υ HUD Squad Commands: This is the quick key interface for giving snap commands to your squadmates.
- ¥ Targeting Reticle: Main shooting reticle (crosshair).
- Y Weapon Range Indicator: This indicator turns green when the area before the reticle is in the range of the selected weapon. The indicator turns red when the area is out of the selected weapons range.
- Υ Torso/Directional Bracket: The Gear s directional indicator. Shows in which direction your Gear is moving. These brackets always face front, even if your Gear s torso is twisted.
- Υ Leading Reticle: Computerised target point for effectively leading a moving target (small crosshair).
- ¥ Waypoint/Target Indicator: Waypoints are indicators of where you should go in missions in order to accomplish your objectives. Any selected waypoint or targeted object is shown as a free-floating selection if in front of the Gear, or as a free-floating arrow pointing in the direction the Gear should turn in order to face it.
- ¥ Torso Viewing Arc: The arcing line above the radar indicates the current facing of your torso relative to centre. As you turn your Gear's torso left or right, the arc will also slide left and right to show in which direction you are looking. If the arc is centred directly over the radar circle, then your Gear's torso is also centred.
- ¥ Active/Passive Indicator: The letters ACT indicate you are using Active Sensors, while the letters PAS indicate Passive Sensors
- $\mbox{$\Psi$}$ Sensor Diameter: This number indicates the diameter of your sensors field, shown in meters.
- ${\tt Y}$ Armour Level: Sliding bar reflects overall armour integrity. While in battle, this bar will turn yellow to indicate

- moderate armour damage and then red to indicate major armour damage.
- ¥ Movement Method: A device which monitors whether your Gear is standing upright, kneeling down, or lying prone.
- ¥ Speed: Your current velocity is shown here (in kilometres per hour).
- ¥ Detection Alert: If the word Warning appears here, then an enemy is actually alerted to your presence and is moving to intercept.
- Y Stealth Box: This box has a green vertical line in it. Whenever you're within enemy detection range, red will begin filling the box. As long as the red stays to the left of the green line, you can't be detected. When it passes the green line, you can be detected. A red Warning sign will also appear above the stealth box. The green line can be moved via Perks, active vs. passive radar, and crouching/lying down.

Not Shown

¥ Warning Indicators: The Critical Hit indicator will be displayed to indicate that an integral Gear function has been damaged or destroyed.

Warning Indicators Legend

Critical Hit — Indicates that your Gear has been seriously damaged. A Gear can suffer a critical hit even with a high overall armour level, if a shot is taken in a vulnerable area of the Gear (such as the head).

Torso - Torso is damaged and will not respond to commands.

Targeting — Target designator is destroyed and will not function.

Speedometer - Speedometer has been destroyed.

Weapon - Weapons display has been destroyed.

Fire Control - Fire Control systems have been destroyed.

Sensors - Sensors no longer function.

Leading - The leading reticle has been destroyed.

Sniper - Sniper Systems have been destroyed.

Motion - Motion sensors have been destroyed.

Magnetic - Magnetic sensors have been destroyed.

Radar/Compass - Radar no longer functions.

Reticle - Targeting reticle has been destroyed.

Ultrasonic - Ultrasonic sensors have been destroyed.

 $\ensuremath{\mathsf{Mov}}/\ensuremath{\mathsf{SMS}}$ — Your Gear has lost some of the ability to walk. SMS no longer functions.

 ${\tt Man/Upright\ Movement-Your\ ability\ to\ move\ has\ been}$

Note: Before you receive either the SMS or Upright Movement warning indicator, the Movement Method indicator in your HUD will turn light blue to indicate some damage and then orange to indicate moderate damage.

ADVANCED RADAR TECHNIQUES

Your radar is equipped with sophisticated systems which allow your Gear to distinguish between friends or enemies. When an object or vehicle is picked up by the radar, it will appear as a white icon. After the NNet determines whether or not the object or vehicle is hostile it will colour-code the contact. If the contact appears red, the NNet has designated the contact to be hostile, green designates a friendly.

Active vs. Passive

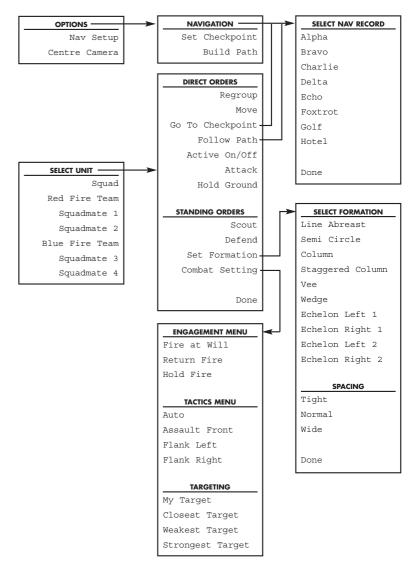
Your Gear radar has two basic modes of operation. In the Active mode, your radar sends an electronic pulse which is used to scan the surrounding environment and report any signals within your operating range. This scan is usually very dangerous to use because it makes the Gear very easy to detect on the battlefield. Passive mode, on the other hand, only acts as a receiver of signals. As a Strike Recon Gear pilot, it will be very important for you to operate with as much stealth as possible. For this reason, it is advised that you learn how to operate in Passive mode in all but the most dire of circumstances.

TACTICAL COMBAT

As a Spec Ops Commander, you are responsible for your squadmates. Your team depends on your direction, and the completion of your mission depends on your ability to gain a tactical advantage on the battlefield. It is critical that you become familiar with the tactical system installed in your Gear.

All Spec Ops Commanders have instant access to an electronic Tactical Map. This information and communication system is displayed in your Virtual Reality helmet. Simply strike the Map key (the default key is Tab) to invoke the Tactical Map.

TACTICAL MAP COMMANDS FLOWCHART



Options

Nav Setup: Allows the commander to designate checkpoints and construct paths for specific manoeuvers.

Centre Camera: Centres the camera on the Commander (that $\ensuremath{\mathbf{s}}$ you).

Direct Orders

Regroup: This command orders your squadmates to stop what they are doing and return to formation as fast as possible. Warning: issuing this command will cause your squadmates to stop fighting so make sure they are not in battle when you summon them to Regroup.

Move: Select a single unit, one of two teams: Alpha (Red Fire team, squadmates 1 and 2) or Bravo (Blue Fire team, squadmates 3 and 4), or the entire squad, and then click on a new location. The squad will proceed to the designated point and await further orders or act on their default orders.

Go To Checkpoint: Direct a unit or units to a checkpoint on the tactical map.

Operations Update #7: Black Talon Intelligence will always attempt to supply a set of nav points for your tactical map. However, you should assess these nav points once the mission is underway. The suggested path may not be your best alternative.

Sensors Active/Passive: This command toggles an order to your squadmates to change their sensors from Active to Passive mode.

Attack: This command attacks the designated enemy.

Hold Ground: Unit will stop all actions and defend the current position.

Standing Orders

Scout: Designate the units you want to command then click on their intended destination on the tactical map. The Gear selected will survey the surrounding area while progressing to the checkpoint. Upon reaching the checkpoint, the Gear will patrol the surrounding area until ordered to do otherwise.

Defend: This order tells the selected unit(s) to defend an object or area you specify on the tactical map. The squadmate will engage any enemy who threatens the designated object or area.

Set Formation: This series of orders allows the commander to set a predetermined formation.

These are the possible formations available to the Commander:

Line Abreast	Wedge
Semi Circle	Echelon Left 1
Column	Echelon Right 1
Staggered Column	Echelon Left 2
Vee	Echelon Right 2

Separation: This is the distance between units in formation. The three choices are tight, Normal, and Wide.

Combat Settings: The active commands in each category work together to form a tactical strategy.

Rules of Engagement

The following commands determine how your squad will react when threatened by an enemy engagement.

Fire at Will: The selected unit or units are ordered to pick their own targets and engage at will.

Return Fire: Only fire when fired upon.

Hold Fire: Unit will never fire unless ordered to.

Tactics

Auto: Will choose between following tactics and making the best decision

Assault Front: Initiate a frontal attack on the target.

Flank Left: Maintain a position to the left of the enemy while attacking.

Flank Right: Maintain a position to the right of the enemy while attacking.

Targeting

My Target: Attack your current target.

Closest Target: Attack the closest enemy in sensor range.

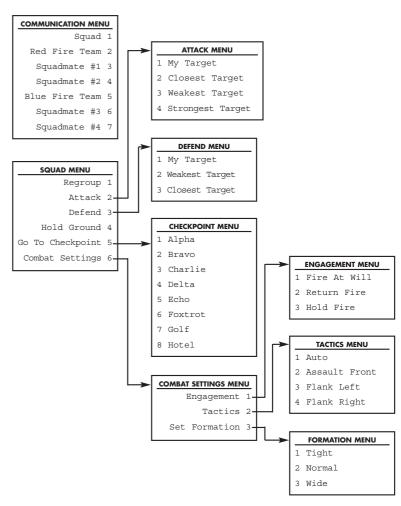
Weakest Target: Attack the weakest enemy in sensor range.

Strongest Target: Attack the strongest enemy in sensor range.

HUD TACTICAL COMMANDS

It s not always feasible or smart to pull up your tactical map, especially in the heat of battle. However, communication with your squad is critical, so a quick interface exists in your HUD to give you easy access to most of the same commands. This interface is accessible by pressing C. The diagram describing access to those functions is shown on the next page.

HUD TACTICAL COMMANDS FLOWCHART



SQUAD COMMAND HOT KEYS

Attack (Nearest Enemy)	Ctrl	+	A
Regroup	Ctrl	+	R
Stand Ground	Ctrl	+	S
Defend (My Target)	Ctrl	+	D
Attack (My Target)	Ctrl	+	Т
Go To Checkpoint Alpha	Ctrl	+	G

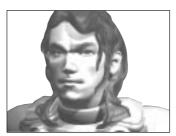
STEALTH

When you are dropped behind enemy lines, combat is inevitable. However, you can fight at the time and place of your choice by taking advantage of your Gear s stealth capabilities. By carefully monitoring your sensors, which produce varying amounts of heat and radio waves, you can render a Gear almost invisible. In addition to using stealth tactics, you can equip your Gear with a Stealth Perk during the customisation process. The rating of this perk determines how difficult it is for enemy sensors to detect your Gear. Finally, the rating of the Electronic Counter Measures perk will determine the amount that enemy sensors are disrupted.

APPENDIX A: THE 01ST BLACK TALONS CHARACTER COMPENDIUM

LIEUTENANT KEIJI KAGE

Peace River Defence Force



On assignment outside of Peace River when CEF saboteurs destroyed his city-state, Keiji Kage is now a man without a nation. Before the tragedy, he had served as a mercenary and a soldier of fortune across the Badlands, including in the community of abandoned Earth soldiers known as Port Arthur. Kage finally settled into the role of a Duelist in the Peace River Defence

Force. He married and had a child, only to see them vaporised by the anti-matter device that destroyed his home.

Military Specialties

Lieutenant Kage served as a Duelist for the Peace River Defence Force and then as a test pilot for the Paxton Arms Research and Development wing. This is a testament to his skills as a pilot. Kage is deadly, especially in one-on-one combat where the battlefield is closest to the duelling arena. His time in Port Arthur has also given him a passing familiarity with CEF forces and tactics, a valuable skill in the mission ahead.

Psychological Profile

Part of Kage feels he should have died with his family at Peace River. He has channelled this guilt into anger and his participation in the strike against Caprice is in all likelihood a personal vendetta. This makes him very motivated, but it may cause behaviour problems in the field when the professional facade he has built begins to crack. There can be little doubt, however, that he will be effective and driven in combat against CEF forces; the memories of his family give him little choice.

LIEUTENANT BOYDEN WALLIS

Norlight Armed Forces



Like many Norlights, Boyden Wallis is a man of faith. A devout follower of the Revisionist Church, the major religion born on Terra Nova, Wallis sees his military service as a spiritual obligation. For him, this is a pilgrimage, the Revisionist duty to better the world. He joined the Norlight Armed Forces when he felt the South was getting to be too dangerous and

served with distinction during the Interpolar War. With the destruction of Peace River, he realised that the true enemy was Earth, a faithless colonialist empire bent on subjugating his church, his nation, and his planet. Wallis is anxious to test his mettle against the heathens of the CEF.

Military Specialties

Lieutenant Wallis is an experienced Gear pilot, having served with the 7th Norlight Gear Regiment (Red Crusaders) during some of the hardest fighting of the Interpolar War. His combat skills are excellent and he is not prone to hot-dogging.

Psychological Profile

Boyden Wallis faith is his strongest psychological asset and his greatest weakness. The conviction that the Gentle Prophet is on his side makes Wallis a fearless soldier. Unless his faith is profoundly shaken something unlikely to occur Wallis should be virtually immune to any psychological problems and resist interrogation if he is captured. Unfortunately, his driving faith isolates Wallis from the rest of the Black Talon pilots. Indeed, fighting with those who don t share his faith is somewhat distasteful to him. Conflict with the Southern pilots may be unavoidable.

LIEUTENANT JUNO VESPING

Northern Guard



Lieutenant Juno Vesping is a native of the city-state of Rapid City in the United Mercantile Federation and served for a brief time in the corporate security service of Northco, a giant Gear manufacturer. After a corporate raid went wrong, she left the private sector for the military. She served with distinction in the Northern Guard Intelligence Service as both an

operative and an analyst. She left the intelligence service six cycles ago to join the Cat s Paws, an elite commando Gear regiment in the Northern Guard. There she served with distinction under Colonel Stacey Diggs.

Military Specialties

Vesping, with over a decade of experience in covert operations, is a true asset to the Black Talon Squadron. She is a veteran of many spectacular commando raids with the Cat s Paws, including one on Port Oasis itself in TN 1938 that earned her the Guard s highest commendation. Vesping s analytical mind, however, is probably her best asset. She will be the best suited to interface closely with Liberati and other locals once on Caprice.

Psychological Profile

Vesping is a surprisingly well-adjusted woman, given her background in covert operations. She does not suffer from any significant stress disorders or antisocial tendencies. Vesping does put a strong value on innocent life, however, and has twice in her career disobeyed orders that put her regiment at risk. Both times she managed to find another solution (a testament to her creative thinking), but this could be a problem in a mission like the excursion to Caprice.

SERGEANT ANTOINE MAILLAUX

Southern MILICIA



Antoine Maillaux was born in Aquitaine, on the border of the Southern Republic, but quickly got into trouble with the local authorities and fled into the Badlands. He hooked up with rovers and smugglers and began the life of a rogue, serving briefly with the Peace River Army at the end of the War of the Alliance. Once Earth was defeated, he became a full-time

smuggler, making treks between Wounded Knee, Port Arthur, Hsi Tsang, and other lawless towns. In TN 1936, when the Interpolar War exploded, Maillaux was operating on the Republican border and got drafted into the Southern MILICIA. Because of his skills and experience, he was assigned to the 11th Regiment (the Rapiers), an elite auxiliary to the Legion Noire. He served with distinction, but remained a rogue and wasted no opportunity to challenge authority.

Military Specialties

Maillaux s training with the Legion Noire came to supplement the extensive skills he had already acquired as a smuggler and rover. A skilled pilot, he mostly excels at stealth and hitand-run operations, which should come in handy in the mission ahead. He also has direct experience against Colonial Expeditionary Forces during the War of the Alliance.

Psychological Profile

Maillaux, despite his military service, is still a rogue at heart. He will follow orders, but rarely does so to the letter. He respects only those troops who he believes have earned respect. It will be critical to the missions success that Maillaux consider all his teammates worthwhile.

SOUS-CAPORAL MORGAUSA TEMPLE

Mekong Peacekeepers



Morgausa Temple is the latest inheritor of a long family tradition of distinguished military service, going back to the birth of the Mekong Dominion. Temple herself, however, has not seen combat as of yet. She signed up for duty as soon as she could and finished her training mere days before the Peace River explosion. Since then she has been awaiting an assignment,

transferring from unit to unit. The 1st Black Talon Squadron will be her baptism of fire.

Military Specialties

Sous-Caporal Temple may not have seen combat, but she rates very high on all training tests. Her piloting skills are excellent and she impressed her academy teachers enough to earn a recommendation for special operations. Due to her family background, Morgausa Temple seems to be a natural. Before she signed up, Temple had begun studies in electronics and mechanics; she completed some of that training in the Academy. Her technical know-how supplements her combat skills.

Psychological Profile

Temple has great potential, but has yet to be tested under fire. She is all too aware of this and suffers from an occasionally acute lack of self-confidence. Surrounded by hardened soldiers, she is anxious to succeed but is unsure how to do so. She will likely continually look to her commander and squadron-mates for guidance and orders. Unfortunately, her family s record of service only compounds the problem; indeed, she follows the Mekong practice of ancestor worship and fears she isn t worthy of her heritage.

SOLDAT LEO SOBEC

Republican Army



Leo Sobec was once a decorated pilot with the Southern Republic s Iron Defenders regiment. Now he is prisoner 03-645-62, freshly transferred from Labour Camp 27 near Siwa Oasis. Sobec committed grievous crimes while serving with the Iron Defenders and was court-martialed. The Southern Republic will say only that he was involved in the deaths of several fellow soldiers. Sobec

underwent experimentation while at Labour Camp 27, reportedly designed to curb psychotic tendencies. The results and exact nature of this program are unavailable to us. Sobec s inclusion in this mission is due mostly to his piloting skills and the fact that he is utterly expendable.

Military Specialties

Sobec s military record shows him to be an extremely skilled Gear pilot, able to face overwhelming odds and succeed. He excels at close combat in and out of a Gear and rarely leaves an opponent breathing. Incarceration has, if anything, added to Sobec s effectiveness, apparently killing off any last trace of remorse he might feel toward his enemies. Missions of total destruction or assassination are his specialty.

Psychological Profile

Sobec is a potential time-bomb waiting to explode. He refuses to socialise with his squadron-mates and generally remains cold and almost unemotional. In the field, he attacks enemies (real or simulated) with a zeal that borders on insanity. Sobec is in enough control to channel his raging hatred toward designated enemies, but he should be watched with the utmost attention.

HELENE DEL PULCIANO

Caprician Liberati



Helene del Pulciano will be your contact on Caprice among the Liberati partisans. Our information on her background is sketchy, although she may have been a rare member of the Caprician corporate elite who refused to collaborate with the CEF when they returned to Caprice. Our information, however, places her as being too young to have been an executive at that

time. It is more likely that her family resisted or that she has rebelled against both her parentage and the CEF.

Military Specialties

Del Pulciano has as far as we can tell never received formal military training. She has been fighting with the Liberati guerrillas for several years, however, and so has most likely acquired a great deal of field experience. Our contacts say she is at least competent with walker vehicles and so should be able to serve with the Black Talon. Del Pulciano s greatest asset for the mission, however, will be her knowledge of Caprice, the CEF s forces there, and the Liberati.

Psychological Profile

Any psychological profiling of del Pulciano is extremely tentative, but there is likely to be some sort of cultural clash between del Pulciano and the Black Talons pilots. Indeed, they come from different worlds and she may be accustomed to a certain class of companions. She is also likely very dedicated to her cause, and all Talon pilots should strive to make clear they are present to assist the Liberati cause, not to become another invading force.

APPENDIX B: GEARS

BLACK TALON GEARS

All of these Gears are considered spec op varieties and include a pressurised cockpit, increased armour, power, and stealth capabilities.

Dark Warrior

Ops Code BTX-01

The Dark Warrior is a modified version of the Warrior Elite, a Gear prototype created by Paxton Arms ultra-secret advanced Gear development program. The Warrior Elite was to be the vanguard of a new generation of highly mobile Gears for Peace River s army, but only three prototypes are known to have escaped the city-state s destruction. The Dark Warrior upgrade retains the Elite s agility and speed but features additional stealth equipment.



SPECIFICATION

Code Name:

Production Code:

Manufacturer.

Use:

Height:

Full Combat Weight:

Armour Material:

Average Armour Thickness: Maximum Running Speed:

Maximum Rolling Speed:

Powerplant:

Horsepower:

WEAPONS

6 x Weapon Hardpoints

Dark Warrior

n/a

Black Talon Werks

Main Battle Gear

4.6 meters

6900 kg

Advanced Composites

50 mm

69 kph

90 kph

PV-650 V-engine

650 hp

Dark Cheetah

Ops Code BTX-04

The swift Cheetah scout Gear was selected to perform the reconnaissance tasks of the mission. Its extensive sensor array and builtin electronic warfare suite make it well-suited for this role. It will serve as the eves and ears of the team once on the ground, but can also serve as a light skirmisher. The basic Cheetah frame was substantially modified to incorporate additional armour and stealth equipment, but did not lose speed or agility.



SPECIFICATION

Code Name:

Production Code:

Manufacturer:

Use:

Height:

Full Combat Weight:

Armour Material:

Average Armour Thickness: Maximum Running Speed:

Maximum Rolling Speed:

Powerplant:

Horsepower:

WEAPONS

6 x Weapon Hardpoints

Dark Cheetah

n/a

Black Talon Werks

Scout Gear 4.1 meters

5200 kg

Advanced Composites

20 mm

60 kph 90 kph

S-V850S V-engine

450 hp

Dark Jaguar

Ops Code BTX-02

The advanced Jaguar was high on the acquisition list for Black Talon. Most of the modifications incorporated technology from the time-proven Hunter to ensure ease of repair in the field. Like its mass-produced brothers, the Dark Jaguar is very mobile and features an above average sensor/comm suite for a line unit. This can prove helpful in confined environments, or if the team s usual scout is unavailable.



SPECIFICATION

Code Name: Dark Production Code: n/a Manufacturer: Blac Use: Mair Height: 4.6

Full Combat Weight: Armour Material:

Average Armour Thickness:
Maximum Running Speed:
Maximum Rolling Speed:

Powerplant:

Horsepower:

Dark Jaguar

Black Talon Werks Main Battle Gear 4.6 meters

7100 kg

Advanced Composites

51 mm 54 kph 84 kph

S-V1110S V-engine

620 hp

WEAPONS

6 x Weapon Hardpoints

Dark Mamba

Ops Code BTX-03

The Southern Republic s Black Mamba design is cutting edge, and it was only natural that we get some for the Black Talon program. Despite numerous early problems with the powertrain and the new modularised systems not to mention Republican officials, who were extremely leery of releasing the stealth technology of their Snake Eye Gear for adaptation the current vehicle is an agile and versatile machine that should perform well.



SPECIFICATION

Code Name: Dark Mamba
Production Code: n/a
Manufacturer: Black Talon Werks
Use: Main Battle Gear
Height: 4.6 meters
Full Combat Weight: 6200 kg
Armour Material: Advanced Composites

Average Armour Thickness: 56 mm

Maximum Running Speed: 54 kph

Maximum Rolling Speed: 84 kph

Powerplant: WV-930S V-engine

Horsepower: 630 hp

WEAPONS

6 x Weapon Hardpoints

Dark Cobra

Ops Code BTX-05

The Dark Cobra will fulfil the task of long range fire support in your combat squad. Its strong frame is capable of carrying multiple ballistic and missile systems, and while it is slightly slower than the other machines, its heavy armour will keep it safe during engagements. The machine can also be used as a brawler, but its poor agility makes this a dangerous practice to engage in.



SPECIFICATION

Code Name: Dark
Production Code: n/a
Manufacturer: Blac
Use: Fire
Height: 5.0

Full Combat Weight:
Armour Material:

Average Armour Thickness: Maximum Running Speed:

Maximum Rolling Speed:

Powerplant: Horsepower:

WEAPONS

6 x Weapon Hardpoints

Dark Cobra

Black Talon Werks Fire Support Gear 5.0 meters

8900 kg

Advanced Composites

90 mm 36 kph 66 kph

WV-1500S V-engine

940 hp

Dark Kodiak

Ops Code BTX-010

The Black Talon Werks are working hard on adapting another series of machines to the new specs, so we do not presently know which one(s) will be available for the mission. The Dark Kodiak seems the most likely prospect, however. Its heavy armour, combined with an upgraded engine and transmission, would allow you to fight your way out of the most desperate situation. Just don t get cocky and think it makes you invincible.



SPECIFICATION

Code Name:
Production Code:
Manufacturer:
Use:

Height:

Full Combat Weight: Armour Material:

Armour Material:

Average Armour Thickness: Maximum Running Speed: Maximum Rolling Speed:

Powerplant: Horsepower:

Dark Kodiak

n/a

Black Talon Werks Heavy Assault Gear

5.2 meters 10,200 kg

Advanced Composites

80 mm36 kph60 kph

S-V2202S V-engine

1150 hp

WEAPONS

6 x Weapon Hardpoints

NORTHERN GUARD

Hunter

The Hunter Heavy Gear has the distinction of being the first exclusively military walker machine on Terra Nova. As such, it is a sturdy, simple machine which enjoyed an enormous popularity in its prime. Hunters were produced by the thousands and found their way into the military forces of practically all nations of the North. The design, slightly modified and renamed J ger, is also found in the armies of the South.



SPECIFICATION

Code Name: Hunter
Production Code: HACS-01MG-MP
Manufacturer: Northco

Use: General Purpose Heavy Gear

Height: 4.3 mFull Combat Weight: 6627 kg

Armour Material: Durasheet with Alloy

Average Armour Thickness: 45 mm
Maximum Running Speed: 42 kph
Maximum Rolling Speed: 72 kph

Powerplant: S-V950A V-engine

Horsepower: 450 hp

WEAPONS

Name	Code	Fire Arc	Qty
M222 Autocannon rifle	LAC	Forward	1
RP-109 Pepperbox	LRP/24	Forward	1
MK IV Grenade Launcher	APGL	Fixed Forward	1
M-2A Hand Grenade	HG	Forward	3
Vibroblade	VB	Forward	1

Jaguar

The Jaguar was intended to be the Hunter's successor in the armies of the Confederation. It is faster, sports better armour, and can carry heavier weaponry, all at the cost of some endurance. It was also the unit that introduced the use of the VR helmet, dispensing with the bulky screens and HUD of the early Hunter models. Unfortunately, the head of the Gear is barely large enough to contain its pilot's own head and VR helmet.



85

Jaguars are fewer in number than Hunters because of their higher cost, and are thus more likely to be found in elite units such as the infamous Cat s Paws.

SPECIFICATION

Code Name: Jaguar

Production Code: HACS-02MG-MPS

Manufacturer: Northco

Use: General Purpose
Heavy Gear

Height: 4.6 m
Full Combat Weight: 7123 kg

Armour Material: Durasheet with Alloy

& Ceramic Average Armour Thickness: 51 mm

Maximum Running Speed: 54 kph Maximum Rolling Speed: 84 kph

Powerplant: S-V1110 V-engine

Horsepower: 620 hp

WEAPONS

Name	Code	Fire Arc	Qty
MR25 Machinecannon rifle	MAC	Forward	1
RP-111 Pepperbox II	LRP/32	Forward	1
K IV Grenade Launcher	APGL	Fixed Forward	1
M-2A Hand Grenade	HG	Forward	6
Vibroaxe	VA	Forward	1

Grizzly

The Grizzly is what could be called a heavy Heavy Gear. It towers over other designs and is equalled only by the Southern Republic's Spitting Cobra. Grizzlies are usually used to tow field artillery pieces, a job at which they excel because of the high torque ratio of their main drive. Unfortunately this results in a slow ground speed.

The Grizzly is also very efficient in assault squads because of its heavy armour. An interesting characteristic is the single minigun bolted under the right arm, on the side of the machine s body just above the waist.



SPECIFICATION

Code Name: Grizzly
Production Code: HACS-02HG-MPS

Manufacturer: Northco/Shaian Mechanics
Use: General Purpose/Fire Support
Height: 5.1 m

Full Combat Weight: 9210 kg

Armour Material: Durasheet with Alloy & Ceramic

Average Armour Thickness: 70 mm
Maximum Running Speed: 42 kph
Maximum Rolling Speed: 66 kph

Powerplant: S-V2200Z V-engine

Horsepower: 956 hp

WEAPONS

Name	Code	Fire Arc	Qty
M225 Heavy Autocannon	HAC	Forward	1
GH-8 Rocket Pods	MRP/18	Forward	2
U-10 Gatling Gun	HMG	Fixed Forward	1
TD-76 Mortar Unit	HGM	Forward	1
Deployable Pack Gun	DPG	Forward	1

Cheetah

Yet another machine evolved from the Hunter design, the Cheetah was born out of the need for a rapid scout/strike unit at a reasonable cost. The Cheetah was Shaian s first entry into the military market. Shaian, an actuator/Gear frame company, made sure the vehicle got the best actuators possible, resulting in a fast, supple machine.

The Cheetah is lightly armoured, and relies on its speed and superb manoeuverability to avoid being hit.



SPECIFICATION

Code Name: Cheetah
Production Code: HACS-01LG-SCT
Manufacturer: Shaian Mechanics
Use: Scout/Recon Heavy Gear

Height: 4.3 m Full Combat Weight: 5230 kg

Armour Material: Durasheet with Alloy

Average Armour Thickness: 20 mm

Maximum Running Speed: 66 kph

Maximum Rolling Speed: 90 kph

Powerplant: S-V820S V-engine

Horsepower: 425 hp

WEAPONS

Name	Code	Fire Arc	Qty
RP-109 Pepperbox	LRP/24	Forward	2
M-2A Hand Grenade	HG	Forward	4
Deployable Pack Gun	DPG	Forward	1
Vibroblade	VB	Forward	1

Kodiak

Introduced in the final two cycles of the war, the Kodiak was the sum of Northern engineering, concentrating massive firepower in a mobile package. The armour was consistently thickened, especially on the front, and the armour skirts were extended for additional protection. The engine and transmission were upgraded to help the Kodiak carry nearly one and a half tons more weapons and armour plating.



SPECIFICATION

Code Name: Kodiak
Production Code: NACS-10HG-AST

Manufacturer: Northco/Shaian Mechanics
Use: Heavy Assault Gear

Height: 5.2 m

Full Combat Weight: 10485 kg

Armour Material: Durasheet with Alloy & Ceramic

Average Armour Thickness: 80 mm

Maximum Running Speed: 36 kph

Maximum Rolling Speed: 66 kph
Powerplant: S-V2202 V-engine

Horsepower: 1150 hp

WEAPONS

Name	Code	Fire Arc	Qty
XPA-001 Light Part.	LPA	Forward	1
GH-16 Rocket Pod	MRP/36	Forward	1
Guided Missile Launcher	AGM	Fixed Forward	1
GU-10 Gatling Gun	HMG	Forward	2
Mark IV Grenade (Heavy)	HHG	Forward	6
Vibroblade	VB	Forward	1

SOUTHERN MILICIA

Gila

The initial concept behind the Gila was to make a small, rapid Gear which could go into close range with other small and medium Gears, and chew them up. While the Gila s size is the same as the Iguana upon which it was based, the design team at Territorial Arms has gone out of its way to make the weapons load second to none for its size.

The Gila s armour was thickened to rival even that of the Black Mamba, turning the new design into,

according to some, some kind of

armadillo monster. Lastly, the weapons were also shielded, ensuring once more that the Gear would actually make it to close range and survive there long enough to do some damage.



SPECIFICATION

Code Name: Gila Production Code: T-XC132

Manufacturer: Territorial Arms
Use: Close Assault Gear

Height: 3.9 m Full Combat Weight: 6125 kg

Armour Material: Armoplast with Alloy

Average Armour Thickness: 50 mm

Maximum Running Speed: 54 kph

Maximum Rolling Speed: 84 kph

Powerplant: WV-850TC/X V-engine

Horsepower: 440 hp

WEAPONS

Name	Code	Fire Arc	Qty
AK-86 Heavy Autocannon	HAC	Forward	1
Hargon-C Rocket Launcher	MRP	Forward	1
Heavy Hand Grenade	HG	Forward	3
Frag Cannon	FGC	Forward	1

Jäger

The J ger is the southern version of the successful Hunter Heavy Gear design. Southern Republic commandos stole the design a century ago and brought it back to the Republic, which quickly used it to force the other southern leagues into a military alliance.

Externally, the J ger looks somewhat different from its northern cousin: it has rounded shoulders and a more refined appearance. The internal systems, however, are practically the same as the ones found on the Hunter.



SPECIFICATION

Code Name: J ger
Production Code: OACS-01M/SU
Manufacturer: Territorial Arms

Use: General Purpose Heavy Gear

Height: 4.3 m
Full Combat Weight: 6627 kg

Armour Material: Durasheet with Alloy

Average Armour Thickness: 45 mm
Maximum Running Speed: 42 kph
Maximum Rolling Speed: 72 kph

Powerplant: WV-950A V-engine

Horsepower: 450 hp

WEAPONS

Name	Code	Fire Arc	Qty
PR-25 Autocannon	LAC	Forward	1
Vogel-6 Rocket Pod	LRP/24	Forward	1
HLB-16 AP Launcher	APGL	Fixed Forward	1
HG-2 Hand Grenade	HG	Forward	6
Vibroblade	VB	Forward	1

Black Mamba

The Black Mamba is a recent Southern design which took the Northern armies by surprise. The Mamba is a totally new machine, a rugged medium Gear designed to replace the earlier Medium-class Basilisk Heavy Gear as the advanced model of the Southern Alliance.

The Mamba can be compared favourably with the North s Jaguar, although they are very different in concept. The Mamba uses a carbon composite in its internal frame to reduce the quantity of metal needed in its



construction. It also sports rounded composite armour to better deflect incoming rounds.

SPECIFICATION

Code Name: Black Mamba
Production Code: OACS-05M/SU
Manufacturer: Territorial Arms

Use: General Purpose Heavy Gear Height: 4.6 m

Full Combat Weight: 4.6 m

Armour Material: Armoplast with Composite

Average Armour Thickness: 56 mm
Maximum Running Speed: 54 kph
Maximum Rolling Speed: 84 kph

Powerplant: WV-930TC V-engine

Horsepower: 630 hp

WEAPONS

Name	Code	Fire Arc	Qty
PR-55 Autocannon	MAC	Forward	1
Vogel-8 Rocket Pod	LRP/32	Forward	1
GL-01 Grenade Launcher	APGL	Fixed Forward	1
GL-01 Grenade Launcher	APGL	Fixed Rear	1
G-C4 Hand Grenade	HG	Forward	6
Vibroblade	VB	Forward	1

Iguana

Although the Iguana looks somewhat like its brethren of the GP class, it is very different in both mission capability and construction. The Iguana is not built around the usual composite chassis but a metal alloy one. Its armour also incorporates alloy with armoplast material.

The Iguana was conceived to replace the modified, stripped-down Basilisks that were previously used for scouting purposes. The machine is small, with the pilot cramped into a tiny cockpit which occupies a good part of the main body. Tiny and fast, the Iguana is perfectly suited for recon and rapid strike missions where discretion is imperative.



SPECIFICATION

Code Name: Iguana
Production Code: OACS-01L/SC
Manufacturer: Territorial Arms
Use: Scout/Recon Heavy Gear
Height: 4.1 m

Full Combat Weight:

Armour Material: Armoplast with Alloy

5100 kg

Average Armour Thickness: 40 mm
Maximum Running Speed: 54 kph
Maximum Rolling Speed: 84 kph

Powerplant: WV-750TC/B V-engine

Horsepower: 360 hp

WEAPONS

Name	Code	Fire Arc	Qty
MPGU-22 Pack Gun	DPG	Forward	1
Vogel-7 Rocket Pod	LRP/24	Forward	1
Vibroblade	VB	Forward	1

King Cobra

The King Cobra was given a frightening and varied array of weaponry. The King s main weapon is the advanced PA-2X Particle Accelerator, backed up by a shoulder-mounted rocket pod and a back-mounted rocket rack, the latter giving the machine long-range hitting power as well. A guided mortar provides medium range firepower and a Gatling autocannon replaces the Spit s minigun. Among the most frightening sights seen on the modern battlefield



SPECIFICATION

Code Name: King Cobra
Production Code: OACS-12H/AS

Manufacturer: Territorial Arms Skunk Works

Use: Heavy Assault Gear

Height: 5.2 m Full Combat Weight: 10120 kg

Armour Material: Armoplast with Alloy

& Ceramic

Average Armour Thickness: 92 mm
Maximum Running Speed: 36 kph
Maximum Rolling Speed: 66 kph

Powerplant: WV-2500TC/x V-engine

Horsepower: 1055 hp

WEAPONS

Name	Code	Fire Arc	Qty
SRWI PA-2X Light Part.	LPA	Forward	1
Vogel H-27 Rocket Pod	MRP/36	Forward	1
FLRP-74 Rocket Pod	HRP/24	Forward	1
ASRWI G-11 Gatling Gun	LAC	Forward	1
TA-12 Guided Mortar	LGM	Forward	1
Vibroblade	VB	Forward	1

Spitting Cobra

The Spitting Cobra is one of the South s heavier Gear models. It follows the usual design philosophy of the southern engineers: rounded composite armour and minimal metallic allow use. Still, the vehicle is heavy, so its secondary movement system is a half-track model, sturdier than the usual wheels.

The main function of the Spitting Cobra is to field heavy support weaponry such as mortars and light howitzers. For close defence, the Cobra is equipped with a shouldermounted, high-speed Gatling cannon, which, although small and shortranged, is an excellent deterrent.



SPECIFICATION

Code Name: Spitting Cobra Production Code: OACS-01H/SU Manufacturer. Territorial Arms

Use: General Purpose/Fire Support

5.0 m Full Combat Weight: 8990 kg

Armour Material: Armoplast with Alloy

& Ceramic Average Armour Thickness: 90 mm Maximum Running Speed: 36 kph Maximum Rolling Speed: 60 kph

Powerplant: WV-1500TC/A V-engine

Horsepower: 940 hp

WEAPONS

Height:

Name	Code	Fire Arc	Qty
MR60 Autocannon	HAC	Forward	1
FSRP-36 Rocket Pod	MRP/18	Forward	1
ASCRP-98 Rocket Pod	HRP/48	Forward	1
MGU-77 Minigun	LMG	Fixed Forward	1
HG-2 Hand Grenade	HG	Forward	6
Light Guided Mortar	LGM	Forward	1

BADLAND GEARS

Myrmidon

With the success of the initial prototypes of the Warrior Elite came additional funding, resources, and an extended research and development profile. The extended profile called for the research and development of four additional Gear designs to fill a wide range of mission requirements. The first of these, meant to fill the role of heavy assault Gear, was given the name Myrmidon.

The Myrmidon s primary function is to act as a multipurpose heavy weapons platform for the defence of Peace



River, and its purpose is reflected in it s design. The crew compartment design was made with crew protection in mind. In addition to heavy armour and reinforcement for the pilot, the entire crew compartment was moved towards the rear of the chassis and away from the head assembly.

SPECIFICATION

Code Name: Myrmidon Production Code: PA-MX01

Manufacturer: Paxton Arms Research & Dev. Use: Multi Purpose/Heavy Assault

Height: 5.0 m Full Combat Weight: 9015 kg

Armour Material: Adv. Durasheet with Composites

Average Armour Thickness: 80 mm Maximum Running Speed: 42 kph Maximum Rolling Speed: 66 kph

PMW-V3000 V-Engine Powerplant:

Horsepower: 985 Hp

WEAPONS

Name	Code	Fire Arc	Qty
RGU-25X 45 mm Hvy Autoca	an VHAC	Forward	1
PR-25LX 20mm Lnkd Autoca	ın LAC	Fixed	2
RP-10M 71mm Rocket Pod	MRP/36	Fixed	1
FM-6 Light Field Mortar	LFM	Fixed	1
VK-6 Vibroblade	VB	Forward	1

Warrior Elite

The Warrior Elite was the first of a new generation of heavy Gears born from one of the most secret of Paxton Arms research and development programs: the Elite Program. The purpose was to produce a series of Gears which could match both their Northern and Southern counterparts, but even more importantly, to be able to do so when outnumbered. The Elite has been designed to perform both commando and duelist roles and to exceed the performance capabilities of both the Jaguar and Mamba designs of the Northern and Southern forces.



It is thought that the latest prototype utilises an advanced actuator design that allows it to attain a degree of manoeuvrability approaching that of the Cheetah. In addition, the Elite is said to have been equipped with advanced control systems that allow it to perform feats of agility and speed equal to none.

SPECIFICATION

Code Name: Warrior Elite Production Code: PA-EX01

Manufacturer: Paxton Arms Research & Dev.

Use: Duelling/Assault Gear

Height: 4.6 m Full Combat Weight: 6900 kg

Armour Material: Adv. Durasheet with Composites

Average Armour Thickness: 54 mm

Maximum Running Speed: 60 kph

Maximum Rolling Speed: 90 kph

Powerplant: PMW-V1400 V-Engine

Horsepower: 649 Hp

WEAPONS

Name	Code	Fire Arc	Qty
MR-25 30mm Machinecannon	MAC	Forward	1
RP-10S 52 mm Rocket Pod	LRP/32	Fixed	1
VS-2 Vibrorapier	VR	Forward	1

Agamemnon

The Agamemnon was born for the most important, dire, and inevitable of missions, the covering of the army s retreat — holding the line while comrades regroup. A special composite material was developed for the design which proved not only to be lighter, but in some cases more resilient than the armour used on the other Elite designs. Unfortunately, tests have shown that the Agamemnon has a tendency to overheat if highly active over extended periods of time. For it s primary weaponry, the Agamemnon



was outfitted with a Thunderclap II field gun, a clip-fed weapon capable of direct as well as indirect fire. The design was rounded out with a rocket pack for supplementary firepower, a pulse laser slung on the rear skirt as a backup to the field gun, and an enhanced vibroaxe.

SPECIFICATION

Code Name: Agamemnon Production Code: PA-AX01

Manufacturer: Paxton Arms Research & Dev.

Use: Line Holder/
Heavy Assault Gear

Height: 5.1 m
Full Combat Weight: 10240 kg

Armour Material: Robertson Composite

Average Armour Thickness: 85 mm
Maximum Running Speed: 36 kph
Maximum Rolling Speed: 66 kph

Powerplant: PMW-V3200 V-Engine

Horsepower: 1200 Hp

WEAPONS

Name	Code	Fire Arc	Qty
SW-12X 56 mm Field Gun	VLFG	Forward	1
AW-3X Pulse Laser	LPLC	Forward	1
RP-10M 71mm Rocket Pod	MRP/36	Fixed	1
FM-6 Light Field Mortar	LFM	Fixed	1
VBA-3 Vibroaxe	VA	Forward	1

APPENDIX C: WEAPONS

PROJECTILE WEAPONS

Cannons

Weapon Type	Abbreviation	Rate of Fire	Damage
Very Light Machine Gun	VLMG	Very Fast	Very Light
Light Machine Gun	LMG	Very Fast	Very Light
Heavy Machine Gun	HMG	Very Fast	Very Light
Frag Cannon	FGC	Moderate	Light
Very Light Rifle	VLRF	Fast	Light
Light Rifle	LRF	Fast	Light
Medium Rifle	MRF	Fast	Moderate
Heavy Rifle	HRF	Fast	Moderate
Deployable Pack Gun	DPG	Very Fast	Light
Light Anti-Air Cannon	LAAC	Very Fast	Light
Medium Anti-Air Cannon	MAAC	Very Fast	Moderate
Heavy Anti-Air Cannon	HAAC	Very Fast	Moderate
Very Light Autocannon	VLAC	Very Fast	Light
Light Autocannon	LAC	Very Fast	Light
Medium Autocannon	MAC	Very Fast	Moderate
Heavy Autocannon	HAC	Very Fast	Moderate
Very Heavy Autocannon	VHAC	Very Fast	Heavy
Very Light Field Gun	VLFG	Very Slow	Very Heavy
Snub Cannon	SC	Very Slow	Incredible

MISSILE WEAPONS

Rockets & Missiles

Weapon Type	Abbreviation	Rate of Fire	Damage
Very Light Rckt Pk 8	VLRP8	Very Fast	Light
Very Light Rckt Pk 32	VLRP32	Very Fast	Light
Very Light Rckt Pk 128	VLRP128	Very Fast	Light
Light Rocket Pack 8	LRP8	Fast	Moderate
Light Rocket Pack 16	LRP16	Fast	Moderate
Light Rocket Pack 24	LRP24	Fast	Moderate
Light Rocket Pack 32	LRP32	Fast	Moderate
Medium Rocket Pack 9	MRP9	Fast	Heavy
Medium Rocket Pack 18	MRP18	Fast	Heavy
Medium Rocket Pack 36	MRP36	Fast	Heavy
Incend. Rocket Pack 10	IRP10	Fast	Moderate
Incend. Rocket Pack 20	IRP20	Fast	Moderate
Incend. Rocket Pack 30	IRP30	Fast	Moderate
Heavy Rocket Pack 24	HRP24	Moderate	Very Heavy
Heavy Rocket Pack 48	HRP48	Moderate	Very Heavy
Hvy Incend. Rckt Pck 24	HIRP24	Moderate	Heavy
Hvy Incend. Rckt Pck 48	HIRP48	Moderate	Heavy
Anti-Gear Missile	AGM	Very Slow	Moderate
Anti-Tank Missile	ATM	Very Slow	Incredible

Recoilless

Weapon Type	Abbreviation	Rate of Fire	Damage
Light Panzerfaust	LPZ	Moderate	Moderate
Medium Panzerfaust	MPZ	Moderate	Heavy
Heavy Panzerfaust	HPZ	Moderate	Very Heavy
Rapid-Fire Bazooka	RFB	Moderate	Moderate
Light Bazooka	LBZK	Moderate	Heavy
Medium Bazooka	MBZK	Moderate	Very Heavy
Heavy Bazooka	HBZK	Moderate	Incredible

INDIRECT WEAPONS

Indirect

Weapon Type	Abbreviation	Rate of Fire	Damage
Anti Personnel Mortar	APM	Slow	Very Light
Light Guided Mortar	LGM	Slow	Heavy
Heavy Guided Mortar	HGM	Slow	Very Heavy
Light Field Mortar	LFM	Slow	Heavy
Medium Field Mortar	MFM	Slow	Very Heavy
Heavy Field Mortar	HFM	Slow	Incredible
Anti-Pers. Grenade Laun.	APGL	Slow	Very Light
Light Grenade Launcher	LGL	Slow	Moderate
Heavy Grenade Launcher	HGL	Slow	Very Heavy

ENERGY WEAPONS

Advanced

Weapon Type	Abbreviation	Fire	Damage
Light Particle Accel.	LPA	Slow	Moderate
Light Rail Gun	LRG	Moderate	Moderate
Sniper Laser Cannon	SLC	Slow	Moderate
Gatling Laser Cannon	HGLC	Moderate	Heavy
Medium Particle Accel.	MPA	Slow	Heavy
Medium Rail Gun	MRG	Slow	Heavy
Light Laser Cannon	LLC	Slow	Heavy
Heavy Laser Cannon	HLC	Very Slow	Very Heavy
Light Pulse Laser Cann.	LPLC	Slow	Very Heavy
Heavy Pulse Laser Cann.	HPLC	Very Slow	Incredible

Close Combat

Weapon Type	Abbreviation	Rate of Fire	Damage
Vibroblade	VB	N/A	Light
Vibrosword	VS	N/A	Light
Vibrorapier	VR	N/A	Moderate
Vibroaxe	VA	N/A	Moderate
Haywire Grenade	HWG	N/A	Moderate
Hand Grenade	HG	N/A	Heavy
Heavy Hand Grenade	HHG	N/A	Incredible
Self Destruct Grenade	SDG	N/A	Massive

APPENDIX D: THE FURY DROPSHIP

FURY DROPSHIP



Vessel Data

The Fury Intersystem Assault Dropship is the latest creation of the Terranovan shipyards. This fusion-powered spacecraft was already in the works prior to the Interpolar War, but only the needs of Operation Black Talon provided the impetus to complete the project. Much of the craft s main hull and systems are derived from the CEF s Sleipnir-class space plane, an advanced orbital shuttle designed to carry high priority personnel and cargo across conquered planets. According to our research, the Sleipnir was itself based on the older Tarantula assault lander developed by the New Eurasian Commonwealth during World War III.

The hull of the Fury is fairly angular due to the numerous stealth surfaces built into the design. The underside of the main body is covered with high temperature cerametal composites to withstand re-entry, while the rest is clad in armour. Hatches on the side and rear of the ship allow easy egress from the main cargo bays. The Fury is propelled by four fusion engines, all of modular design, that can use any high density fluid as reaction mass. Enough reserves are carried to fly from a planetary surface to a Gate and back. Operational securities on all fusion tubes are patched to main ops and may be deactivated by authorised personnel to cause the vessel to self-destruct.

All work on the Fury project is classified as Ultra Secret so as not to alert CEF interests infiltrated on Terra Nova

SHIP SPECS

Name: Fury

Origin: Terra Nova
Manufacturer: Hope Shipyards

Type: Intersystem Assault Shuttle

Crew: Pilot, Weapon Officer, Chief Engineer

Length: 120.4 m
Width: 69.5 m
Height: 22.3 m
Empty Weight: 18,000 tons
Loaded Weight: 45,000 tons

Main Drive: 4 x Advanced Dynamics FT-9000

Fusion Tubes

Total Thrust: 4 x 30,000,000 kg

WEAPONS

Main: 2 x IY-98 Particle Accelerator

Assorted Guided Missiles

Secondary: Area-Defence Laser Emitters

x12 Anti-Personnel Machine

quns x10

Defence: Full particle and EM shielding

CREDITS

Director Jack Mamais

Lead Programmer Jean-Marc Morel

Lead Designer
Dave White

Art Director Danny Matson

TECHNOLOGY

AI Programmer Clancy Imislund

Network Programmer Jeff Grabner

Shell/Tool Programmer Smith Surasmith

Network Shell Programmer Cristian Grunca Dan Kegel

Special Effects Programming Johnathan Kranc

Physics/Special Effects Programming Brent Oster/Check Six Studio

Installer Programmer Jeff Matsushita Ben Siron

DARKSIDE ENGINE

Jean-Marc Morel Clancy Imislund Julio Jerez Dave White

PRODUCTION

Associate Producer Christian Astillero

Producer

Eveline Cureteau

Executive Producer Elizabeth Storz

Additional Production

DESIGN

Game Designers
Dave Nash
Doug Pearson
Robert Berger
Jens Andersen

Story by
Dave White
Jack Mamais
Ted Peterson
Dream Pod 9

Written by Robert Berger Ted Peterson

ART

Animation
Paul Waggoner
Danny Matson

3D Models Junki Saita

2D Art John Rh

John Rheume Robert DePalma

Dave Georgeson

Juan-Carlos Rodriguez Shell Design

Shell Design Consultant Larry Paolicelli

Cinematics by Digital Freaks Conceptual Art

Eric Hilleary/Equinoxe

AUDIO

Sound Design Jack Mamais

Christian Astillero

Audio Engineer Michael Schwartz

Audio Editing Brian Bright

Video Editing Mattt Stubbs

Music Composed and Conducted by

Albert Lloyd Olsen

Sound Produced by EFX

EFX Sound Design Mike Kamper

Sound Consultant Harry Cohen

IAS Audio Model Glen Arnold Aaron Lesch

ACTIVISION

VP, Production Scott Lahman

VP, Production Alan Gershenfeld

VP, Production Frank Evers

Production Manager

Ryan Moos Producer

Dave Georgeson

Associate Producer

Tyler Scott

Central Activision Technology Eric Schmidt

Dan Kegel
Mason Deming

Installer Ed Clune Ben Siron Lead Production Testers

Rick Omori Doug Jacobs Lee Brisken

Production Testers
Frank Stankowski
Chris Scaglione
Eric Baudoin
Chris Toft
John Virtes

LOCALISATION

Associate Producer Brian C. Diggs

Linguistic Assistant

Axel Wippich

UK Office: Localisation Ed Bainbridge

Mark Nutt

Miami Office: Product Manager Salvador Fernandez

LA Office:

International Publishing Coordinator

Heather Maxwell

German Localisation: Natascha Conrad Effective Media M & S Music

CREATIVE SERVICES

UK Office: Artworker Alex Wvlde

QUALITY ASSURANCE

QA Project Lead Matt Powers

Senior QA Project Lead Eric Zala

Curtis Shenton

Testers John Sherwood Samantha Lee

Tim Harrison Ron Weibel Jeff Poffenbarger Chad Siedhoff Derek Johnstone Joe Favazza Jeremy Luyties Jay Anthony Franke Dan Hagerty Ron Avila Hector Guerrero Matt McClure Anthony Hatch Korotko David B. Marling Peter Muravez Todd Komesu Eric Baudoin Alex Sarkissian Matthew Willis Chris Campbell Joseph Shackelford Ilya Tchak Ken Chia Michael Harris Paul Baker Peter Muravez Sean Farrell Tom Bernard Chris Keim (Network Lab Lead) John Fritts (Compatibility Lab Lead) Jennifer ONeal (Compatibility) Stan Chao (Compatibility)

DREAM POD 9

World Background (Caprice) Lucien Soulban

Artwork (Colour Drawings) Ghislain Barbe, with Normand Bilodeau and Charles-Emmanuel Ouellette

Art.work (Logos and Technical Drawings) Ghislain Barbe, Normand Bilodeau, Jeff Fortier. Charles-Emmanuel Ouellette, Pierre Ouellette

Writing Philippe R. Boulle Marc-Alexandre V zina

MARKETING

Brand Manager Peter Karpas Brand Manager Charlie Hill

ONLINE

Online Marketing Manager David Vonderhaar

Online Coordinator Maria Viola

MANUAL

Editing/Lavout Belinda M. Van Sickle

SPECIAL THANKS

Occlusion Mapping

Terrain Compactor Yann Follet

Yishai Lerner

Tactics Consultant

Ian Haves Marshall Robin, Jim Summers, Chichi, Amy King, Goku,

Charlie Hill, Jason Wong

Alan Gershenfeld, Rei Ayanami,

Pierre Oulette,

Dave Arnspiger,

Matt Candler, Jens Anderson.

Adam Goldberg,

Mason Demming,

Jonathan Moses,

Stanley Kubrick,

Rick Baumgartner

MORE SPECIAL THANKS

Special thanks go out to the Visioneers who downloaded the game almost every night so that they could help us ensure that it was the best it could be. Your dedication is appreciated.

Emily Moher (External Test Coord) Ric Allen Jose Avala Jamie Badgerow David Barron Andy Bohne Jim Bovdston Jean Claude Bureau Steve Bybee Martin Chamberlain Chris Chao Eric Chau Paul Chouv Adnan Chowdhury Ari Clark Rvan Clemmer Dave Cleric Dan Condon Gary Conroy

Justin Coonev Maxwell DeChant James Dicken James Dillinger Alvaro Dos Santos Bob Dudlev Michael Dwiel Lamar Dvkes Dave Evans Matthew Fauhel Trae Faught David Finan Carlton Forsythe Peter Franke Eric Friedner Simon Garner Robert Gelinas Alex Goldberg Charles Graham Brian Grapatin Aaron Gray Keith L. Graydon Philip Hansen Brad Hendricks Tom Hepner Mike Herauf Jonathan Hill

Nic Jansma Illoyd Jessee Tvler Jordan Scott Kasai Scott Kingston Ron Kramer Philip Lazzari Giancarlo Lenzi Gregory Loeke Todd Manion David Marcinowski Myron McMullen Jr Robert Mitchell Cory Mueller Graham Nardone Christian Nash Thomas Norris Dean O'Donnell Charles Otoupalik Christopher Pennev Matthew Ployhar Josh Pollak Steve Ricketts Joseph Ruffolo Ken Rumsey Eric Schliesing David Seale Dakota Smith

Tain Hill

Chris Squatritto Maxime St-Pierre Don Machman Swanner, Jr. Craig Tate David Teague Christopher Tew David Thomas Mark Valentine Tim Waite Frank Walther Dave Whittle Timothy Wilson John Yan Omar Yehia John Zart

Shadow Guard **Beta Testers**

John GUESS WHO? Aubin Patrick Oun Bohnet Kenny PeaceMaker Chow Akiva ScreaminGecko Jason Cephalopod Davis Brett RA Enlow Keith L. Kitman Graydon Ian Jabberwock Haves Anthony W Great Sword Helton Jason Hero Hitchens Scott GreenMeat Howie Lloyd D. Jesster Jessee Ben Flver Jones David B. LoneWolf Marcinowski Adrian Boba Fetacheese Moscher Dan Noname Oliver Jason Annihilation Reid David C. Gilbert Seale

Terence D. Wraith Stern Ryan Red Eye Sugimoto Clint Phoenix Swereda Tim Blitzkrieg! Waite Tim Scooter Waite V James E. Ronin Wright

CUSTOMER SUPPORT

Before contacting customer support, please consult the technical help file. It contains the answers to some of our most frequently asked questions and may quickly and easily

provide a solution to your difficulty. If after reviewing the technical help file you are still experiencing problems, please feel free to contact us through any of the online

services listed.

In order to assist us when dealing with your difficulty, please have the following information ready when you call.

- 1. Complete product title.
- 2. Exact error message reported (if any) and a brief description of the problem.
- 3. What operating system you are using (e.g., Windows 95 or DOS)?
- 4. What kind of processor does your machine have (e.g., Intel Pentium 90)?
- 5. What kind of video and soundcards does your machine have (e.g., Diamond Stealth 64 video, Sound Blaster)?
- 6. Are you using a joystick? If so, what brand and model? What is it using as a game port (e.g., soundcard, dedicated game port)?
- 7. How much free disk space do you have?
- 8. How much RAM is in your machine?

If you are experiencing difficulty with the multiplayer or online portion of the product, please assist us by having the following additional information ready when you call.

If you are using a modem:

- 1. What kind of modem is on each end (brand, model, speed, internal or external)?
- 2. Do you have more than one modem?
- 3. On which port is each configured?
- Does Hyperterminal (or any other terminal program) work with your modem? This
 is an easy way to test whether or not your modem is configured correctly.
- 5. At what speed are you connecting?
- Have you made sure data compression, error detection, and flow control is turned OFF? Refer to your modem s manual to do this.

If using an external modem:

- 1. What kind of serial card is being used?
- 2. Do you have a seven-wire serial cable?

If you are on a LAN:

- 1. Can you see other computers on the network?
- 2. What is your network configuration?
- 3. What brand of network card do you have?
- 4. What network software are you running? What version number?

Online Services with Activision Forums, E-Mail and File Library Support

For support via the web please visit http://www.activision.com/support or e-mail support@activision.co.uk

CUSTOMER AND TECHNICAL SUPPORT IN EUROPE

For Customer Support you can contact Activision in the UK on + 44 (0)1895 456 789 between the hours of $1.00 \, \text{pm}$ and $5.00 \, \text{pm}$ (UK time) Monday to Friday with the exception of holidays.

For Technical Support, please contact: + 44 (0)990 143 525 between the hours of 9:00am and 5:00pm (UK time) Monday to Friday with the exceptions of holidays.

Your calls may be monitored

For Technical Support and Customer Service in areas not listed, please contact your local distributor or Activision via online. (Please note the online support is available in English only).

SOFTWARE LICENSE AGREEMENT

IMPORTANT - READ CAREFULLY: USE OF THIS PROGRAM IS SUBJECT TO THE SOFTWARE LICENSE TERMS SET FORTH BELOW. THE "PROGRAM" INCLUDES ALL SOFTWARE INCLUDED WITH THIS AGREEMENT, THE ASSOCIATED MEDIA, ANY PRINTED MATERIALS, AND ANY ON-LINE OR ELECTRONIC DOCUMENTATION, AND ANY AND ALL COPIES OF SUCH SOFTWARE AND MATERIALS. BY OPENING THIS PACKAGE, INSTALLING, AND/OR USING THE PROGRAM AND ANY SOFTWARE PROGRAMS INCLUDED WITHIN THE PROGRAM, YOU ACCEPT THE TERMS OF THIS LICENSE WITH ACTIVISION, INC. ("ACTIVISION").

LIMITED USE LICENSE: Subject to the conditions described below, Activision grants you the non-exclusive, non-transferable, limited right and license to install and use one copy of the Program solely and exclusively for your personal use. All rights not specifically granted under this Agreement are reserved by Activision and, as applicable, Activision's licensors. The Program is licensed, not sold, for your use. Your license confers no title or ownership in the Program and should not be construed as a sale of any rights in the Program. All rights not specifically granted under this Agreement are reserved by Activision and, as applicable, its licensors.

You agree not to:

- Exploit the Program or any of its parts commercially, including but not limited to use at a cyber cafe, computer gaming centre or
 any other location-based site. Activision may offer a separate Site License Agreement to permit you to make the Program available
 for commercial use: see the contact information below.
- Sell, rent, lease, license, distribute or otherwise transfer this Program, or any copies of this Program, without the express prior
 written consent of Activision.
- Use the Program, or permit use of the Program, in a network, multi-user arrangement or remote access arrangement, including
 any on-line use, except as otherwise specifically provided by the Program.
- . Use the Program, or permit use of the Program, on more than one computer, computer terminal, or workstation at the same time.
- Make copies of the Program or any part thereof, except for back up or archival purposes, or make copies of the materials
 accompanying the Program.
- Copy the Program onto a hard drive or other storage device; you must run the Program from the included CD-ROM (although the Program itself may automatically copy a portion of the Program onto your hard drive during installation in order to run more efficiently).
- · Reverse engineer, derive source code, modify, decompile, or disassemble the Program, in whole or in part.
- · Remove, disable or circumvent any proprietary notices or labels contained on or within the Program.
- · Export or re-export the Program or any copy or adaptation thereof in violation of any applicable laws or regulations.

OWNERSHIP: All title, ownership rights and intellectual property rights in and to the Program and any and all copies thereof are owned by Activision or its licensors. The Program is protected by the copyright laws of the United States, international copyright treaties and conventions and other laws. The Program contains certain licensed materials and Activision's licensors may protect their rights in the event of any violation of this Agreement. You agree not to remove, disable or circumvent any proprietary notices or labels contained on or within the Program.

THE PROGRAM UTILITIES: The Program contains certain design, programming and processing utilities, tools, assets and other resources ("the Program Utilities") for use with the Program that allow you to create customised new game levels and other related game materials for personal use in connection with the Program ("New Game Materials"). The use of the Program Utilities is subject to the following additional license restrictions:

- You agree that, as a condition to your using the Program Utilities, you will not use or allow third parties to use the Program Utilities and the New Game Materials created by you for any commercial purposes, including but not limited to selling, renting, leasing, licensing, distributing, or otherwise transferring the ownership of such New Game Materials, whether on a stand alone basis or packaged in combination with the New Game Materials created by others, through any and all distribution channels, including, without limitation, retail sales and on-line electronic distribution. You agree not to solicit, initiate or encourage any proposal or offer from any person or entity to create any New Game Materials for commercial distribution. You agree to promptly inform Activision in writing of any instances of your receipt of any such proposal or offer.
- If you decide to make available the use of the New Game Materials created by you to other gamers, you agree to do so solely
 without charge.
- . New Game Materials shall not contain modifications to any COM, EXE or DLL files or to any other executable Product files.
- New Game Materials may be created only if such New Game Materials can be used exclusively in combination with the retail
 version of the Program. New Game Materials may not be designed to be used as a stand-alone product.
- New Game Materials must not contain any illegal, obscene or defamatory materials, materials that infringe rights of privacy and
 publicity of third parties or (without appropriate irrevocable licenses granted specifically for that purpose) any trademarks,
 copyright-protected works or other properties of third parties.
- All New Game Materials must contain prominent identification at least in any on-line description and with reasonable duration on
 the opening screen: (a) the name and E-mail address of the New Game Materials' creator(s) and (b) the words "THIS MATERIAL
 IS NOT MADE OR SUPPORTED BY ACTIVISION."

108 109 1s available in English Only).

ACTIVISION Limited 90-Day Warranty

Activision warrants to the original consumer purchaser of this computer software product that the recording medium on which the software program is recorded will be free from defects in material and workmanship for 90 days from the date of purchase. If the recording medium is found defective within 90 days of original purchase, ACTIVISION agrees to replace, free of charge, any product discovered to be defective within such period upon receipt at its Factory Service Centre of the product, postage paid, with proof of date of purchase, as long as the program is still being manufactured by ACTIVISION. In the event that the program is no longer available. ACTIVISION retains the right to substitute a similar product of equal or greater value.

This warranty is limited to the recording medium containing the software program originally provided by ACTIVISION and is not applicable to normal wear and tear. This warranty shall not be applicable and shall be void if the defect has arisen through abuse, mistreatment, or neglect. Any implied warranties applicable to this product are limited to the 90-day period described above. EXCEPT AS SET FORTH ABOVE, THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND NO OTHER REPRESENTATION OR CLAIMS OF ANY KIND SHALL BE BINDING ON OR OBLIGATE ACTIVISION. IN NO EVENT WILL ACTIVISION BE LIABLE FOR SPECIAL, INCLUDING DAMAGE TO PROPERTY AND, TO THE EXTENT PERMITTED BY LAW, DAMAGES FOR PERSONAL INJURY, EVEN IF ACTIVISION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND/OR EXCLUSION OR LIMITATION OF LIABILITY MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

When returning merchandise for replacement please send the original product disks only in protective packaging and include:

- 1. A photocopy of your dated sales receipt
- 2. Your name and return address, typed or clearly printed
- 3. A brief note describing the defect, the problem(s) you encountered and the system on which you are running the product
- 4. If you are returning the product after the 90-day warranty period, but within one year after the date of purchase, please include a check or money order for \$10 U.S. (AUD \$17 for Australia, or £10.00 for Europe) currency per CD or floppy disk replacement Note: Certified mail is recommended.

In Europe send to:

WARRANTY REPLACEMENTS

ACTIVISION, Gemini House, 133 High Street, Yiewsley, West Drayton, Middlesex UB7 7QL, United Kingdom. Disc Replacement: + 44 1895 456 789

In Australia send to:

WARRANTY REPLACEMENTS Activision P.O. Box 873 Foning, NSW 2121, Australia

LIMITATION ON DAMAGES: IN NO EVENT WILL ACTIVISION BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM POSSESSION, USE OR MALFUNCTION OF THE PROGRAM, INCLUDING DAMAGES TO PROPERTY, LOSS OF GOODWILL, COMPUTER FAILURE OR MALFUNCTION AND, TO THE EXTENT PERMITTED BY LAW, DAMAGES FOR PERSONAL INJURIES, EVEN IF ACTIVISION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. ACTIVISION'S LIABILITY SHALL NOT EXCEED THE ACTUAL PRICE PAID FOR THE LICENSE TO USE THIS PROGRAM. SOME STATES/COUNTRIES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND/OR EXCLUSION OR LIMITATION OF LIABILITY MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.

TERMINATION: Without prejudice to any other rights of Activision, this Agreement will terminate automatically if you fail to comply with its terms and conditions. In such event, you must destroy all copies of the Program and all of its component parts.

U.S. GOVERNMENT RESTRICTED RIGHTS: the Program and documentation have been developed entirely at private expense and are provided as "Commercial Computer Software" or "restricted computer software." Use, duplication or disclosure by the U.S. Government or a U.S. Government subcontractor is subject to the restrictions set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clauses in DFARS 252.227-7013 or as set forth in subparagraph (c)(1) and (2) of the Commercial Computer Software Restricted Rights clauses at FAR 52.227-19, as applicable. The Contractor/Manufacturer is Activision, Inc., 3100 Ocean Park Boulevard, Santa Monica, California 90405.

INJUNCTION: Because Activision would be irreparably damaged if the terms of this Agreement were not specifically enforced, you agree that Activision shall be entitled, without bond, other security or proof of damages, to appropriate equitable remedies with respect to breaches of this Agreement, in addition to such other remedies as Activision may otherwise have under applicable laws.

INDEMNITY: You agree to indemnify, defend and hold Activision, its partners, licensors, affiliates, contractors, officers, directors, employees and agents harmless from all damages, losses and expenses arising directly or indirectly from your acts and omissions to act in using the Product pursuant to the terms of this Agreement

MISCELLANEOUS: This Agreement represents the complete agreement concerning this license between the parties and supersedes all prior agreements and representations between them. It may be amended only by a writing executed by both parties. If any provision of this Agreement is held to be unenforcable for any reason, such provision shall be reformed only to the extent necessary to make it enforceable and the remaining provisions of this Agreement shall not be affected. This Agreement shall be construed under California law as such law is applied to agreements between California residents entered into and to be performed within California, except as governed by federal law and you consent to the exclusive jurisdiction of the state and federal courts in Los Angeles, California. If you have any questions concerning this license, you may contact Activision at 3100 Ocean Park Boulevard, Santa Monica, California 90405, USA, (310) 255-2000, Attn. Business and Legal Affairs, legal@activision.com.

APPENDIX E: KEYBOARD CONTROLS

APPENDIX E: KET	BOARD CONTROLS	Marala
/=ll		Wheels
Steering/Throttle		Jump
Steer Right	Numpad 6	Jump Jets
Steer Left	Numpad 4	HUD Controls HUD Display ON-OFF
Forward	Numpad 8	HUD Colour
Backward	Numpad 2	
Increase Throttle	Numpad +	Imaging System
Decrease Throttle	Numpad -	Targeting Laser then Set Nav point
1/3 Throttle	[Select Nav Point
2/3 Throttle]	Squad Control
Full Throttle	\	Tactical Map
Full Stop	=	Objectives
Reverse Throttle	Backspace	Command Group
Reticle/Weapons Control		Attack (My Target)
Weapon Fire	Mouse Button 1	Go To Checkpoint Alpha
Weapon Cycle	Mouse Button 2	Attack (Nearest Enemy)
Target Reticle X	Mouse X-axis	Regroup
Target Reticle Y	Mouse Y-axis	Stand Ground
Change Weapon	Right Shift	Defend (My Target)
Pick Up/Drop Weapon	/	Command Unit 1
Throw Grenade	G	Command Unit 2
Change Grenade	В	Command Unit 3
Sniper In	Home	Command Unit 4
Sniper Out	End	Network Chat
Targeting		General Chat
Cycle Target	T	Team Chat
Previous Target	Y	Multiplayer List/Stats
Target At Reticle	R	User Taunt 1
Target Enemy	E	User Taunt 2
Target Friendly	F	User Taunt 3
Radar Control		User Taunt 4
Radar Zoom	Z	User Taunt 5
Active/Passive Radar	A	User Taunt 6
ECM Enable/Disable	Ctrl + E	User Taunt 7
Movement		User Taunt 8
Strafe Left	Numpad 7	
Strafe Right	Numpad 9	
Roll Left (In Space)	Numpad 1	
Roll Right (In Space)	Numpad 3	
Kneel/Crouch	Numpad /	
Barrell and Flance		

Numpad 5

Recenter Torso

112

Stand Up

Numpad *
Numpad 0

Ctrl + H
Alt + H
I
L then S
N

Tab O C Ctrl + T

F2

F3 F1 F5 F6 F7 F8 F9 F10 F11 F12

Ctrl + G
Ctrl + A
Ctrl + R
Ctrl + S
Ctrl + D
1
2
3
4

Numpad Enter Numpad .

Camera Control

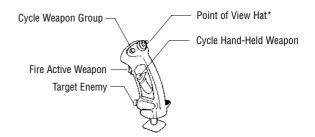
External Tracking Ctrl + C
Camera Left Left Arrow
Camera Right Right Arrow
Camera Up Up Arrow
Camera Down Down Arrow

Zoom In (In External) HOME Zoom Out (In External) END

System Controls

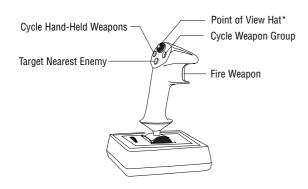
Pause/Abort (Sim) Esc
Game Options (Shell) Esc
Console Toggle '

THRUSTMASTER JOYSTICK



APPENDIX F: CONTROL CONFIGURATIONS

CH JOYSTICK



* Point of View Hat

↑ Stand Up

ullet Crouch/Kneel

★ Strafe Left and Right

NOTES