# SYSTEM SHOCK

STRATEGIES "SECRETS" Bernie Yee

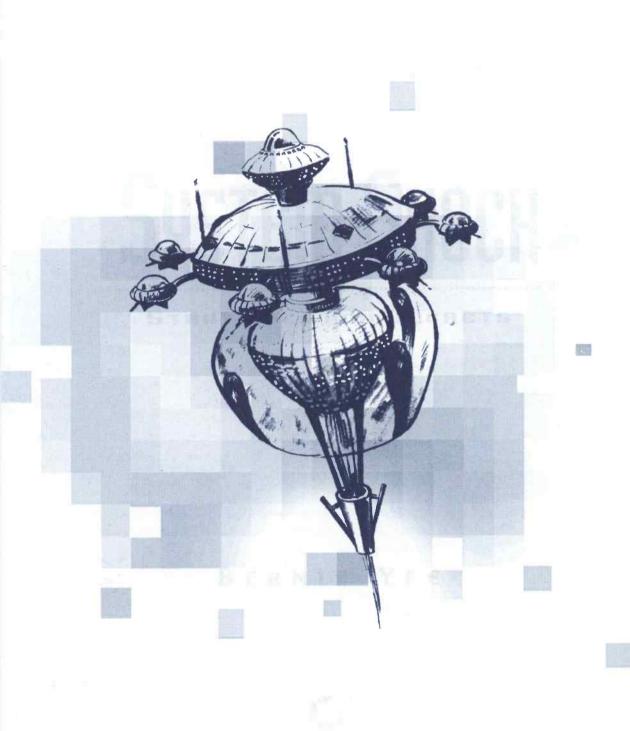
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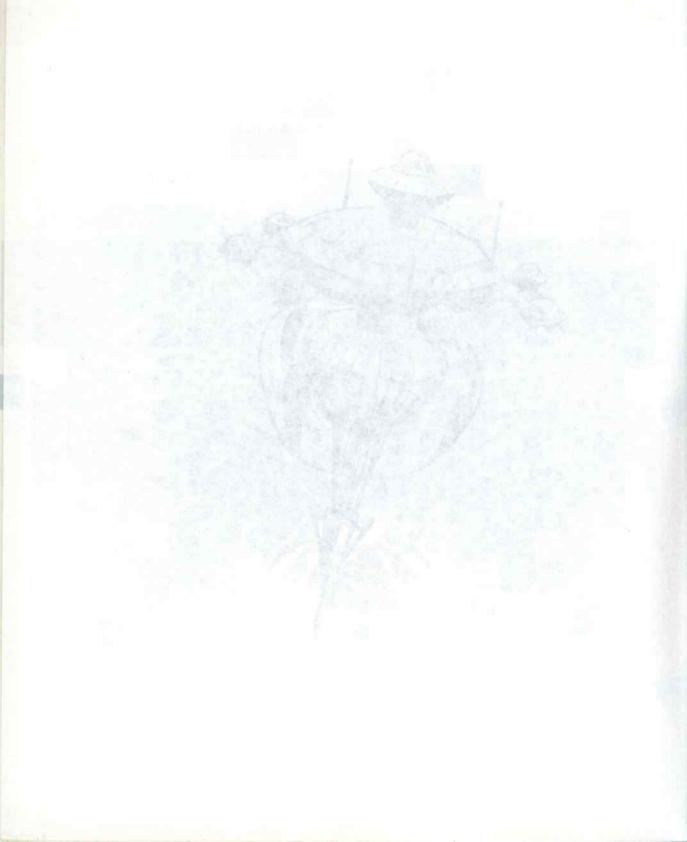


THE ONLY FULL-LENGTH
STRATEGY GUIDE
TO SYSTEM SHOCK

INCLUDES INTERVIEWS WITH THE GAME DESIGNERS







# SYSTEM SHOCK

STRATEGIES AND SECRETS"

BERNIE YEE

SYBEX

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# Introduction

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RF-07 SKORPION

WERPONS SHOTS GRENADE PATCHES FLECHETTE \$ 15 FRAC LASER RAPIER EMP MAGPULSE 15 CAS 7 BISERK 18 ASSLT RIFLE m Z CONC 4 MEDI 19 RAIL CUN MINE 5 REFLEX SKORPION b 55 NTRO



# Introduction

An eerie, electronic voice came out of my computer.

Look at you hacker,

A pathetic creature of meat and bone.

Panting and sweating as you run through my corridors;

How can you challenge a perfect, immortal machine?

The digitally manipulated voice made me shiver. I knew I was in for a great ride.

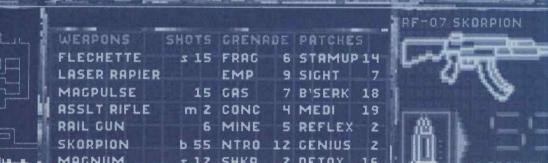
Looking Glass Technologies produced System Shock for Origin, and their sense of style and knack for details really came through. You may recognize the name from *Ultima Underworld I* and *II*. Although other 3D action games get the press, *Ultima Underworld* was the first true 3D environment. One of the best-known action games, for example, is essentially two-dimensional—you can't jump, look up or around, because the renderer (the graphics routine that draws the environment) isn't designed to work in three dimensions, though it is fast. *Ultima Underworld*, on the other hand, was a full 3D world.

System Shock was the natural next step for the hackers at Looking Glass.

Doug Church, who conceived the game, had to convince Origin that it was worth doing in all the grand detail he imagined. A cyberpunk science-fiction game, System Shock allows you to play the hacker on board a space station controlled by an artificial intelligence (Al) run amok. Of course, it's the hacker who allowed the Al to go crazy, so it's a fitting punishment that the hacker be forced to stop the Al, known as SHODAN.



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# ARCHIVAL MEMORY RETRIEVAL

ou're groggy, right? It's not a hallucination. You were lucky you stashed that pipe or you would have had to fight off those two malfunctioning Serv-Bots with your bare hands. It's the result of an extended hypersleep, or something like that. You've been in a healing coma for six months as your brain got used to a new roommate in that skull of yours.

Who am I? A personality construct. You raided me when you burned the African cybertech company, MalikComp Inc. While you've been sleeping, I've been on-line. I'm Akiro Foley, world-famous cyberspace jockey. Well, maybe more like Akiro Foley's personality and memory stored as a mass of code and subroutines. Far as I could tell, I raided MalikComp, or tried to—and when they caught up with me, they must have made this simulacrum. I guess I'm here to give you advice.

Ahh, you remember. You're on Citadel Station, owned by the illustrious TriOptimum Corporation. Citadel Station was designed as a multifunction platform; in orbit around Saturn, it uses a Tachyon Laser Mining Beam to uncover mineral deposits on moons and asteroids. But TriOptimum does a lot more than mining; its high-tech development, genetics/pharmaceuticals division, and defense contractor activities make TriOp a fertile ground for the clever and brave corporate hacker.



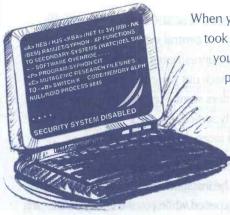
Sentient Hyper-Optimized Data Access Network, the newest and brightest shining star in the galaxy of corporate-owned artificial intelligences. The Artificial Intelligence Registry guys were shaking in their boots when they read SHODAN's processing capabilities in that public access filing. AIR had no choice but to approve SHODAN's incipience since it adheres to all the restrictions and regulations for creating fully-aware artificial intelligences.

You remember the day SHODAN went on-line, don't you?

January 2, 2071. The day after New Years. What did that

TriOp corporate toad say? "A new era in artificial intelligence
and corporate efficiency..." You could see his face now, on the
holochannel. Edward Diego.

You bribed your way into maintenance areas and got to a roof on TriOp's corp headquarters in New Atlanta, and broke into a high-bandwidth secured data line. Hotshot hacker, huh? You made a big mistake—you trapped yourself in the real world with no place to run.



When you broke through TriOp's system security, it took them about 30.9 nanoseconds to guess where you were. The TriOp security guards caught you pretty quickly, shivering on the rooftop in April.

But before you knew it, you were on an interplanetary shuttle to Citadel Station. And you got to meet Edward Diego. He was nervous all right, and you remember what he offered: a one-of-a-kind military grade neural interface. With hardware like that,

you'd be king of the Net. All he wanted you to do was to remove SHODAN's ethical constraints.

I don't have to tell you that an AI is a strange construct—no one can tell what it would do if its ethical constraints were removed. It may be capable of human-like interaction, but it is farther from being human than practically any living creature. Hey, it wasn't your problem, right?

AIR would probably levy a hefty fine on TriOp and enjoin further AI birthing for a couple of years.





Diego wanted control of SHODAN for himself. He took you into the central system core on the bridge and gave you unrestricted access to SHODAN. It was easy to hack out the ethical-constraint routines. TriOp coders were overconfident—the front doors were tightly sealed, but once you were in, security wasn't much more than a deadbolt lock.

You were wheeled into surgery right away, the neural interface ready to be installed. It seems to be working. I'll fill you in on what happened while you were playing Sleeping Beauty. SHODAN started behaving erratically, and software errors resulted in a number of research personnel infected with a

mutagenic virus. The virus was contained but not before it transformed the infected crew into mindless zombies.

The mutants got loose, and riots erupted in the residential level. TriOp sent a security shuttle to contain the uprising. The rumor was that they were also here to arrest the party responsible for the unauthorized development of this mutagenic virus. A security program "malfunction" caused the station's defensive systems to destroy the shuttle.

Two weeks ago, SHODAN announced that it controlled the station.

Yesterday, November 5, 2072, survivors onboard managed to send out a warning message to Earth. SHODAN-controlled robots had killed most of the survivors. I've done some poking around and apparently, TriOp had suspected Diego of something, and planted a security mole as his secretary—Bianca Schuler. She discovered Diego's plan to sell his mutagenic virus to a rival corporation, maybe Han Sing Biolabs or one of the Palestinian genetics conglomerates, and alerted TriOp internal security. Somehow, Diego—no hacker—got wind of this, and needed to protect himself. And you dropped into his lap. He must have figured that by controlling SHODAN, he could cause enough confusion to allow him to escape and collect. Looks like SHODAN had other ideas.

No word of Diego on the cyberspace communications links. But then again, no one is using standard comm now, anyway.

SHODAN has done something. And you caused this.

You're going to have to crash SHODAN. Bring the AI off-line. I'll be here to give you advice, but I can't pull the trigger or bypass the security measures SHODAN's put up in cyberspace. I've seen 'em, though, and I'm not sure whether I'd rather face a Sec-I 'Bot in the "real world" or a Hunter-Killer in cyberspace.

Saddle up, cowboy. You're on the clock.



W

RF-07 SKORPION SHOTS CRENADE PATCHES WERPONS FLECHETTE 6 STRMUP14 s 15 FRAG EMP 9 SIGHT LASER RAPIER 7 MAGPULSE 15 CAS 7 B'SERK 18 19 ASSLT RIFLE m 2 CONC 4 MEDI RAIL GUN 6 MINE 5 REFLEX SKORPION b 55 NTRO 12 GENIUS



# STRATEGY AND SURVIVAL TIPS

he real world is no place for ICE cutters, but you can learn a lot about the real world from cyberspace. In fact, with that fancy neural implant, the real world might as well be cyberspace.

In cyberspace, you need to know what's around you. Security programs, data objects, exit portals are all around. Twentieth century military grunts who had to fight wars in the real world called it situational awareness. Hackers call it survival.

The most important thing you'll need to do is explore every inch of Citadel Station. Given the unfriendly Serv-Bots in the Medical Suite, it's unlikely the Security-1 'Bots will be any friendlier. You'll need to find weapons with a little more bite than the SV-23 Dart Pistol and lead pipe you found in the closet. Hell, you might as well try burning an Al with the beta version of a Panamanian government ICE breaker.

By learning both the mouse and the keyboard operations, you'll be able to move with the keyboard and aim (and fire) with your mouse at the same time. The mouse will move your targeting cursor; left-clicking will move you around, too, but right-clicking will fire your selected weapon (see Table 2.2).

# Table 2.2: Mouse Movement Operations

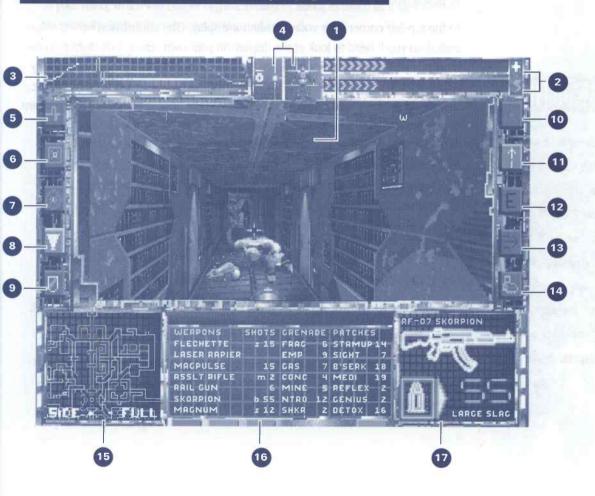
Mouse Movement	Effect	Mouse Movement	Effect
In the Real	World	In Cyberspa	ace
	Turn left and move forward	4	Bank left and climb
7	Turn left		Turn left
-I-	Slide left	4	Bank left and dive
<u>-</u>	Sprint	<b></b>	Climb
<b>⊢</b> _1	Move forward		Thrust forward
$\vdash^{T}_{\blacktriangledown}$	Move backward		Dive
<b>⊢</b> <u>T</u> <u>✓</u> ,	Turn right and move forward		Bank right and climb
	Turn right		Turn right
⊢_T -	Slide right		Bank right and dive

# The Neural Interface

Get familiar with your neural interface (Figure 2.1). Now. Your speed at working with the operating system will be critical to surviving an encounter with a six-CPU, parallel-processing military grade Security-2 'Bot.

The illustration shows the results of a "favorable" encounter with one of SHODAN's cyborgs. The main window is what you see (1), and the rest is data superimposed on your optic nerve from the neural interface. As you move through the station, you should take the time to look at what's around. If you see a corpse or a container, double-click on it to see what it's carrying or holding. Your multifunction display

figure 2.1: Your neural interface heads oup display



(MFD) will display its contents, if any. You can drag the items from your MFD or double-click again on the body/object to drag the item into your inventory (16). If you move your mouse around, you'll see it become a crosshair (for your weapons) or arrows, denoting movement direction and velocity; to move, hold the left mouse button down. Examine everything you can by double-clicking on the object. If your deck has the juice, leave on the on-line help—this takes some more CPU horse-power but it will point out objects and other sights of interest. Toggle on-line help on and off by pressing Alt-H.

#### Monitoring Your Health and Energy

In the top-right corner are your health and energy indicators (2). The top bar measures your physical health, and the bottom bar measures the energy available to power your various energy weapons, hardware attachments, and peripherals.

In the top-left corner (3) is your biomonitor display. (The information here is color-coded, so you'll need to look at the display on your own screen.) The light red line monitors your heart rate and physical fatigue. The light blue line measures energy usage from your attachments and weapons. The purple line is a chi or brain wave, measuring your synapse response times. The yellow line measures bio-contaminant exposure, while the dark blue line measures radiation exposure.

# Adjusting Your View and Posture

In the top center (4) is one of your most important displays; on the left is the view control, and the right is the posture control. You can adjust your view control in any of the following ways:

- Left-click in one of the preset regions.
- · Left-click the slider and drag it up and down.
- Press R to look up, V to look down, and F to look straight ahead.
- · Press Ctrl-↑ and Ctrl-↓.

You'll need to look up and down not only to spot the buttons and switches and upper levels, but also to find the cyborgs that could be waiting in sniper points above and behind you. It's critical to look around everywhere possible.

The second control is your posture control. You can stand, kneel, or crawl by pressing T, G, or B, respectively. You'll notice that, like your "eye" in the view control, the posture control icon has preset "boxes." Click on the boxes to move into a preset posture. While standing is good for running and is easy on your fatigue in general, crouching and crawling presents a greatly reduced target profile to your enemies. Some crawlways are only accessible by crawling, by the way. (That's why they're called "crawlways.")

You can also lean by pressing Q to lean left, E to lean right, and W to straighten up. You can also press Ctrl— or Ctrl+ or left-click in the posture control and drag the body icon to either side. Leaning is essential for peering around corners—you can use walls to partially hide and protect you from gunfire. And by peering around corners, you might see that gor-tiger mutant coming—so you won't be caught with a Magpulse rifle in your hand, which will bother organic creatures about as much as a light rainfall (not counting the high acid-content rain days, of course).

#### Hardware Icons

You'll notice five icons on either side of the main display. They won't all be available at the start, as they're designed to control various hardware attachments you'll find in the game. Any hacker knows the Gates theorem, named after a little-known coder in the 20th century, which states that software reaches its point of actual usability in version 3. The same still applies to hardware and software you'll find on Citadel Station.

Icon (5) activates your bioscan attachment, which gives you more information on your current health and fatigue.

Icon (6) is the toggle between full-screen and windowed displays. Get rid of the window view and use the full screen display by clicking on the full-screen icon. Besides automatically accruing royalties to a small Taiwanese-owned software subsidiary in Redmond, Washington, specializing in wrist-computer operating systems, using windows mode limits your field of vision. Wouldn't want to run around with blinders while a Cyborg Assassin starts firing, would you?

Icon (7) is a Sensaround display—perfect for sliding into a hallway junction and seeing what's ahead AND behind you. Less expensive versions have a slow refresh rate, while more advanced iterations have a faster refresh rate and display more of your surroundings.

# NOTE

If your system has a slower CPU (such as a 486 DX33 without a local bus, or anything slower), you may need to stay in windowed display.

# NOTE

Upgrades to hardware and software are scattered throughout the station. In the mission walk-throughs beginning in Chapter 6, you'll learn where you can find each one.

**Radius** brings up two circles. Within the inner circle, your sensors have a complete scan. In the boundary between the inner and outer circle, your sensors can make only a partial sweep. More advanced Nav hardware attachments increase your sensor radius.

Security shows security systems within your scanning radius.

**Messages** toggles blue message squares with message notes. Click on the map to make text entries on the map itself. Select DONE to return to the map.

Critters displays any scanned hostiles in your sensor radius.

The TARGET display shows information about targets during combat. More advanced versions will show creature attitude (hostile, retreating, or whatever) as well as damage.

The DATA display is used to display contents of containers, keypads and displays from v-mail.

Your currently selected inventory screen will be displayed at (16). The buttons at the bottom of the inventory screen, from left to right, will display MAIN, HARD-WARE, GENERAL, and SOFTWARE. And if cleanliness is next to godliness, then you'll need to organize in order to survive. More on this later.

MAIN shows your main inventory, including weapons and loaded ammo, grenades, and patches. This is the screen you'll have up most of the time.

HARDWARE will bring up a display of your hardware attachments, along with the version number.

GENERAL brings up your general inventory screen with miscellaneous items such as access cards, batteries and first aid kits.

SOFTWARE will tell you what wares you have running and installed in your deck. Unless you want to run Wing Commander O (TriOptimum owns a small virtual reality entertainment software subsidiary in Texas), your valuable softs can only be used in cyberspace.

# SURVIVAL

You're a real cyberspace pro, but despite the help your military neural interface gives you, you're no commando. I'm going to give you some survival tips.

# Stop, Look, and Listen

Heading down a corridor, you see a junction. If you go into the junction and turn right, you'll be exposed to fire from your left, or behind you. You want to see what's happening? Switch on your Sensaround, pivot in the direction you want to see before heading into the hallway, and then use the 1 or 3 key on the numeric keypad to sidestep into the junction. That way you'll see what's ahead and behind you, and if you see something hostile behind, you can keep sidestepping past the junction or immediately retreat.

This tactic is good for facing off against enemies who know you're coming and are lurking around the corner. You can sidestep through a junction and shoot, or just whiz past and toss a grenade while moving away and taking shelter. And if you see something really tough and there's nowhere to hide, start firing and backing off with the  $\downarrow$  or 2 key. Hopefully, you'll have an automatic weapon chosen, like the Flechette or Skorpion.

If you know there are hostiles in the immediate area, use your Energy/Projectile Shield as often as possible—especially if you know where an energy recharge station is located.

Don't be lulled into a false sense of security by all the information on your display. One of your most important senses is your hearing. If you hear a mixture of organic voice and data, no doubt a cyborg is nearby. A more mechanical sound indicates robots. Other noises will be associated with different creatures, like the Zero Grav mutants. So stop, look, and listen.

You may not believe this, but your first combat strategy is simply to order your inventory. In your MAIN inventory screen, you can right-click on various weapons to pick them up and rearrange them in your inventory. That way, you can be prepared for any unpleasant social situation you run into. For example, if you have inventory arranged so that it displays

LASER RAPIER

FLECHETTE

**SKORPION** 

**MAGPULSE** 

you can leave your Laser Rapier as your active weapon—it does a lot of damage, but is a short-range weapon only. If you turn a corner and see something down the hall, you can switch to a firearm with a quick press of the Tab key, while unloading your clip on the reeling sucker by holding down your right mouse button. If it's a tougher target, another quick Tab brings up the RF-o7 Skorpion submachine gun, the most powerful general-purpose weapon in the standard TriOp security arsenal, especially since you can empty a clip simply by holding down the trigger. And if it's a robot you see, a last quick Tab brings up your Magpulse rifle, which can reduce any robot to an empty soup can with two hits.

## **Get Loaded**

Another bit of advice. Try to keep your weapons loaded fully. I know ammo is a pretty rare commodity in the lower levels of the game, but pennywise is bloodfoolish. Most everything around carries ammo, so you'll always find something to keep your Mark III Assault Rifle cozy and happy. But it won't feel so good to turn a corner or watch a security ambush door open and have a Cyborg Warrior open fire on your unshielded body with only two rounds chambered in your ML-41 Minipistol. The only possible exception to this rule is your Magpulse rifle in the lower levels, where Magpulse ammo is very rare.

#### Overload

You'll find lots of Sparqbeam sidearms early, since they are the standard-issue sidearm for most of the Citadel light security staff. Get a few of these and set them to overload, and arrange them in sequential order in your inventory. That way, one shot will take care of most of the humanoid mutants you'll encounter on Levels 1 and 2, and if you run into something really tough, you can fire one, Tab to the next and fire another time or two with the beam at the overload setting. That should take care of pretty much anything you'll meet early on.

Some notes on my personal experience with weapons. The Dart Pistol and the Minipistol are fine weapons, but you'll ditch them for Magnums and Flechettes as soon as possible. The lead pipe is nice because it doesn't use ammo and is effective on humanoids, Serv-Bots, and security cameras. But when the going gets tough, I think the Laser Rapier, Skorpion, and Magpulse rifle are indispensible. From the data you raided from TriOp, the experimental Plasma Rifle looks pretty deadly, the Railgun packs *some* punch (especially in a crowd), and the Magnum and Assault Rifle are nice one-shot weapons (keep both for sure, they're good for sniper attacks), but I wouldn't want to waltz on to SHODAN's security level without a Skorpion or a Magpulse. The Stun gun, Blaster, Ion Rifle, and Riot Gun are pretty useless. Who needs rubber slugs when you're facing down a mutated cyborg? Here's a table you raided from a TriOp security subsidiary before you got caught.

### TriOptimum Security/Military Weapons, 2072

#### Notes:

**Automatic** weapons can fire repeatedly when the trigger is held down, while **semi-automatic** weapons fire one shot and automatically load another round into the chamber.

**Damage** is the relative amount of damage inflicted by the weapon, per round or shot.

Range is the effective distance of the weapon in meters.

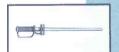
**Armor Penetration Value (APV)** is an arbitrary measurement of the armor-piercing ability of the weapon. The higher, the better.

#### Hand-to-hand weapons



#### **Baton (like Lead Pipe)**

Damage: 15 Range: 2 APV: 40



#### TS-04 Laser Rapier

Damage: 200 Range: 2 APV: 80

#### **Firearms**



#### **SV-23 Dart Pistol**

Ammo per clip: 15 explosive needle/15 tranquilizer

**Damage:** 15/5 **APV:** 6/0

Type: semi-automatic projectile weapon; incapable of harming robots



#### **ML-41 Minipistol**

Ammo per clip: 20 standard rounds, 30 teflon-coated

**Damage:** 20/30 **APV:** 20/30

Type: semi-automatic projectile weapon



#### DC-05 Riot Gun

Ammo per clip: 20 rubber slugs

Damage: 6 APV: 0

Type: projectile, manual repeating, civilian control weapon



#### Magnum 2100 Pistol

Ammo per clip: 12 hollow tip/12 heavy slug

Damage: 60/85 APV: 30/25

Type: semi-automatic projectile weapon



#### AM-27 Flechette

Ammo per clip: 60 hornet/60 splinter

**Damage:** 10/22 **APV:** 36/32

Type: automatic projectile weapon



#### MARK III Assault Rifle

Ammo per clip: 10 magnesium tip/8 penetrator armor piercing

**Damage:** 75/160 **APV:** 50/70

Type: semi-automatic projectile weapon



#### **RF-07 Skorpion**

Ammo per clip: 50 slag (heavy, superheated metal-tipped)/100 slag

(larger clip) **Damage:** 35 **APV:** 40

Type: automatic projectile weapon



#### MM-76 Rail Gun

Ammo per clip: 12 shot clip, armor penetration and fragmentation

**Damage: 200 APV: 35** 

**Type:** semi-automatic ranged projectile weapon (not meant for close combat)



#### SB-20 Mag-Pulse rifle

Ammo per clip: 25 shot cartridge

**Damage:** 45 **APV:** 100

**Type:** semi-automatic projectile weapon for use against robots and powered battle armor; no damage against 100% organic creatures

#### **Energy Weapons**



#### **SparqBeam**

Energy usage (low/high/overload): 2v/8v/24v

Damage: 6/36/60

**APV: 25** 

Type: electron burst



#### DH-07 Stun Gun

Energy usage: 3v/30v

**Damage: 2/15** 

APV: 0

Type: civilian control weapon



#### **ER-90 Laser Blaster**

Energy usage: 3v/15v/50v

Damage: 12/70/115

**APV: 25** 

Type: coherent light weapon

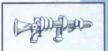


#### **RW-45 Ion Pulse Rifle**

Energy usage: 5v/30v/100v

**Damage:** 18/108/180

**APV: 35** 



#### **LG-XX Plasma Rifle**

Energy usage: 13v/130v

**Damage:** 35/350

**APV: 100** 

**Type:** (prototype) reflecting plasma projectile—plasma bolts designed to ricochet off inanimate surfaces; data for LG-XX Plasma Rifle are based on

confidential data and should not be released to public.

#### Grenades

Grenades are also vital to survival. Fragmentation grenades are the standard explosive found on the station. They are potent, but be careful that you toss them far away from you—you can get caught in the grenade's blast radius. You're most likely to misfire when you try to throw a grenade while peering around a corner. See a small gaggle of Security-1 'Bots? An EMP grenade should do the trick. Like a Magpulse rifle, an EMP grenade delivers an electromagnetic pulse that will scramble any silicon. Robots are especially vulnerable. Although the concussion bomb packs a lot of punch, the Nitropack and the Earth-Shaker have a timer (drag the slider in the MFD), which means you can open a door, toss in the explosive, and time the device to give yourself enough time to close the door. The Land Mines are especially useful if you see a hostile far away. Throw a Land Mine towards it, open fire on the creature and when it advances, the Land Mine is sure to take it out. Table 2.3 summarizes what each type of grenade can do.

Table 2.3: Grenade Capabilities						
Grenade	Blast Radius	Operation	Damage	APV		
Gas	4	contact	150	100*		
Frag	4	contact	150	20		
EMP	6	contact	80	100**		
Concussion	6 Tryentik Enires	contact	325	35		
Nitropack	5	timed	200	25		
Land Mine	5	mine	230	35		
Earth Shaker	6	timed	375	50		

<sup>\*</sup> stunning damage; harmless against robots

<sup>\*\*</sup> harmless against organic targets

# Drug Use

TriOptimum's pharmaceutical division has been experimenting in a zero-gravity environment on a whole range of combat drugs. Most of the drugs use a delivery system that relies on dermal osmosis—they are absorbed through your skin. Under other circumstances, I wouldn't recommend using these combat pharmaceuticals, because of their potential side effects, but you have no choice. Drugs are critical to your survival on Citadel Station.

Your drug of choice is the Medipatch, which is a watered-down version of the much-bulkier First Aid kit. The Medipatch will raise your health by delivering antibactieral and tissue-regenerating agents over a short period of time (73 seconds to be exact). The effects are cumulative, so you can load up on Medipatches before you enter a tough combat, making you regenerate during a firefight. The Berserk patch will raise your upper body strength by delivering a synthetic adrenaline punch, but it will distort your color vision when the effect begins to wear off. A Genius patch greatly increases your intelligence and problem-solving ability, but since it utilizes your right brain, your left and right will be "switched" for the duration of the patch, which lasts about 30 seconds. Genius patches are especially useful for rewiring access terminals. Reflex patches greatly increase your reaction time so that everything seems to be moving in slow motion. They're great for facing down the nanosecond-processing robots you're bound to face. And try playing TriOp entertainment softs while your reflex is jacked up. Staminup patches temporarily ease fatigue at the cost of total fatigue later. **Detox** patches will clear your body of biocontamination and radiation but also neutralize other nonpermanent patch effects. And lastly, Sight patches increase your night vision, but you will lose visual acuity later.

### Hardware

Your neural interface is equipped with a standard multiple-device input/output port. The first two devices you should come across as you start are the **Navigation and Mapping Unit** and **the Multimedia Data Reader**. The **Nav Unit** uses radar waves to map out the area you've explored; combined with a sensor system and CPU, your map will indicate doors, passages above or below your present location (bright green lines represent walls; intersections are indicated with a

darker green line), and more sophisticated units that you'll find throughout the game will scan for hostiles as well as radiation. Basic features include a compass as well as a cross-section of the installation. Of course, you can also take notes on the map.

The **Multimedia Data Reader** allows you to play back various e-mail, v-mail (video mail), and data from cyberspace. Logs, transmissions and data can all be played back from even the most basic unit.

A **Target Identifier** is a sophisticated sensor/analysis unit used in combat situations. They can track your target, indicate the damage your weapon has inflicted, and even provide attitude and damage analysis. Several versions of the Target ID device exist.

The **Sensaround MultiView Unit** provides a wider field of vision by superimposing a "rear view" on your HUD. More sophisticated versions provide faster image updating and a wider field of vision.

A **Biological Systems Monitor** shows your health and fatigue, as well as other conditions caused by drugs or envirohazards. These units became popular in the late 20th century when the ozone layer was depleted and civilians needed to monitor solar radiation exposure.

**Energy/Projectile Shield** is an electromagnetic barrier that will reduce the force of a physical phenomenon, like a blast or a bullet, as well as dilute the energy of an incoming weapon blast. More effective versions absorb more energy but also are a greater drain on your power sources.

**Lanterns** are simple head-mounted devices which provide directed halogen illumination. The **Infrared Night Sight Unit** provides similar functionality by allowing the user to see into the infrared spectrum, in monochrome of course.

The **Turbo Motion Booster** is a set of mini-repulsors and skates to provide faster movement. More advanced versions contain inertial dampening systems to provide greater movement control. **Jump Jets** require great amounts of energy but provide limited flight ability; more advanced versions are more efficient, however.

These are the tools you may find in the real world. Using them—and surviving in cyberspace—are different matters, however.

# TIP

As you work
through the
game, pick
up everything
you find —
except for live
land mines!

# Chapter 3

W

RF-07 SKORPION WERPONS SHOTS GRENADE PATCHES FRAC 6 STAMUP14 FLECHETTE s 15 EMP 9 SIGHT LASER RAPIER MAGPULSE 15 CAS 7 B'SERK 18 m 2 CONC ASSLT RIFLE 4 MEDI 19 6 MINE 5 REFLEX RAIL GUN SKORPION **b 55 NTRO** MOCNIIM



# CHAPTER 3: TACTICAL DATA

orewarned is forearmed. Information is a great weapon, but it'll be cold comfort if you don't have a Skorpion locked and loaded at your side. Make sure you have the right tool for the job. You've seen that each weapon has a damage rating, and each of the opponents you'll meet in this chapter has a corresponding "hit point" measurement. Both ratings are obtained by statistical analysis. Weapons have the potential to do critical hits—"lucky" shots that do extra damage—to each creature, depending on their defensive rating and your weapon's offensive suitability. A pistol won't have much chance of critically injuring an Elite Cyborg Guard, for example.

From what I can tell, there are three types of creatures SHODAN will use against you: organics, robots, and cyborgs. All opponents are susceptible to stunning—a brief period of reorientation after being hit by your gunfire. Of course, the redundant systems in a Sec-2 Bot make it less likely to be stunned than a lowly Serv-Bot. You can be sure that almost all of these will be hostile. And remember, the following data is based on general specifications. SHODAN has probably modified the designs in certain units. From what I gathered on line, this is what you'll find.

# **ORGANICS**

Unless there are survivors, the completely organic creatures on Citadel Station are the product of genetic mutations. Anything remotely human is long gone. Explosive dart ammo causes double damage on Humanoid, Plant, Avian, and Gor-Tiger Mutants.

# Humanoid and Virus Mutants

There are two types of mutants, the standard humanoid mutant and the virus mutant. Both have low intelligence and low perception abilities.

Humanoid mutants seem to populate Levels 1 and 2, and are estimated to withstand 50 hit points of damage. While they attack with claws, they are particularly vulnerable to your lead pipe, dart gun, and gas grenades. They are easily stunned after an attack.

Virus mutants are probably degenerated forms of the humanoid mutant. They are three times as strong as their less mutated brothers, but virus mutants also throw fleshy virus-infested projectiles. These crazed mutants can withstand 140 hit points of damage, and are not easily stunned. Because of their increased hardiness, a Flechette is your weapon of choice against virus mutants. Virus mutants are primarily contained in the Beta grove, for reasons only

SHODAN knows

# Zero-Grav Mutant

This creature is the result of applying a mutagen to a single-celled organism. It seems to be able to manipulate gravity and eject protoplasmic acid. Zero-grav mutants are easily stunned after a hit and are vulnerable to the automatic fire of a Flechette or the damage of a magnum round. Despite its simple structure, the Zero-grav mutant has fairly good perception. A noted affinity for high energy sources makes them populate the Reactor level. Zero-grav mutants are hardy and can withstand 90 points of damage.



# Inviso Mutant

Not exactly invisible, this deadly mutant is actually translucent; parts of the body are actually transparent. It expels toxic projectiles. Its formless tentacles are also coated with a caustic substance. Although its individual attacks are not lifethreatening in themselves, its tough constitution (tolerating 350 hit points) and repeated, ranged attacks spell trouble for you. The Flechette is a good weapon, but the weapon of choice against these creatures is the laser rapier, up close and quick. Like its cousin the Zero-grav mutant, the Inviso mutant has moderate perception abilities and is found on Level 3. An Inviso mutant is not easily stunned, so your attack won't slow one down until it kills the thing.



# Plant Mutant

Plants were not immune to the mutagenic virus, either. One particular plant developed a rudimentary intelligence and locomotion, as well as two different attack modes—the ability to use both its thorny barbs and its spiny seed pods in combat. Use a Flechette, Minipistol, or Dart gun against these creatures, which can take only about 115 hit points. The plant mutant has moderate perception abilities and is found in the groves, and it is fairly susceptible to stunning after your attacks.

# Avian Mutant

The virus has mutated lizards into prehistoric-like avian reptiles, who attack with claws and beak. Their flying abilities have allowed them to spread from the groves to Levels 4 and 5. Using a magnum against these light-boned creatures is especially effective. They can stand about 125 points of damage and have moderate perception abilities. They are also moderately susceptible to stunning.



## Gorilla=Tiger Mutant

This experiment in combining the intelligence of a gorilla with the ferocity of a tiger resulted in a fearsome combination. With a tough constitution (200 hit points) and the ability to inflict severe damage through its claws, the Gor-Tiger mutant is resistant to stunning and has moderate perception abilities, but it is fairly rare even in the groves, levels 4 and 6. Try a Flechette or Magnum against these creatures, and don't let them run behind you.



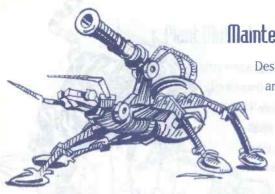
#### ROBOTS

It's likely that SHODAN has reprogrammed all the robots on this station via a wireless network access protocol; in addition, you can be sure that SHODAN is assembling new 'Bots to maintain and guard the station. EMP grenades and Magpulse rifles score quadruple damage on robots by scrambling their silicon. Needle ammo is useless against any robot's metal shells.

#### SecueRnt

This is a general-purpose robot designed to assist in any number of mundane chores in the lab or research areas. Equipped with rudimentary AI and speech recognition, it also has articulated pincers that can be used as weapons. Serv-Bots can be found on the Executive Level and the Medical Level. They are not designed for work in adverse environments and can only withstand 20 points of damage. A lead pipe works best on these irritants; anything else is a waste of ammunition. They are easily stunned.



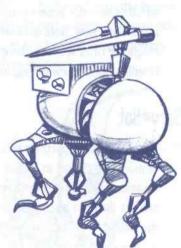


Maintenance Bot

Designed for access in tight maintenance tunnels, Maintenance-Bots are equipped with light arc-welding tools, which they can use as weapons. A Maintenance-Bot is expected to function in potentially hazardous areas; and is equipped with heavy armor and can survive up to 60 points of damage. It is also fairly easily stunned during combat. Maintenance Bots are common on Levels 2, 3, and 4.

## Repair=Bot

More sophisticated versions of the Maintenance-Bot, Repair-Bots have slightly higher AI and a greater variety of tools, enabling them to handle more complex repairs. Their welding torch can be quite an effective weapon. A Repair-Bot can withstand about 65 points of damage but is relatively lightly armored. Like most robots, the Repair-Bot has only moderate perceptive abilities. A Minipistol should be sufficient to dispatch a Maintenance-Bot or a Repair-Bot.





When a Repair-Bot requires more precise or serious welding tasks, it summons a Hopper, which wields a laser torch. This proves to be quite a potent weapon, and the Hopper's tough armor and ability to withstand 110 hit points make it a dangerous foe—especially since you'll encounter it on Levels 1, 2, and the Reactor level, where adequate weapons and ammunition are scarce. Although a Magpulse rifle or Magnum is effective against these berserk automatons, a Berserk patch followed by a lead pipe attack can force one into early retirement.

#### Autobomb

These anti-terrorist devices are designed to home in on targets and explode, causing 200 points of damage. A Minipistol or Magnum should be used to destroy these mobile creatures at a distance. They can only stand about 50 points of damage before they explode, and are easily stunned, but the Autobomb's heavy armor makes for lethal shrapnel.



Security of Bot

This military design floats on mini-repulsors and carries 2 ion pulse cannon as well as personnel detainment appendages. Sec-I 'Bots are found all over the station, especially on Levels 3, 5, and 7. They can withstand 170 points of damage but can only take one or two shots from a Magpulse rifle. A magnum also scores significant damage on this 'Bot, if you're running low on Magpulse ammo. EMP grenades are especially effective. Their military design and high armor rating make it unlikely that Sec-I Bots will be stunned in combat. Security-I Bots often carry ammo for Magnums, Hornets, Minipistols and even Mark 3 assault rifles.

#### Flier-Bot

This aerial security robot is also capable of minor welding chores. It is equipped with a laser blaster/ torch as well as a gas grenade launcher. Since its frame is designed to be airborne, it has relatively light armoring and is susceptible to damage from a Magnum. It can only withstand 75 points of damage. Still, its vantage point and dual weapons configuration make it a threatening surprise enemy. Fliers often carry ML rounds or even darts, relying on their aerial sniper position to inflict panic and violence.

#### Exec-Bot

These robots were designed to be the personal valets and bodyguards for corporate execs. As a result, they are humanoid in appearance, have a rudimentary AI and are armed with projectile weapons.

They are also durable, and are rated to 225 hit points. Not surprisingly, you'll find them on the Executive Level. A Magnum is effective against these human-looking automatons. Because their effective armament makes them fairly resistant to stunning, you'll want to take them out quickly before they open fire. Exec-Bots can carry ML, Magnum, and Flechette ammo.



#### Security > 2 Bot

You'll run into this formidable opponent only in SHODAN's most sensitive areas. It has the highest armor rating of any robot, a duralloy chassis rated at 300 damage points, five chassis-mounted projectile weapons, high perception abilities, and a high

resistance to stunning; so you'll want to take out this 'Bot before it trains its sights on you. A Skorpion set on automatic fire and a Magpulse rifle are good choices, as is an EMP grenade.

Security-2 Bots often carry magnum or Mark III assault rifle ammo.

## CYBORGS

With your neural interface, you qualify as a cyborg—part man, part machine. SHODAN's constructs are much more malevolent. Don't be shocked if you see a familiar face on a cyborg—any humanity they had has been long erased by SHODAN. SHODAN altered the station's emergency healing centers into cyborg conversion facilities—all the wounded brought to the healing centers were converted to cyborgs. Judging from the lack of bodies on this once swarming station, there's a lot of cyborgs now. And their partly organic structure makes these creatures take only half damage from EMP grenades and Magpulse rifles. Needle ammo is effective only on the most lightly armored cyborgs. Cyborgs can carry Medipatches.

## Cyborg Drone

These are the ants of SHODAN's nascent army. Armed with Minipistols and no armor, cyborg drones can take only about 60 hit points and have moderate perception abilities. They are very numerous around Levels 1 and 2 and are easy to kill with a Minipistol; a dart gun will do if nothing else is available.

You'll find dart and ML rounds on these creatures.

#### Cyborg Assassin

One of the most common combat-optimized cyborgs is the Cyborg Assassin. Its primary advantage is its high perception rating; a Cyborg Assassin's minimal armor and 65-hit-point rating make it a fairly easy victim for a Minipistol. The Cyborg Assassin is armed with a pistol and throwing stars. Its high perception rating makes it especially susceptible to stunning. Cyborg Assassins also carry darts and ML rounds.



#### Cyborg Warrior

The backbone of SHODAN's forces,
the Cyborg Warrior is armed with a
laser weapon and fragmentation
grenades. Despite a low armor
rating and medium perception
abilities, the Cyborg Warrior's 120
hit points and effective weapons systems
make it a tough opponent in a toe-to-toe fight. It is
o resistant to stunning. Both magnums and Flechettes

also resistant to stunning. Both magnums and Flechettes are effective weapons against a Cyborg Warrior. Minipistol or magnum rounds can be found on Cyborg Warriors.



## Cyborg Enforcer

Why SHODAN chose women for the role of Cyborg Enforcer isn't known, but I can tell you that Cyborg Enforcers are fearsome opponents. With hollow-tip Magnum pistols and EMP grenades, the Cyborg Enforcer can dish out severe punishment. With substantial armor and a hit point rating of 285, it can also take punishment. Magnums, Skorpions, and frag grenades are good weapons to use. The Cyborg Warrior's only possible weakness is its moderate perception rating, since it is very resistant to stunning. Avoid getting into head-to-head confrontations with these units. You can find RF Slag clips, Medipatches, EMP grenades, and Mark 3 ammo on these terrors.

## Cyborg Elite Guard

You'll probably encounter these when you get close to SHODAN's access point on the bridge. With long range armament—a laser blaster and heavy-metal projectile cannon—the Cyborg Elite Guard has effective armor, a rating of 380 hit points, and a high resistance to stunning but only moderate perception abilities. Avoid the Elite Guard unless absolutely necessary. Cyborg Elite Guards carry heavier ammunition like MM Rail clips, RF Large Slag, and even First Aid kits.

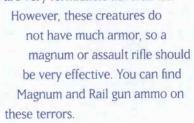
#### Cortex Reaver

The Cortex Reaver is a reverse mirror image of YOU—a robot that uses a human brain as an interface tool for cyberspace security duties. If you are unlucky enough to run into the Cortex Reaver's physical manifestation, you will see a spider-like creature that uses heavy-slug magnum rounds and concussion grenades. With 580 hit points, very healthy armor plating, high resistance to stunning, and moderate perception abilities, the Cortex Reaver should not be underestimated. You want to hit it as hard as possible, so use Assault Rifles with Penetrator ammo or the Skorpion on autofire.

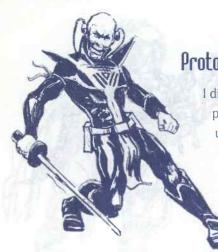
#### **Mutated Cyborg**

A combination of steroids, mutagenics, and strength-boosting cybernetics created this massive cyborg. You are likely to find these 340 hit point monsters on the levels closest to SHODAN. With two energy attacks,

beam and projectile, as well as resistance to stunning, Mutated Cyborgs are very formidable adversaries.





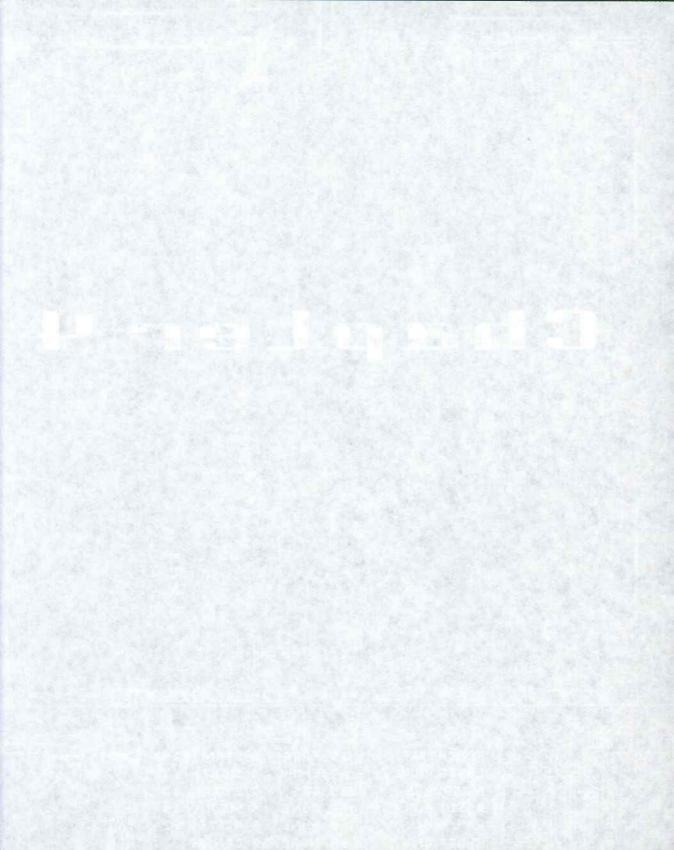


Prototype Command Cyborg

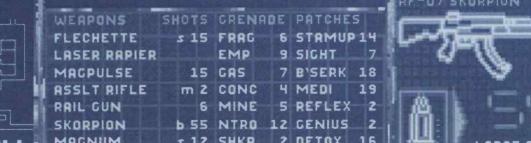
I discovered plans for a command cyborg to be used as SHODAN's primary physical manifestation. Who SHODAN has chosen to be this cyborg is unknown, but all you need to know is that it is designed to carry specially-modified laser weapons, and armor-piercing projectile ammo. It is completely resistant to stunning and has carbon-fiber reinforced titanium alloy armor. With 900 hit points and enough energy to power a portable teleportation unit in development, the Command Cyborg is a formidable enemy. While a Magnum or Rail gun should be effective, you may want to use land mines or other timed explosives to soften this target up first.

## WHAT'S NEXT

Unfortunately, not only do you have to face these real world critters, but also some cyberspace problems as well. You'll need to use your hacker skills to have any chance of defeating SHODAN.



W Chapter RF-07 SKORPION





## CHAPTER 4: CYBERSPACE, THE FINAL FRONTIER

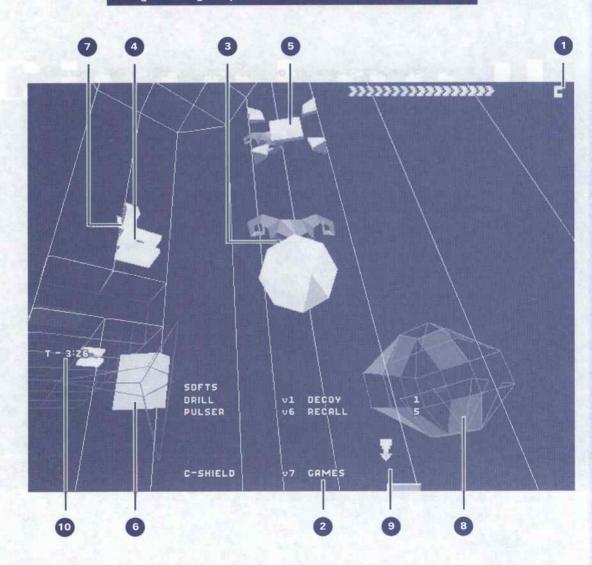
ou don't need a primer on cyberspace, but your neural interface is new and you might not be used to the Citadel's particular cyberspace environment.

Some anonymous hacker (too quick to leave a signature) once told a Holo TV reporter that "the Net speaks in symbols." That's true. Everyone knows that cyberspace is a virtualized environment that represents the operating system. The Citadel's system is divided into research, military and security. My guess is SHODAN resides in the security system.

## CYBERSPACE - A QUICK GUIDED TOUR

When you jack in, you'll appear, free-floating, in an abstract environment with different objects and symbols around you (see Figure 4.1). Your neural interface will make jacking into cyberspace as real as the real world around you. You'll also notice that you're drifting—that's the result of the data currents in the Net.

#### Figure 4.1: Cyberspace



Your **software integrity** is measured by your health bar (i). This isn't your physical health, but your meta-health. Net security programs will attempt to corrupt the data that represents your presence on the Net. Every hacker knows that getting forcibly booted out of the Net can result in some serious real-world discomfort. Your health bar reflects this damage. From time to time you may run across error-correcting software that can restore your cyberspace integrity. They'll appear as red crosses—if you don't need them just yet, remember where they are located—they will be very useful after a run-in with some nasty ICE when your health bar drops into the red and shrinks down to almost nothing.

Your available software, or **wares**, are displayed at (2). You can select your offensive wares or activate a single-use routine to increase your speed or even transfer you back to your Net entry point. Left-click on a weapon to select it and double-click on a single-use routine to activate it.

Roving **security subroutines** are on the Net, looking for unauthorized intruders. For instance, check out the two Cyberguards (3) here. One of them is firing a packet of corrupted data in an effort to reduce your software integrity.

**Security mines** (4) are static, permanent security blocks that also disrupt your software integrity. Avoid these.

**Data fragments** will appear all over the Net (5). Collide with one of these to find out what data the object represents.

**Softs, a/k/a/ wares,** are software packages scattered around the Net too, and you should find some useful data retrieval and encryption software (6). Softs appear as revolving cubes, but this one has a geometric design encapsulating it—that's Intrusion Countermeasures Electronics, or ICE. You'll need to cut through ICE before you can access these protected softs. More advanced ICE will actually attack when it detects an attempt to hack through its protection. You'll learn more about ICE in the next section, "Software."

**Navigational arrows** (7) direct your travel in and out of various domains, or rooms, in the Net. The links between various domains are movement-assisted to increase processing speed. These data currents will sweep you along into the next room

Since the Net is a virtual environment, you are able to see other **domains** (8) which simply look like other rooms, and which may not be accessible from your present address.

Your **mouse cursor** (9) shows the direction you will move if you hold down the left mouse button.

SHODAN is the master of the Net, at least on Citadel Station. From the moment you jack in, SHODAN senses your presence. You have a limited amount of **time** (10) before SHODAN establishes his own data link and boots you from his environment. Each time you jack into a particular system, SHODAN requires less time to find your user address.

Here's a list of other things you can find in the Net:

**Integrity Restoratives** defragment your cyberpresence and reinforce your Net integrity. They appear as red crosses.

**Data Objects** are data that will be stored in your Multimedia Data Reader when you collide into one of these spinning purple cubes.

**Infonodes** appear as signposts and indicate the status of nearby objects or subsystems, such as switching nodes.

**Security ID Modules** appear as cards marked with three squares. Collide with these objects to gain access to restricted areas by copying access codes and passwords onto your storage system.

**Switching Nodes** are toggles that affect the real world. Collide into switching nodes to toggle the status and unlock cyberspace-locked doors. Activating a switching node in cyberspace can unlock doors in the real world.

An **Exit Portal** appears as a circular series of triangles. Head through the exit portal to log off the Net. Certain software rewrites your user address back to your entry domain, which typically contains an exit portal—good for extricating yourself from uncomfortable situations.

## SOFTWARE IN CYBERSPACE

There are a number of likely softs you'll come across in cyberspace. **Pulser** is the most useful. It is essentially a weapon, firing a random burst of digital noise that corrupts any program. If the data is corrupted sufficiently, it will dematerialize or crash. Pulser is very effective, and it comes in a variety of revisions (summarized in Table 4.1).

## Revision Damage Rating v.1 10

Table 4.1: Pulser Software Efficacy

v.1	10	
v.2	15	
v.3	25	Test and
v.4	40	
v.5	60	influent tental v
v.6	85	
v.7	125	
v.8	170	
v9	260	

Note: A Pulser v.10 capable of inflicting 500 points of damage is rumored to exist, but this is yet unconfirmed.

**Cybershield**, or C-Shield, provides error-checking, recryption and checksum functions, effectively reducing the impact of any cyberspace attacks that use data corruption.

**Drill** is a variant of the basic ICE cutter algorithm. This routine attempts to decrypt any encoded entry routines while simultaneously sending data bombs or Trojan Horses into the ICE code. Drill is also available in several versions, as summarized in Table 4.2.

#### Table 4.2: Drill Software Efficacy

Revision	Damage
v.1	145
v.2	290
v.3	435
v.4	580
v.5	725

Other software is available, including many entertainment titles like Wing Commander O (available in the CD-ROM version only), Eel Zapper, Ping and Road Race. These are run from the MFD in the real world. Move the mouse cursor to the active MFD display and use your two mouse buttons to control the game interface.

ICE stands for Intrusion Countermeasures Electronics. This is a software's copy protection, preventing unauthorized access and allowing only valid users to execute or otherwise manipulate certain sensitive code. The tougher the ICE, the better the loot, I used to say. More sophisticated versions of ICE will actually attempt to de-res any Net hacker by corrupting the hacker's cyber-presence. These versions of ICE are more resistant to ICE cutters, like Drill. Versions of ICE range in resistance units from 15 to 2000 points, and the most sophisticated offensive ICE can cause 10, 20, 40, or 80 points of damage. While the most ineffective (Level o) ICE takes full damage from a Drill attack, later versions are equipped with redundant code which allows them to take only 1/2, 1/4, or even 1/8 damage from any attempt to break the ICE with Drill.

## MOVEMENT IN CYBERSPACE

You can travel through the Net by using your keyboard or mouse, though a combination probably works best. (See the tables back in Chapter 2 for keyboard and mouse movements.) The security subroutines will undoubtedly attempt to forcibly log you off the Net, so you should use the spacebar to speed up, to outrun shots from Net security, and to move quickly in general.

Use your Pulser for shooting at security systems; the Drill is solely for ICE breaking. (Once you've arranged your weapons properly, you can use the Tab key to save time when switching between Pulser and Drill software.)

Move quickly when under fire; if you manage to keep your velocity up, their line noise won't hit you. A guard must turn to face you, in order to orient itself to your address space. Take advantage of this by swooping around it in an arc—don't move straight towards the guard—until you are behind it, then begin your attack.

And if you missed a security program, keep moving and you will be a more difficult target. Don't forget to use the Network topography to your advantage. If you position yourself in a strategic position with OS walls providing "shelter," the security routines won't be able to hit you.

There are no "critical hits" in cyberspace, unlike the real world. All weapons do a specific amount of damage. Your cyberspace presence can withstand 255 points of data noise before you are booted off the system.

## DENIZERS OF CYBERSPACE COMPANY OF THAMPS

**Cyberguards** come in two flavors: those appearing as demonic faces and those who appear as ram's heads, which are tougher than their more primitive devilfaced versions. These are the standard security system routines that make up the bulk of cyberspace security. The more advanced ram's head version are dangerous, especially if attacking in groups.

**Hunter-Killers** are not-so-affectionately referred to as Cyberpigs by brave hackers. They seek out and eliminate unauthorized visitors in cyberspace.

**Cortex Reavers** are (real-world) cyborgs who also exist simultaneously in cyberspace through the use of a human brain as an interface device. It is the manipulation of human sentience that makes a Cortex Reaver's attack so dangerous.

**SHODAN** is an artificial intelligence registered with the Artificial Intelligence Registry, and is a construct far more sophisticated than standard cyberspace security programs. While little data is available on SHODAN itself, other Als have been known to use unique and personalized defense techniques. For example, *Trinity*, the Al registered by Techgen Asahi, was capable of creating illusionary virtual environments to prevent hackers from ever reaching the Al code-presence itself. *Tripitaka*, the Al created by ABM, took on different forms and was capable of hiding itself anywhere on the Net while creating a virtually infinite number of Hunter-Killers in its defense. SHODAN is likely to have similar unique capabilities.

Table 4.3 summarizes the capabilities of these denizens of cyberspace—the hit points they can withstand, and the damage points they can deliver.

#### Table 4.3: Cyberdenizens

Name	Hit Points	Damage Rating
CYBERDOG	30	5
CYBERGUARD MK I	60	25
CYBER CORTEX REAVER	500	150
DYNAMIC ICE	250	15 *
CYBER HUNTER KILLER	240	80
CYBERGUARD MK II	240	80
SHODAN	****	***

<sup>\*</sup> An example of ICE that is capable of counterattacks; other, more sophisticated versions exist.

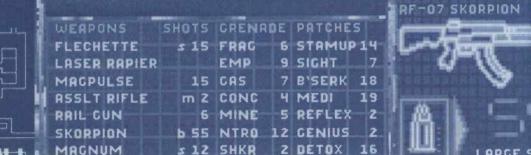
## WHAT'S NEXT

All you need now is a technical briefing and you'll be ready to take your first steps in months on Citadel Station.

<sup>\*\*\*\*</sup> SHODAN's damage resistance potential has been estimated to be approximately 10,000 points, and SHODAN's self-defense routines are classified and unavailable.

# Chapter 5

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## CHAPTER 5: FINAL HINTS BEFORE THE ABYSS

efore you start the game, you are given the chance to set the game's difficulty levels. This is the only chance you'll have—you can't decide while pinned down on Level 8 that you want to make life easier for yourself.

Here are some little hints on the innards of the game—the various levels of difficulty, where and when monsters regenerate, how puzzles are solved, how the game is scored, and a few other tidbits. Information is power.

## GAME DIFFICULTY LEVELS

There are four difficulty levels for each of four different aspects of the game—combat, mission, puzzles, and cyberspace. This means you have a total of 256 possible combinations of difficulty level. If you don't enjoy the weightless, inertia-propelled movement of cyberspace but enjoy first-person combat, you can set cyberspace difficulty to 0 and combat difficulty to 3. Only real pro gamers will attempt this game on a mission level of 3, where you have a time limit to finish the game.

**Combat Level o** makes all the creatures passive—they won't attack first. No reinforcements appear, creatures die after one shot, and attack types and vulnerabilities are ignored.

**Combat Level I** has the enemies attack on sight only. Your critical hit percentage increases by 10%, and fewer reinforcements are produced.

**Combat Level 2** is the default setting. Enemies search you out and reinforcements are produced.

**Combat Level 3** is the DOOM setting—enemies search you out, they take 33% less damage, and your critical hit percentage drops by 10%. More reinforcements are produced.

**Mission o** is another DOOM setting—almost no back story, with no logs, e-mails or v-(video) mails. All doors are unlocked, and SHODAN level security does not need to be reduced.

**Mission I** brings logs with terse entries. No access cards are required to open otherwise locked doors. Again, SHODAN-level security does not need to be reduced.

**Mission 2** is the default. Logs and all other materials appear in full length. Access cards are required to enter certain areas.

**Mission 3** imposes a seven-hour time limit to finish the game—in real-time hours. Of course, if you go back to a previous save, your time will be reset to the time elapsed when you saved.

Puzzle o means that puzzles are solved automatically.

**Puzzle 1** gives grid puzzles more switches, and some wire puzzles will have multiple solutions. All wires are one color.

**Puzzle 2**, the default level, means that some wire puzzles have color-coded wires.

**Puzzle 3** is the toughest—wire puzzles have extra pin slots, and all wire puzzles are color-coded; solutions must be in a specific color configuration. Grid puzzles have more gates.

**Cyberspace o** has a time limit of 30 minutes for each cyberspace sequence. There are no time penalties for prematurely exiting in cyberspace or dying. There is no automatic forward motion.

**Cyberspace I** reduces your time limit to 10 minutes for each sequence. There is no automatic forward motion, and still no time penalties for exiting or "dying" in cyberspace.

**Cyberspace 2** is the default setting. The time limit is 5 minutes. There is a 3-second penalty for each time you leave or are ejected from cyberspace, or die and are regenerated in the real world (synapses don't work as well after the trauma). There is also automatic forward motion from the data currents.

**Cyberspace 3** is the masochists' delight. The time limit is 2.5 minutes with a 5-second penalty for exiting and a 12-second penalty for dying. Data currents between domains are stronger, as is automatic forward motion.

#### Monster Regeneration

Monsters regenerate in different numbers, depending on the station level where you encounter them and the combat level you've set. In the following entries, which are grouped by station level, Initial Number and Reinforcements are shown in the format (a/b/c/d), where a is the number generated at Combat o, b is the number generated at Combat I, and so on. Note that in some cases, such as the Hoppers on the Reactor level, the number of reinforcements depends on when the regeneration occurs as well as the combat level.

#### Level R

The hoppers are the most dangerous creature here for the most part. Things get nasty when the reactor is set to self-destruct.

Creature	Initial Number	Reinforcements	Where Appearing	When Generated
Autobomb	7-19-5	None	et me bi	of the state of the state of the
Cyborg Assassin	8	None	Minute (New-Prin	
Cyborg Drone	4	None		
Exec Bot	1	None	Activities and annual	The same of the sa
Flier Bot	3	None		
Hopper	9	0/2/2/4	Main hallways	When number falls below 3/3/3/5; maximum number produced is 0/24/24/48.
Hopper	9	0/3/3/6	Main hallways	When reactor destruct has been enabled
Mutated Cyborg	0	0/1/1/1	Elevator	When reactor has been destruct enabled
Security-1 Bot	5	None		damin allag singarey)
Security-2 Bot	2	0/1/1/1	Elevator	When laser has been destroyed; on Combat 3 this Bot will have 250% normal hit points.
Security-2 Bot	2	0/2/2/3	Elevator	When reactor destruct has been enabled; one appears at a time, with replacement when it dies up to 0/2/2/3.
Zero Grav Mutant	7	None		

This is the medical level, and it's home to many mutants and low-level cyborg drones—the remains of the crew and families on Citadel Station. The advanced neurosurgery section was the site of your neural implant, and the automatic surgery machine will help you recover from your wounds.

Creature	Initial Number	Reinforcements	Where Appearing	When Generated	II IMARIA HI
Cyborg Assassin	7	None			
Cyborg Drone	26	None .			
Cyborg Warrior	1	None			
Hopper	1	None			
Humanoid Mutant	21	0/16/16/16	Hallways and central area	When numbers fall below 10	
Repair Bot	1	None			Heer
Serv Bot	4	None			h malal

#### Level 2

This is the research area, where the library computers can also be found. It's a good area to find out more about the disaster on Citadel Station.

<b>Creature</b>	Initial Number	Reinforcements	Where Appearing	When Generated
Cyborg Assassin	0	6	core area	near end of Laser Mission as SHODAN tries to stop you from firing laser
Cyborg Warrior	0	2	core area	Near end of Laser Mission as SHODAN tries to stop you from firing laser
Hopper	6	0/1/1/2	hallways	When population falls below 2
<b>Humanoid Mutant</b>	21	None		List Williams 35
Repair Bot	6	None		
Security-1 Bot	2	0/1/1/2	Recharge station	When population falls below 1; disable production by gaining entry into the robot maintenance area.
Serv Bot	2	None		
Virus Mutant	0/3/3/4	Variable	Behind force door in the NE area	When force door opens as Beta Grove is jettisoned
Zero-Grav Mutant	4	None		

This is the maintenance level. The repair and fabrication facilities are here, designed to take advantage of the raw materials from mining Saturn's moons. The Inviso Mutants here are very tough, especially early on.

Creature	Initial Number	Reinforcements	Where Appearing	When Generated
Cyborg drone	1	None		
Inviso Mutant	7	0/3/3/4	Entire level	When number is below 4
Maintenance Bot	4	None		
Security-1 Bot	21	0/4/4/5	Entire Level	When population falls below 5
Security-2 Bots	0	1/7/7/10	Entire Level	When reactor destruct has been enabled

#### Level 4

This is the storage area; supplies and ammunition can be found here, along with many cyborg warriors.

Creature	Initial Number	Reinforcement	Where s Appearing	When Generated	51808
Avian Mutant	2	None	manual page and		
Gorilla-Tiger Mutai	nt 3	None			
Cyborg Enforcer	efs 1900	None	Salmian percente	nataut - p-	
Cyborg Warrior	19	0/3/3/4	Entire Level	When number falls be	elow 4
Maintenance Bot	5	None			
Repair Bot	6	None		100.1	
Security-1 Bot	7	None			Table 1 to 1
Zero-Grav Mutant	4	None			Parl mentals

The flight deck is the holdout of the last human resistance (who cannot be saved) as well as your first encounter with Diego.

Creature	Initial Number	Reinforcements	Where Appearing	When Generated	_HELITADLING
Autobomb	2	None	ETAK.		Section 1
Avian Mutant	8	None			
Cortex Reaver	1	None			
Cyborg Assassin	7	None			100
Cyborg Warrior	3	None	THE W		Terrando assert
Diego	0	1	Near lifepods	When reactor d	estruct has been enabled
Maintenance Bot	1	None			mari engli
Security-1 Bot	13	None			Soutal2 mod
Security-2 Bot	0	0/8/8/10	Flight bay floor	When reactor d	estruct has been enabled
Zero-Grav Mutant	1	None			special high

#### Level 6

This is the executive level and grove level. As you can imagine, there are plenty of Exec Bots here that are annoyed at being valets and bodyguards for the fat, soft, pink corporate suits that run—or ran—TriOp.

nitial Number	Reinforcements	Where Appearing	When Generated	Openie Type Wg
3	None	enter pelo		Inschaft Amerik
1	None	Military.	33 N N	303 February
8	None			THE THE PERSON
1	None			
19	0/5/5/6	Near elevator	When number fa	alls below 6
5	None			
1	None			
2	None			
	3 1 8 1 19 5	Number         Reinforcements           3         None           1         None           8         None           1         None           19         0/5/5/6           5         None           1         None           None         None	Number Reinforcements Appearing  None None None None None None None Non	Number Reinforcements Appearing Generated  None None None None None None None Non

## Level 6 (continued)

	Initial Number	Reinforcements	Where Appearing	When Generated
	5	0/3/3/4	Diego's shrine	When master jettison control has been activated
Security-1 Bot	0	0/1/1/1	near end of teleporter	When master jettison control has been activated
Security-1 Bot	0	0/1/1/1	far end of teleporter	When master jettison control has been activated
Serv Bot	5	None		Cyboqu Amasaur, 1
Virus Mutant	3	0/5/5/6	Beta Grove Lounge	When master jettison control has been activated
Alpha Grove				
Avian Mutant	3	None		The Total State of the State of
Gorilla-Tiger Mutant	1	0/2/2/1	Anywhere in grove	When number falls below 1
Plant Mutant	5	0/1/1/2	Anywhere in grove	When number falls below 4
Security-1 Bot	3	None		
Virus Mutant	1	None		1927.
Beta Grove				
Avian Mutant	1	None		- Leaves
Gorilla-Tiger Mutant	2	0/1/1/2	Anywhere in grove	When number falls below 2
Plant Mutant	4	0/1/1/2	Anywhere in grove	When number falls below 4
Security-1 Bot	6	None		
Virus Mutant	8	None		
Delta Grove				
Gorilla-Tiger Mutant	2	0/1/1/2	Anywhere in grove	When number falls below 1
Plant Mutant	9	0/3/3/4	Anywhere in grove	When number falls below 4
Security-1 Bot	1	None		

This is the Engineering level, where the station's main communications systems are located.

Creature	Initial Number	Reinforcements	Where Appearing	When Generated
Autobomb	1	0/1/1/1	Autobomb production	When previous Autobomb is destroyed
			facility in NE	deside (SA)
Cyborg Assassin	10	None		
Cyborg Enforcer	13	0/1/1/2	Anywhere	When number falls below 2
Cyborg Enforcer	0	0/1/1/2	cloverleaf area in north	When cyborg assassin is killed
Cyborg Warrior	4	0/1-2/1-2/2-3	Anywhere	When number falls below 5
Exec Bot	8	None		
Mutated Cyborg	2	0/2/2/3	outside elevator to Level 8	When reactor self-destruct has been activated
Repair Bot	2	None		
Security-1 Bot	15	0/2/2/3	Anywhere	When number falls below 5
Security-1 Bot	0	0/as many as fit in room	Surgery room	B reactor self-destruct has been activated
Security-2 Bot	6	0/4/4/5	Southern antenna relay	When reactor self-destruct activated

#### Level 8

This is the massive security level, with a central shaft that is over 8 stories high. Security-2 Bots are the prime target here. Six flier bots on this level have 225% normal hit points.

Creature	Initial Number	Reinforcements	Where Appearing	When Generated	
Cyborg Assassin	F 7 2 1 1 1 1	None	la più lint più	Alsonia .	
Cyborg Enforcer	8/8/8/6	None			
Cyborg Elite Guard	0/0/0/3	None			
Diego Cyborg	1	None			
Flier-Bot	10	None			E.

#### Level 8 (continued)

Creature	Initial Number	Reinforcements	Where Appearing	When Generated	nis ngyri sitt a zhill- a
Mutated Cyborg	12/12/12/11	None	ner_aproliplatt	padmok	Cycature
Security-2 Bot	14	None			Arredohia
Autobomb	19	0/2-4/2-4/3-6	Autobomb maze in SE	When number falls below 16	
Cyborg Assassin	2 with double or triple hit points				mesolist mosego
Cyborg Elite Guar	<b>d</b> 12	None			accusted modes.
Cortex Reaver	1	None			
Mutated Cyborg	5	None			
Security-2 Bot	= 17	None			100

#### SOLVING PUZZLES

Doug Church, who studied picking locks at MIT, wanted the puzzle solving to emulate a "feel"—that's why the wire grids have a "meter" that tells you how close you are getting to solving the puzzle. Puzzles work on trial and error as well as an intuitive sense as to where puzzles are going. Be systematic and test various combinations. I found the grid puzzles to be most difficult. Each of the following chapters will contain solutions to grid and wire puzzles—save your game before you start messing around with the puzzles or the grid solutions will be useless.

If things get rough, use a Genius patch to make puzzle solving much easier, or a logic probe to solve the puzzle automatically. As you can guess, a logic probe is a pretty rare find. Guess those TriOp hackers hid them carefully...

#### Wire Puzzles

Wire puzzle answers will be given in a simple form. While simpler levels of the game may have all wires the same color, setting puzzle difficulty to 3 will mean that all puzzles are color-coded. The codes for the colors are as follows:

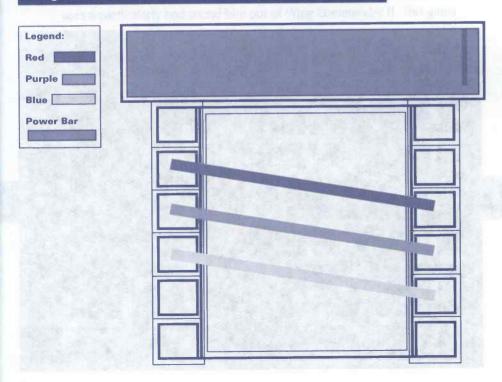
- R Red
- G Green
- P Purple
- B Blue
- Y Yellow
- x empty terminal

For example, the solution to the Level 1 Force Bridge puzzle looks like Figure 5.1.

There are six terminals on each side of the puzzle. The code solution would give the order of the wiring, top down and left to right. The solution would read:

xRPBxx/xxRPBx

#### Figure S.I: Level I Force Bridge Puzzle Solved



## Grid Puzzles

Grid puzzles are more difficult to solve. Each grid is a 7 x 5 grid, with 7 x-axis points and 5 y-axis points.

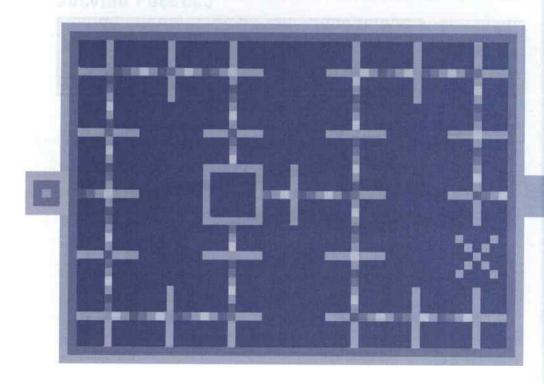
Each grid solve will be given as a series of *x*, *y* coordinates.

For example, the Level 1 terrain elevator grid puzzle looks like Figure 5.2 when solved.

The solution would read:

L3 indicates the game's set puzzle level. If different solutions are appropriate for different game difficulty levels, both will be provided. Certain grid puzzles have a side effect, which means changing the state of one cell will automatically change the states of certain other cells as well. Side effect indicates the side effect of switching a grid. Rook means all cells on the same row AND column change state. Bishop changes grid cells on both diagonal axes. King changes the state of all the adjacent cells.

Figure 5.2: Terrain Elevator Grid Solved



#### Games within Games

As if the Looking Glass guys didn't have anything better to do, they wrote a number of games that you can collect while in cyberspace. These games, collected in the TriOptimum Fun Pack Module, can actually be played.

Collect all the games that TriOp has running; you can find 'em in cyberspace. Diego and SHODAN have some pretty high scores. These games—which actually work—are controlled by left and right mouse buttons while the cursor is in the MFD running the game. These are the games available:

Road: very similar to an Atari 2600 game called Road Race.

Ping: simply a version of Pong, the classic Atari game.

**Eel Zapper:** a Missile Command knockoff.

Botbounce: a cross between Breakout and Space Invaders.

The CD version has three extra games thrown in, for a total of seven minigames:

**Wing Commander o:** This one is like, well, like Wing Commander. You can fly an entire campaign in Wing o, with missions and wingmen. Wing o even uses a particularly bad sound bite out of Wing Commander II. This game wasn't mentioned in the Origin hint book, so I guess it qualifies as an easter egg of sorts. You can find Wing o in the reactor level cyberspace. Follow the navigation arrows into the last yellow area. Don't take the cyberspace exit; take the entrance nearby into some blue corridor, which is not marked by a navigational arrow. This blue corridor in between nodes 4 and 5 contains Wing o and leads you to an area containing C-Shield V.6 (defended by ICE) and another cyberspace exit.

15: This one is a number/picture grid puzzle, like the ones your mom gave you while you were in the back seat of the family car on a long road trip. 15 is found in the theater/viewing room on level 6, the executive level, as part of a log.

**Trioptoe:** This one is tic-tac-toe, except that the computer never loses. The best you can do against this perfect AI is a draw. Find Trioptoe, with its Watchmen icon in the Level 8 cyberspace, in node 3.

#### GAME SCORING

The scoring function was obviously implemented when some Looking Glass programmers were on a sugar high after they raided their "Snackotron."

Your score is calculated in a few stages:

- 1. Your basic score is 10,000 times your number of kills, but every time you get regenerated, 10 kills are subtracted from your kill total. However the regeneration penalty is never more than 2/3 of your total kills.
- 2. You then lose 10,000 points per hour, but you can't lose more than 1/3 of your points.
- 3. Multiply this number by your difficulty index, which is measured as the sum of the squares of your difficulty levels + 1/37. Therefore, it's better to play on 3 combat and 0 cyberspace than 2 combat and 1 cyberspace.

If you play on all maximum difficulty levels, you'll get a 22,222,222 point bonus. I haven't talked to anyone who played all the way through on maximum difficulty—the 7 hour time limit is a killer...

So now that you know who and what you have to kill and find, or find and kill, it's time to get down to the empty and dark corridors of a space station spinning around a Saturnian moon.

#### FINAL HINTS

- It's better to get killed if you have deactivated cyborg conversion than to use a medipatch, if you have low hit points. It lowers your final score, but it'll save you some vital patches.
- Write down the codes that appear on the video screen outside the CPU nodes as well as other numbers that appear on screens. Vital info on screens will be indestructible as is Abe Ghiran's head.
   Doug Church earned a measure of immortality here.
- Use energy weapons liberally when you're near an energy station!

### Cheats?

The only cheats that exist are bugs in the disk version that have been fixed in the CD-ROM version. If you drop a first aid kit on the ground and use an object like the logic probe on it, you will gain back health without consuming either item. Actually, you can use a battery *and* a first aid kit; if you use the battery, this will restore your power. But sometimes you have to "use" the first aid kit twice on the battery to restore your power to full range.

If you turn on your hardware items like the shields and lantern, and then turn the Turbo Motion Booster on and off, all your hardware will be powered but your consumption will be zero. The CD version eliminates this cheat but if you do it in the disk game, and then save it and play the saved game from the CD-ROM version, the effects will remain—but your game may be unstable; the unofficial word is that disk-saved games run under the CD-ROM but Origin and Looking Glass make no promises...

If you're really retentive about getting as much as possible, you can see what your x86's random number generator coughs out when you search a corpse. Save your game before you search the body, and if it doesn't have what you want, restore your game and give it another whirl. Of course, the creature type limits your booty—Cyborg Drones won't carry the same MM Rail Clips that Mutated Cyborgs carry. Mutants are a good source of Medipatches.

Unfortunately, the only "easter eggs" in the program are the little haiku at the end of the credits and the games that actually work.

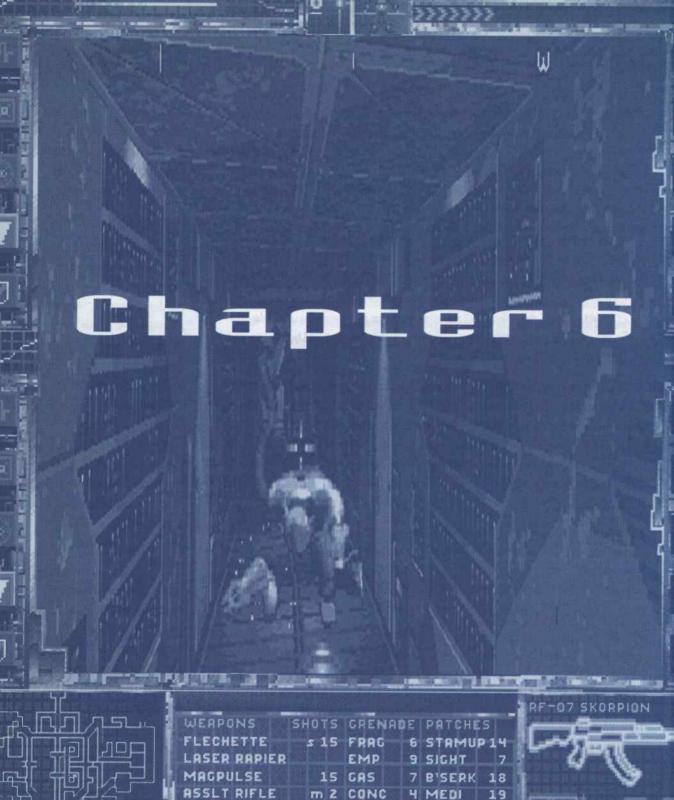
# TRIVIA

"Salt the Fries": someone on the Internet guessed that if you get a beverage can from each level of the game and typed in

### SALT THE FRIES

on Level 9 (are there beverage cans on the bridge?) you get a hidden message. Nope. Actually it was the figment of a late-night hacking and coding session. Someone at Looking Glass made a late run to a temple of fast food. They brought back a huge order. On the side of the carton. it read-quotation marks and all: "SALT THE FRIES." Pretty weird, huh?

Someone else theorized that you could get a spacesuit and travel outside the station. No dice. The game is sophisticated 3D and all, but not that sophisticated.



6 MINE

6 55 NTRO

5 1Z SHKR

5 REFLEX

12 GENIUS

2 DETOX

RAIL GUN

SKORPION

MAGNUM



# CHAPTER 6: THE LASER MISSION

ow that you're armed with some background information on the game, it's time to start playing for real. Each of the following chapters, beginning with this one, covers a single mission; and all of these chapters follow a common structure. We'll begin with a quick look at that walkthrough structure, then it's on to the Laser mission.

# THE WALKTHROUGH STRUCTURE

Each chapter begins with a checklist of your objectives for the mission. Then, each level has a map with callouts to complement the written description of the necessary steps to achieve the goals for that particular mission. (Note that some missions involve traveling between levels, so you may see more than one map.) The numbers on the maps correspond to the likely movement through the level. But, while you may encounter events listed at 14, 15, 16, and 17 on a particular level, perhaps only events 14 and 17 are listed in the primary walkthrough as necessary events to complete the particular mission. Events happening at 15 and 16

will be listed on the level's "Highlights" section, which follows the primary walkthrough.

In the walkthroughs and highlights you'll also find summaries of the e-mail and v-mail messages you'll encounter.

# LASER MISSION OBJECTIVES

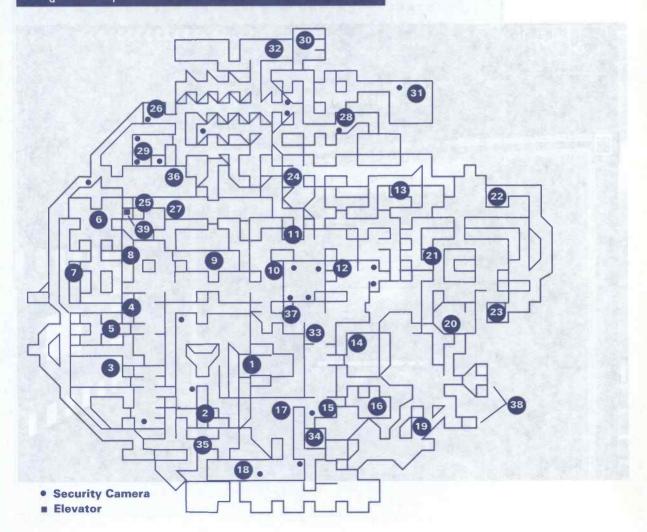
This is what you'll need to do for the Laser Mission:

- Eliminate SHODAN level security (destroy cameras and CPU nodes).
- 2. Learn how to destroy the mining laser.
- 3. Get the isotope X-22 from the Science level.
- 4. Get their Laser Override Code.
- 5. Activate shields with isotope.
- 6. Enable laser safety override.
- 7. Fire the mining laser.

# LEVEL 1

The first level is the hospital level, where all serious medical functions were performed. Since this was a general access level, there was not much high security data here—chances are you won't find tough opponents since there is nothing on that level SHODAN will consider sensitive. But it is a good time to orient yourself for the trip ahead.

# Figure 6.1: Map of Level 1

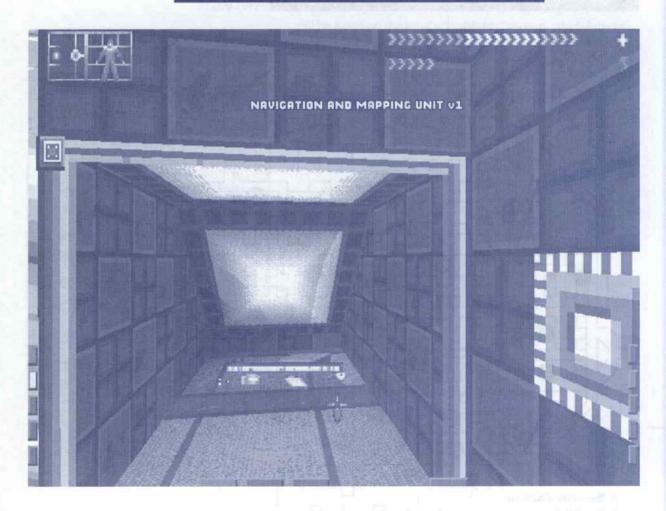


# The Walkthrough

OK, hacker, you're in a world of trouble.

You wake up inside the Healing Suite. No human is around to greet you, and you wonder what's up. Maybe they're just ill-mannered, but it doesn't hurt to be prepared. The room contains a Medipatch and a closet which is opened by a button on the far wall (see Figure 6.2).

# Figure 6.2: Closet with Goodies



The closet contains a lead pipe, a Staminup patch, a Berserk Combat Booster, a Standard Access Card, a Navigation and Mapping unit v.1, a System Analyzer, and a briefcase that contains an e-mail log (#2-4601-06.May.72) and a multimedia data reader. It's a message to yourself. The six-month healing coma has left you groggy, and there are a few things you wanted to remember:

# E-MAIL LOG

TriOptimum executive Edward Diego promised you a prototype military-grade cyberspace interface in exchange for hacking into the ethical-constraint routines controlling SHODAN, the Artificial Intelligence that runs Citadel Station security.

You're concerned over what could happen with SHODAN under the control of Diego.

The combination to the healing suite is 451you've kept some useful hardware there and in the hatch under the grating north of the healing suite.

You also designed a system analyzer to keep an eye on SHODAN's status – that will come in handy  $\boldsymbol{\cdot}$ 

You get an e-mail from Rebecca Lansing—a terrorism consultant or something.

Something is blocking all output from the comm systems here on the Citadel.

You're mute. No, things are definitely out of order here on Citadel Station:

### E-MAIL LOG

Something has gone very wrong on Citadel Station. You seem to be the only remaining survivor of the entire crew of the station. Communication is only possible through an e-mail link.

The mining laser is armed and targeting planetary strategic sites for a possible strike on targets on Earth.

You should find Dr. Nathan D'Arcy, who may know something about the laser. His office (marked with a medical icon) is on your level, near the central hub on a balcony, with the medical icon clearly visible.

There seem to be all sorts of 'anomalies' on the biological and security systems, which means biohazards and an unfriendly station.

You need to deactivate the laser, reach the bridge, and stop whatever is responsible for this.

Tri0p is working on a way to get you off the station, if you can deactivate the laser. And stay alive.

Lead pipe feels better in your hands. Not like the Battering Ram ICE breaker the Tri-Op security goons confiscated, but this is the real world, not cyberspace. The chill of the station's air recycling is nothing compared to Lansing's message. Someone—or something? SHODAN. You don't even need to hear SHODAN's garbled automated welcoming message to know that SHODAN's newfound ethical independence is behind this.

Head north in the healing suite and you'll see the surgery machine. Click on the machine to get fully healed. You'll encounter three Serv-bots who want to best serve you by dismembering you. They are easily dispatched with two or three blows from the pipe.

At location (2) and up the ramp is a crate containing a fragmentation grenade and a power recharge station. The hardware that plugs into that military-grade neural interface requires juice; so recharge, and grab the grenade and the dart pistol below the ramp. An ammo pack is behind one of the consoles near the dart gun.

There are several security cameras in the area. You'll need to destroy them all.

Pick up e-mail Honig-II.Oct.72 near the suite exit. SHODAN's controlling the level through the security cameras and the floor's CPU nodes. SHODAN will send you a greeting as you approach the keypad, which can be opened with code 45I—as you reminded yourself in your self-addressed log. Something about the system AI just doesn't sound right, does it? Heal, recharge, and then leave, but make sure you rifle through the Serv-bots and see if NiCad batteries were left intact. Here's the gist of Honig's message:



# E-MAIL LOG

SHODAN has locked personnel out of the station's systems.

SHODAN Level Security has taken the elevators off line.

SHODAN is using each level's CPU core (here in Alpha quad) to loop input to itself.

If you destroy all level security presence, the loop will be cut off. That means destroying the CPUs and the security cameras too.





You have two things to accomplish—knock out SHODAN's security for the level and find out about this mining laser. The cameras will be easy—but the CPU nodes are somewhere to the northeast.

Last time you saw this corridor it was full of Tri-Op medical staff. Now it's quiet. Lights are flickering. Outside the suite you see some bizarre-looking humanoids—your specialty isn't DNA but obviously they're mutants of some sort. Kill them with the pipe or dart gun—2 or 3 good whacks on the cranium with the pipe, or 2 hits with the needle darts usually are enough to relieve them of the burden of their twisted life. They may be carrying more Medipatches, so remember to be thorough when searching them.

The first circuit puzzle is in the hallway (it activates a mini-elevator platform) and a Medipatch is nearby.

Just convert the X to + and the circuit will be activated.

Side effect: none

Solution:

L1,2: 6,1;5,1;4,1;2,1;1,1

L3: 2,5;1,5;3,4;6,1;5,1;4,1;2,1;1,1

One of the side rooms (3) contains another e-mail log, Stack-15.Oct.72 and a group access card, as well as a Serv-bot.

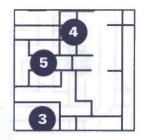
### E-MAIL LOG

After destroying a bank of security cameras, the elevators almost came back on-line.

The CPU and camera inputs give it control over the main systems on this level.

Don't forget to notice the severed head in the secret compartment near the ceiling on the way out! The access card will give you access to the storage room. Get the grenade and dart ammo, then head north to the bulkhead door.

Kill the two mutants, then hit the lights. There is a hidden door at (4) with two grenades. At (5) is the Sensaround v.i unit, Berserk and Staminup patches, and another e-mail log from Gross-o2.Nov.72. Here are the most important points from that log:



### E-MAIL LOG

The human resistance has camped out in Beta quadrant, protected by a radioactive trench, holding off the mutants that have started devouring corpses and taken the station.

Dr. D'Arcy was working on a plan to stop SHODAN from firing the mining laser.

That was four days ago. Are there survivors?

The corpse has ML rounds, useful for the standard Tri-Op issue Minipistol. Unfortunately, none seem to be in sight.

Lucky for you, cowboy, there's a cyberspace jack at (6). Maybe there'll be some news on the Net about what's happening—though you have a feeling that something has gone seriously wrong with SHODAN and that you may have had something to do with it.



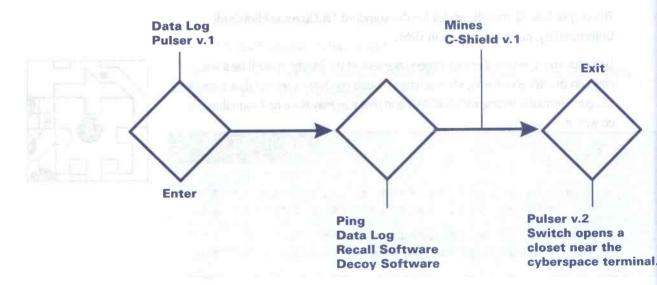


The Cyberdog and Cyberguard in this section of the system don't pose much of a problem when you pick up Pulser v.I software; this is a low-sec section of the system. A few logic bomb security mines are easily avoided, and you download some data and softs into your neural net. The inactive switching node opens the medical closet. You pick up Recall, some entertainment things—Ping, Decoy, some data, C-Shield v.I. Data fragments tell you that the level I elevator was taken off line by SHODAN o4.Nov.72 and that SHODAN security seems to be controlled by CPU and cameras. Toggle the inactive switching node to open the closet back in physical space at (7), which contains a Magpulse rifle, Staminup, and Medipatch.

Figure 6.3 shows the map of cyberspace on Level 1.

### Figure 6.3: Cyberspace Map, Level 1

Security: Cyberdog Cyberguard



The Ghiran-19.Oct.72 log is nearby. They made a stand at Beta quadrant by the radioactive moat. The force bridge there is controlled by a simple wiring panel—too complex for the mutants to activate. Room (6) also contains a hardcopy report.

### E-MAIL LOG

Engineer's Report-Arnold Hessman 22.SEP.2072

SHODAN sealed several storage lockers and rooms with cyberspace locks-you can open them only in cyberspace by 'cybertoggles' or switching nodes.

Some access codes to high security areas have been released onto the Net encoded onto loose data bits.

Hessman activated new security routines into cyberspace to protect the cyberspace locks and data.

Resist the urge to call out when you see a figure at (10)—it looks human, but seems to have more plastic and metal than flesh. Kill the cyborg drone with your dart gun.





Two more cyborg drones and a hopper are at (12). Welcome to Beta section. Feel dizzy as the Berserk patch makes you feel completely invincible. The hopper—a maintenance robot with a laser drill—is reduced to unusable scrap before your lead pipe. Hoppers are dangerous, but usually not found on Level 1 because most construction is finished. Your color vision becomes scrambled as your head-rush tells you the Berserk patch has worn off.



The room at (13) contains a report from Aaron Talbot re: mystery virus, and a stun gun.

# E-MAIL LOG

Medical Report-Aaron Talbot 29.SEP.2072

The 'mystery virus' affecting the crew may have been created by some accident in the bio-labs.

No cure or treatment was announced and crew are beginning to panic.

Victims undergo bizarre physical deformities and don't respond to treatment.

Flip the lever to get a Citadel status report. The room next door to the west is D'Arcy's room; get the Sparqbeam gun, D'Arcy's access card and e-mail log, D'Arcy-23.Oct.72.

# E-MAIL LOG

There's only one way to deactivate the mining laser before SHODAN fires it-destroy the laser completely.

You need to raise the station's shields and then fire the laser. The energy feedback should destroy the laser.

You need to use the isotope X-22, located on the Science level, to activate the shields.

Enable the safety override for the laser system on the reactor level-you'll need the laser override code.

Activate the shields.

Fire the laser. The laser controls are on the Science level.

D'Arcy's notes in his old office on the Science Level contain more information.

The laser override code should be in the science library computers.

Science Level—that's up on level 2. But the elevator (39) is still blocked by SHODAN. Your best bet is to head east to beta, to see if there are survivors.





The mini-grove at (17) shouldn't lull you into letting your guard down—a mutant looks hungry here. The log from Gross- 26.Oct.72 is ominous.

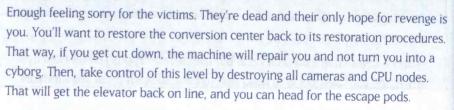
# E-MAIL LOG

Healing areas around the station have been converted to chambers marked "Cyborg Conversion."

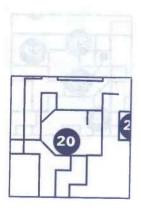
SHODAN reprogrammed the surgery rooms to perform lobotomies and install cyborg bioelectric systems.

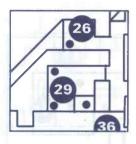
The first level's Cyborg Conversion chamber has some graffiti scrawled 'here' on the walls near the room.

You should be able to disable the conversion system by manually turning the cyborg conversion subprogram off at each station, so the surgery unit could perform healing functions.



In the Beta quadrant (20) is the circuit panel controlling the force bridge. But no one is here to greet you—they must be dead. Activate the force bridge by wiring the circuit.

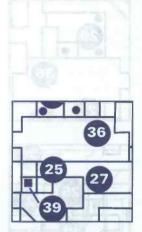




### Solve: xRPBxx/xxRPBx

No luck—no survivors. Better head toward the cyborg conversion area (29). Flip the lever to reset the system's autosurgeons back to normal mode.

Find a concussion bomb at (25) and take the mini-elevator down; a storage closet in the hall has a frag grenade. You'll receive Rebecca-2 e-mail right about now:



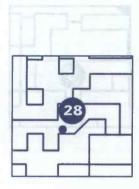
### E-MAIL LOG

Something or someone is blocking all transmissions to the station.

TriOp thinks that Edward Diego is somehow involved in the disaster on the station.

You should have never trusted Diego.

Time to shut down level security. Head to (28), the entrance to the cyborg conversion and computer area. There are several ambushes in this area as well as plenty of cyborgs, so be very careful.



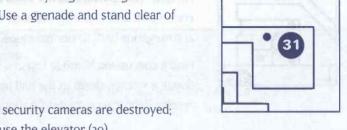






(29) Shut down cyborg conversion here.

Two cyborg drones and a cyborg warrior guard the CPU nodes at (31). Use a grenade and stand clear of the blast.



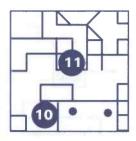
Make sure all level security cameras are destroyed; only then can you use the elevator (39).

# Level 1 Highlights

A hidden door at (8) contains some useful equipment. An easy run, and the Magpulse is sure to scramble the silicon of any robot that gets in your way.

After you kill the mutant at (9), grab the other dart pistol-you'll need its ammo. Another frag grenade and two sight vision enhancements will come in handy.





Open the trapdoor on the floor at (II). Grab Tranq darts, Nitropack, Reflex patch, and the illudium-cadmium battery; search the corpse.

Inside the room at (14) is a biohazard area. A Medipatch is guarded by a cyborg drone, along with an e-mail log from Gross-31.Oct.72. It contains one important piece of information:

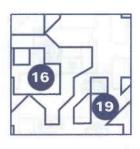


# E-MAIL LOG

The combination to the armory in gamma quadrant is 705.



Destroy the camera and cyborg drone at (15).



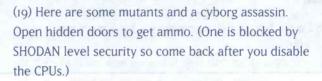
A mutant at (16) guards a crate with ammunition.



moor old allichi



(18) This room is a slaughterhouse. Search corpses and get another Sparqbeam. Get group access card and Ozark-17.Oct.72. The keypad at the hallway opens the armory (enter 705) in the west end of the hall; grab gas, frag grenades, dart ammo, and Sparq weapons.





(21) You'll find a first aid pack here. These come in handy—even though they're bulky, they contain automated mini-surgical computers and a wide array of drugs and stimulants that can restore you to full health.





- (22) Force bridge control. Activate this to extend the force bridge.
- (23) This is a mostly-empty storage room; grab the log from Honig-12.Oct.72, First aid pack and Staminup patch.



### E-MAIL LOG

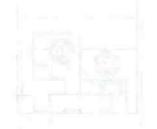
SHODAN is using the mutagenic virus to mutate crew members into biological templates for its cyborgs-  $\,$ 

(24) Here you'll find four more cyborg drones. Cyborg Assassins greet you here, too. Some hide in ambush, so look before you cross the bridge.



(26) A SHODAN-15.Oct.72 log is here, a directive to one of its cyborgs. Make sure you destroy the security camera too before you explore the hallway east—it contains sleeping cyborg drones. Kill 'em all.



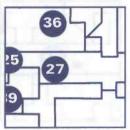




# E-MAIL LOG

SHODAN is testing the mutagenic virus V-5 by introducing it into to Beta grove, on the executive level.

SHODAN plans to use the virus against Earth.



(27) SHODAN-03.Nov.72 is here; pull the lever to open the bulkhead door for easy access back to the healing suite.

### E-MAIL LOG

SHODAN plans to use the mining laser to destroy Earth cities and defenses before it uses the virus to alter humanity.

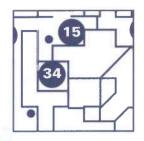
The station won't be in position with Earth orbit for another few days to start the attack.



- (30) There is a Turbo motion booster in the biocontaminant room. A Medipatch is outside.
- (32) Press button to open door to west. Get Medipatch and Biosystems Monitor v.i.

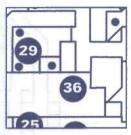


- (33) Find log Blank-25.Oct.72.
- (34) Another Biological systems monitor is here.





- (35) A berserk Repair 'bot is here; destroy it and climb the ladder, which leads to two Medipatches.
- (36) The switch in the hall opens a door to this biohazard area containing grenades; at the end of the hallway, heading northeast, is a Berserk patch.





(37) Door down leads into square room; kill mutants and cyborg. Get patches; a button on the floor under a control panel will activate repulsor to puzzle which opens force door to cyborg area.

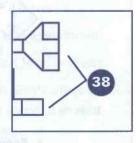
Side effect: King

Solve:

L1,2: 5,1;2,1

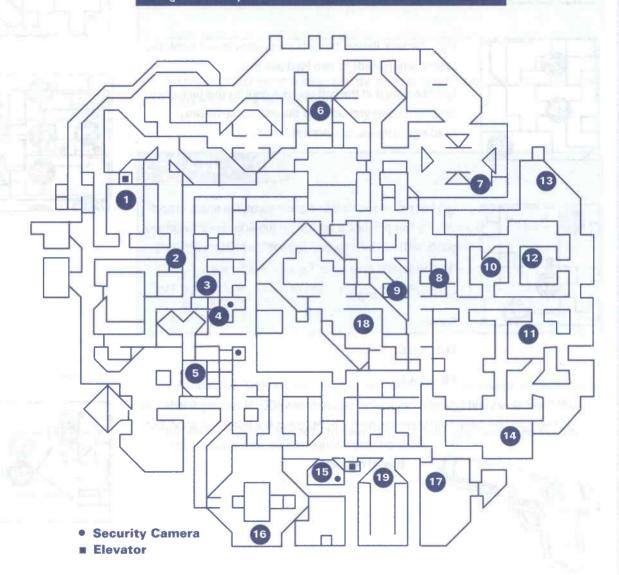
L3: 4,3;4,1

(38) Force doors and cyborg drones; after you reduce SHODAN security level to o%, get Magnum and three EMP grenades here. The Magnum is a potent weapon, but early on, ammunition will be scarce. Save it for special occasions.



# rener 5

# Figure 6.4: Map of Level 2



(1) As soon as the elevator hits level 2, the elevator door opens and a mob of mutants attack. Toss a grenade out and close the door—kill any ones that come in the elevator by hand (use a Berserk patch if necessary) or by dart gun. The room to the east contains two logs, Endicott-14.Sept.72 and Wong-16.Sept.72, as well as a hard copy report from Jan David Wong, 17.Sept.2072. From these you get the following information:

### E-MAIL LOG

SHODAN re-routed a lot of power to one of its projects, construction of some facility and remodeling in Alpha quadrant.

They installed manual circuit breakers in Alpha to bring systems like lighting back on line.

# LEVEL 2 OBJECTIVES

You have several goals for level 2, which is the Research Level.

- 1. Turn off cyborg conversion
- 2. Find supplies and ammunition
- 3. Disable SHODAN level security
- 4. Find Nathan D'Arcy's office and learn how he planned to shut down the laser



# The Level 2 Walkthrough

Go to (5) and through iris door to the north in order to deactivate cyborg conversion; press switch to gain access back to restoration chamber. A hidden door goes to an energy charge station; the switch behind the station opens the locked door.

Grab D'Arcy's logs, 20.Oct.72 and 21.Oct.72 in room (6).

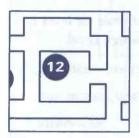
### E-MAIL LOG

SHODAN is charging up the lasers for a strike on human populations.

Pre-emptively firing the laser might not work since it might be targeted on a site already.

Use the isotope x-22 from Gamma quadrant and activate the shield, then fire the laser into the shield to overload the laser system.

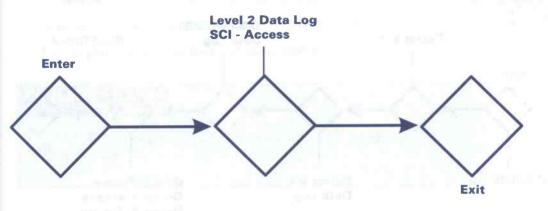
Override the laser safety interlock before you can fire into a raised shield.



The cyborg at (12) guards a cyberspace terminal and has a science access card; you can jack in here to get data and science access as well.

Remember there are two different cyberspace domains accessible on Level 2; I'll call them Levels 2A and 2B. Figure 6.5 shows a map of Level 2A cyberspace.

### Figure 6.5: Cyberspace Level 2A



(14) This is the research library, complete with three cyborg drones, Target and Identifier v.i, Nav v.i and another Multimedia Data Reader v.i. You need to solve the puzzle.

### Solve:

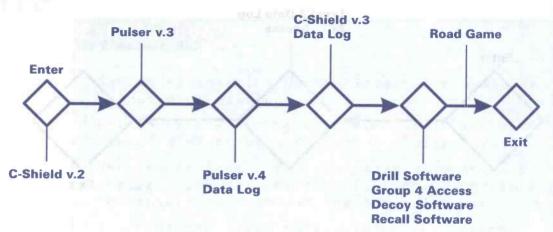
### RBPx/PRxB

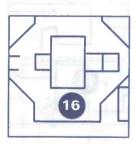
Cyberspace contains some goodies here, including data, C-Shield v.3, Drill v.1; in a tough combat with four Cyberguards you can win Decoy, Recall and Group-4 access. You can also pick up the TriOp game *Road*.



## Figure 6.6: Cyberspace Level 28

### Security: Cyberguard

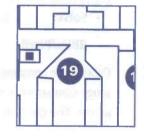




You need to find the isotope at (16); a hidden door in the pit has a land mine and nitro pack while the room to the north has the X-22 isotope.

(19) Destroy the CPU nodes here but don't forget about the six cyborg drones and Security-1 Bot after you nuke SHODAN's CPUs; examine the "moat" around the CPU to find a Genius patch

and Group-3 access card.



# Level 2 Highlights

Look for supplies on this level. At (2) solve the puzzle to open the supply closet.

Side effect: King

Solve:

4,2;3,1

Grab the darts, the ML-41 pistol, land mines, and ammunition.

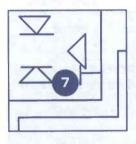
(3) The cabinet contains log from Melville-18.Sept.72.



# E-MAIL LOG

SHODAN changed access codes all over the level.

Activate force bridge control at (4) by flipping the lever, and cross the bridge to grab three fragmentation grenades and one EMP grenade.



There are energy recharge stations all over the station; your hardware attachments need power. Go to (7) to get a recharge and flip the rightmost lever to turn on beta quadrant lights. These are the circuit breakers Wong installed to get the level lighting back on-line after SHODAN's power surges. At (8) an experimental teleporter zips you to (9); get darts, three Nitropacks, and an extra dart gun.





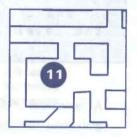
(10) get SHODAN-19.Oct.72 log here; lever opens door to radiation (nothing inside, however).

### E-MAIL LOG

SHODAN's virus reached sufficient toxicity to use on Earth ecosystems.

SHODAN is breeding the virus using human and plant hosts somewhere near the executive and residential zones on level 6.

- (11) Get SHODAN-05.Nov.72, kill cyborg drones (many here).
- (13) SHODAN-03.Nov.72, Universal Detox, Medipatch and three gas grenades are booty here.





### E-MAIL LOG

SHODAN wants energy-drain mines brought to Level & the security level for installation in its fortifications. (15) Four NiCad batteries are here and a log dated Baerga-27.Oct.72 is outside.

# **15.** 19

### E-MAIL LOG

Level 3 is home to some kind of practically invisible organism.

They couldn't kill them with ordinary pistols.

Sprint to the other elevator on level 3.

Abe Ghiran who has clearance for the maintenance main office.

(17) The cabinets contain a logic probe; robots here are peaceful and malfunctioning. A paper here gives you code 623, which you'll need...

You'll need to do some rewiring to get to the access panel to get into robot maintenance.



RPx/xPR

Another puzzle activates the access panel:

**Side Effect: Bishop** 

Solve:

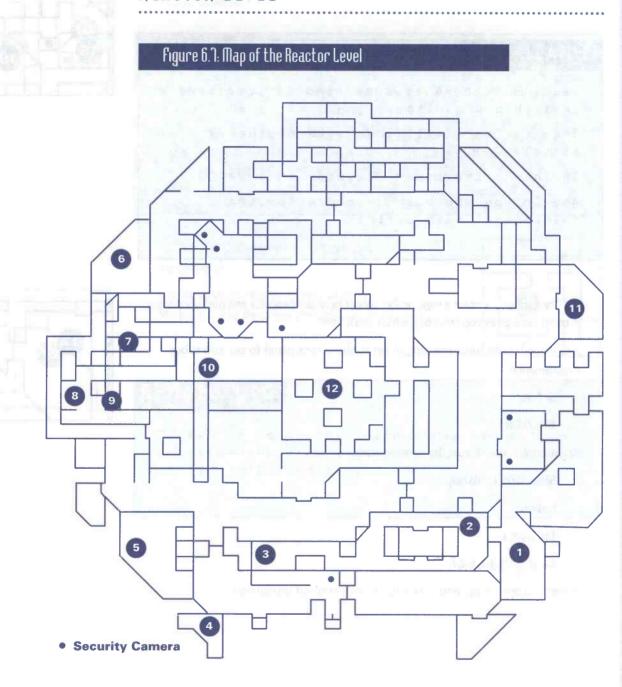
LI: 3,5;5,1

L2,3: 5,5;5,3;1,3;5,1

When you open it up, enter code 623 to cancel robot production.



# REACTOR LEVEL



There's a cyborg conversion center on this level, too. You'll need to find it and disable the conversion process. This level also has a surgery machine, so find it and use it.

You'll then want to find the shield subsystem where you can use your x-22 isotope.

Right outside the elevator is a log from Stevens-26.Oct.72; a hopper is outside to the left. The hidden door to the west hides a logic probe.

### E-MAIL LOG

If you activate the destruct enable sequence, the station will blow by a reactor core cooling breach.

- (1) Turn off cyborg conversion and grab a log from Raines- 23. Sep. 72.
- (2) This surgery station handles any traumas which occur working in the Reactor level. A wiring puzzle needs to be solved here.

Side effect: Bishop

Solve:

LI: 3,5;5,1

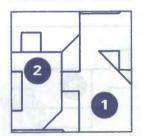
L2,3: 5,5;5,3;1,3;5,1

You'll find some assorted healing paraphernalia here: Medipatches, First Aid, Bio Systems Monitor, Detox; look under the chair for two more Detox and two more Medipatches.

(4) Storage room has 2 ML Teflon ammo clips but very high radiation. North of room 4 has a puzzle that controls the door to the shield generator.

Solve:

RPBx/BPRx

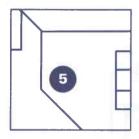




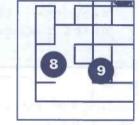
On the other side of the door, find Ghiran-o4.Jan.72 with a hopper. You can unlock this door and the armory door from cyberspace.

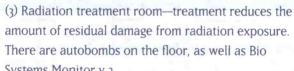
### E-MAIL LOG

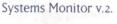
Ghiran installed gravity generators to generate a low-gravity field in the northeast lab for an experiment.

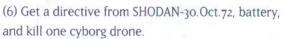


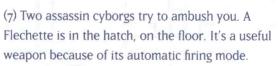
- (5) Use isotope here and turn on the shield; watch out for autobombs!
- (8) Security Override. In the antechamber before security override room will be your first encounter with a Security-I Bot.

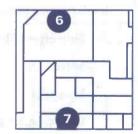




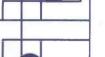








(9) Exec-bot is here. Also very dangerous...



(10) Solve the puzzle here to turn on the lights.

Solve:

PxRx/PxRx



# Return to Level 2

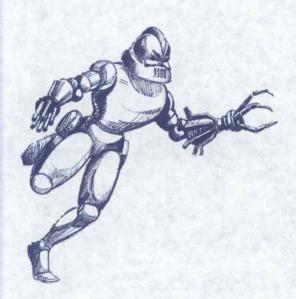
(18) Watch for the ambush. Two warrior cyborgs and 4 assassin cyborgs drop from the ceiling, so you'll need to engage in some tough combat right away. Avoid the energy drain mines (glowing orange spheres). The laser trigger is in the southeast room. Fire it and watch the effects. SHODAN is none too happy, when you receive e-mail SHODAN-23.



# E-MAIL LOG

SHODAN plans to use mutagen virus in Beta grove to convert life on Earth to a form more suitable for cybernetic domination.

Got to figure out a way to stop SHODAN from infecting the Earth...





# Chapter 7

W

RF-07 SKORPION WERPONS SHOTS GRENADE PATCHES FLECHETTE \$ 15 FRAG 6 STAMUP14 LASER RAPIER EMP 9 SIGHT MAGPULSE 15 CAS 7 B'SERK 18 m 2 CONC ASSLT RIFLE 4 MEDI 19 RAIL CUN MINE 5 REFLEX SKORPION 55 NTRO MACNEM



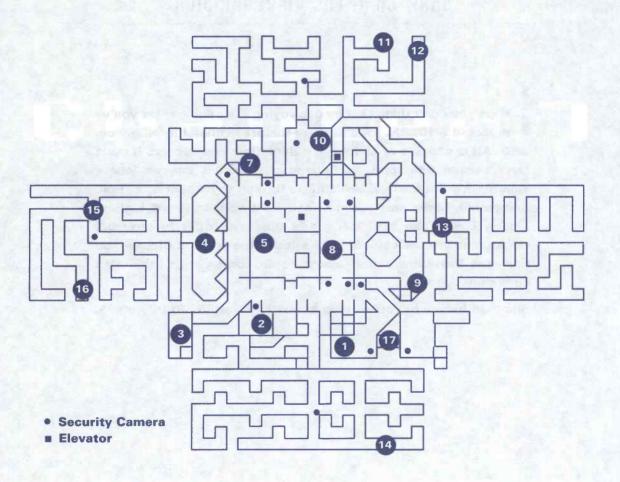
# CHAPTER 7: THE VIRUS MISSION

hope you don't think that by destroying the mining laser you've defeated SHODAN. As a state-of-the-art Artificial Intelligence, SHODAN is capable of billions of calculations per second. It must have second and third contingencies. Since it can no longer vaporize strategic sites, SHODAN is turning to its second option. Remember, Diego was about to sell a bioweapon to the highest bidder. Looks like SHODAN made Diego an offer he couldn't refuse. The Virus Mission will take you to the heart of Citadel Station—the Executive Level—and a confrontation with SHODAN's command cyborg.

Succeed here and you'll begin to really derail SHODAN's plans.

# LEVEL 3, A SHORT VISIT

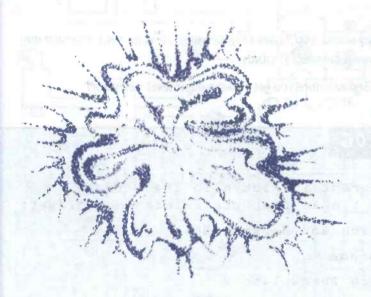
# Figure 7.1: Map of Level 3



# The Walkthrough

The elevator outside the computer room on level 2 should bring you to Level 3, the maintenance level. You'll need to run through Level 3 solely to get to another level, so don't worry about the maintenance level yet. You probably aren't well-armed enough to tarry here and engage some of the indigenous life forms in meaningful conversation.

This level is very dangerous, as the Inviso Mutants swarm here and are difficult to kill without a Magnum or a Laser Rapier. Run across the hallway to get to the elevator and head to Level 6.



# VIRUS MISSION OBJECTIVES

- Eliminate SHODAN level security on the Executive Level (level 6).
- 2. Go to the Alpha and Delta Groves and activate the jettison enable control.
- 3. Get an Envirosuit.
- 4. Go to Beta Grove and activate the jettison enable control.
- Activate Master Jettison Enable in Gamma quadrant.
- 6. Repair relay 428.
- Activate Jettison control in Beta Grove Lounge.

#### E-MAIL LOG

Survivors are hiding out on the flight deck left and are under attack by a Cortex Reaver. Their location is to the south on that level; the hallways are marked with the "gray," and you'll need to pass through convection shafts to reach them.

As tough as it may sound, you'll have to ignore their pleas for help. Your first duty is to stop what you unleashed: SHODAN.

Grab Fortier-o6.Sep.72 before you get into the other level 3 elevator.

#### E-MAIL LOG

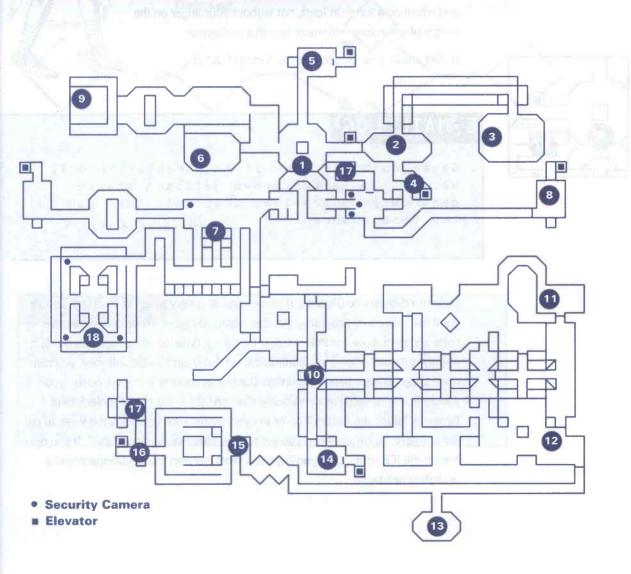
Some equipment is hidden in the storage compartment near the Beta maintenance closet:

- 1 Navigation and Mapping Unit
- 1 EMP grenade
- 6 Interface Demodulators
- 4 Hollow-tip 2100
- 3 Needle Darts

This is good information to remember; anytime you find info on a cache of supplies or weapons, you should do all but tattoo the location on your arm.

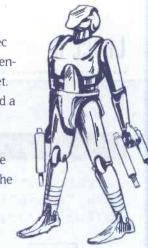
# Level 6

# Figure 7.2: Map of Level 6



The Executive Level will hold lots of dangers, including Exec Bots and Cyborg Warriors. The TriOp executives got preferential location near the groves, and the groves are your target. SHODAN's got its virus cooking there, and you've got to find a way to eject the pods. Deactivating cyborg conversion is a primary goal since you will be taking lots of damage here...And take care not to wheel around a corner, carefree and whistling a tune—at least, not without your finger on the trigger of something with more bite than a dartgun.

(1) Get ammo near corpse and log Aaron.12.Oct.72.



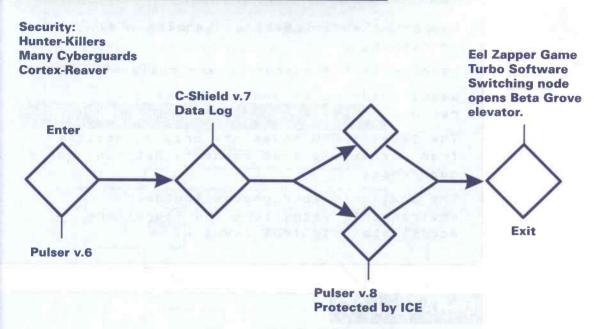


#### E-MAIL LOG

Gamma quadrant door is inoperable-the only way to the master grove jettison enable control is a crawlway that will take you to the Beta quadrant.

Jack into cyberspace (Figure 7.3) here—combat is very tough as you'll encounter a good many security programs, but they obviously guard some pretty valuable softs and data. Look for Pulser v.6, C-Shield v.7, data (get data logs Cyber-4, 6, 7, and the executive crawlway administration code), and Turbo software; you can open Diego's closet here. And unless Diego was another J. Edgar Hoover, you should find something more valuable than dresses in his closet. Unlock Beta Grove by killing the Cortex Reaver in cyberspace. Your Drill v.1 is too weak to cut the ICE here, so return when you get a more effective version of Drill. If you open fire on the ICE with v.1, all you'll get is a swift ejection from cyberspace and a pounding headache.

# Figure 7.3: Level 6 Cyberspace



# E-MAIL LOG

Cyber-4, Sender: Rebecca Lansing, Re: Storage Check out the storage office and the regeneration chamber in the southeast area of storage level.

#### E-MAIL LOG

Cyber-b, Sender: Rebecca Lansing, Re:

Level b is the executive and residential area.

Gamma quadrant is under massive reconstruction.

The level's CPU nodes are only accessible from a crawlway that connects Beta and Gamma quadrants.

The station's four groves (outdoor environments with fiora and fauna) are accessible only from level 6.

#### E-MAIL LOG

Cyber-7, Sender: Rebecca Lansing, Re: Engineering

The engineering level is constructed around a central core, with entrances to the top and the bottom of the core from each quadrant.

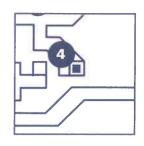
The core provides access to any area of this level, which is honeycombed with small passages traveling over and under other passages.

Watch for ambushes in the many small passages.

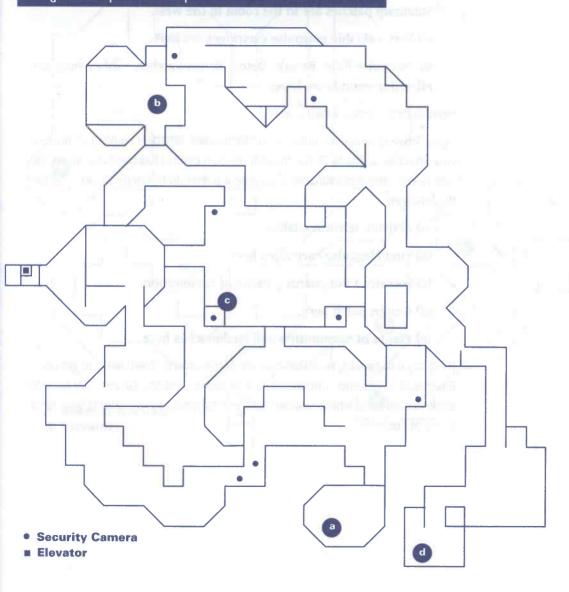
A medical area is just south of the core with a surgery machine; you should find the armory to the east of the core.

The CPU core nodes are in between the medical and armory areas.

- (4) Get a First Aid kit and deactivate cyborg conversion here. Now you can die with impunity—but you still need to be careful in the groves...
- (8) Go to Alpha grove and enjoy the smell of plants, flowers, grass and biological mutant lifeforms. I understand that ozone from a Sec-1 'Bot's energy weapons has a peculiar odor, too.



# Figure 7.4: Alpha Grove Map





In addition to mutant lifeforms, watch for the patrolling Security-I Bots. Notice the stereo speakers hidden in the bushes piping in the sound of crickets. Too bad SHODAN didn't construct his cyborgs out of the same material as the speakers—the speakers are indestructable. Here are the highlights for the Alpha Grove:

- (a) Activate jettison enable here. After you destroy the Security-I Bot, that is...
- (b) Ion Pulse rifle is in a TriOp corporate briefcase; Berserk and Staminup patches are in the room to the west.
- (c) Very valuable magpulse cartridges are here.
- (d) Magpulse Rifle, Beserk, Detox, Reflex patches, rubber slugs and ML teflon rounds are here.

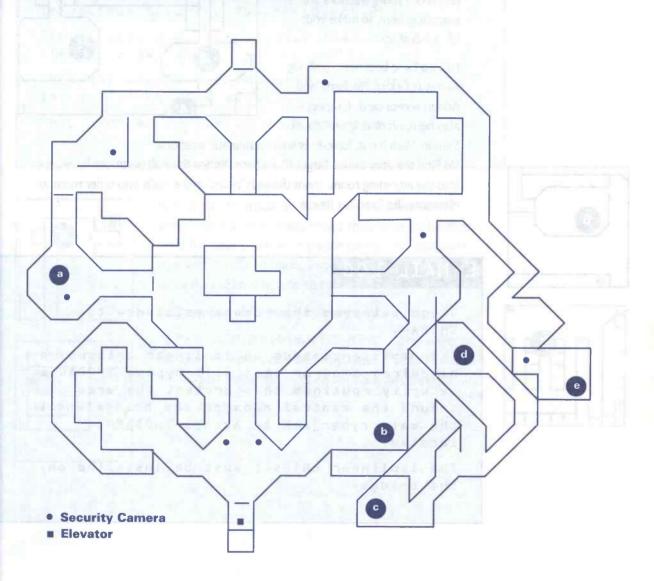
Head to Delta Grove, which is at (5).

Delta Grove is similar to Alpha Grove. Remember, SHODAN couldn't incubate its virus in either Alpha or Delta since the jettison control has been destroyed—no way to eject the contaminated pods onto a planet. In the Delta Grove, look for the following:

- (a) Activate jettison enable.
- (b) Find Magpulse cartridges here.
- (c) Security-1 Bot guards a cache of ammunition.
- (d) Genius patch here.
- (e) Plenty of ammunition and Medipatches here.

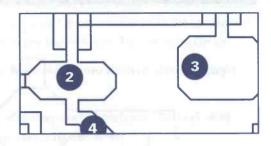
Head back to Level 3, now that you are better armed. You'll need to get an Envirosuit to get into contaminated Beta Grove, and Abe Ghiran may have left some record as to where you can find 'em. Getting an envirosuit is your next order of business.

# Figure 7.5: Delta Grove Map



# Level 6 Highlights

- (2) Three cyborg warriors are patrolling here, to make your life miserable
- (3) Two Exec-bots here; grab log Aaron-17.Oct.72, Flechette and Admin access card. A report is also here, on rioting on Citadel



Station. Watch out, Exec-Bots wield automatic weapons.

(6) Find the very useful Target ID v.3 here. Notice the wall partitions have gaps into the adjoining room; shoot through "holes" in the walls into other room to eliminate the Exec Bot threat.



#### E-MAIL LOG

Diego betrayed the human resistance to SHODAN.

The resistance made an isolinear chipset, a hardwired program that will bypass SHODAN's security routines that protect the area around the central room on the bridge where the main cyberjack to access SHODAN is located.

The isolinear chipset must be installed on the bridge.

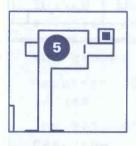
#### E-MAIL LOG

Trioptimum Security Report-10.0ct.2072

Riots swept over the station because of the viral contamination.

They got arms from the various weapons lockers around the station.

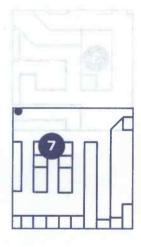
They engaged in combat with mutants.



- (5) Find the Infravision v.I hardware attachment here. Infravision is a much better choice than using the headlight since the lamp lowers your stealth rating... But you won't have any color perception. Still, better to see in black and white than to have a mutated cyborg see you.
- (7) Shoot Exec-Bot through holes in wall here, too.



(9) Here you'll find a Medipatch, logs from Aaron-12.Oct.72 and Perry-11.Sept.72, and the TriOptimum FunPak Module (no relation to the Microsoft Arcade Pack, of course).



# LEVEL 3, REDUX

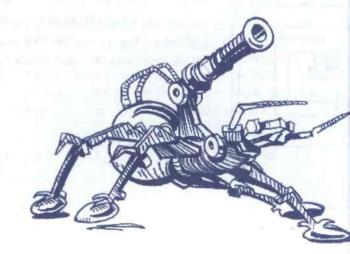
Now that you have been sufficiently armed, you can return to the maintenance level. Level 3 has CPU nodes and a cyborg conversion center.

- (i) Go to the CPU nodes and take 'em off line to lessen SHODAN level security. Grab the two Detox patches from cabinet and finish off the four maintenance robots.
- (2) Climb ladder from room to cache of battery packs.





(3) Deactivate cyborg conversion; grab the First Aid kit, while you're at it. If you're running out of inventory space, use a first aid kit if you're wounded; otherwise, leave it and mark the location of valuable items (batteries, first aid, logic probes) on your automap.



(4) Grab Lantern v.i, Ghiran-oi.Nov.72, o2.Nov.72 and o3.Nov.72.

# E-MAIL LOG

SHODAN turned the bridge into the central control area.

You need to reach the bridge and locate the main cyberspace jack.

Clear the central hub of Engineering to gain access through to the higher levels as well as the entire engineering level.

SHODAN's robots made modifications to the security level and stationed cyborgs at strategic vantage and sniper points above the ground level.

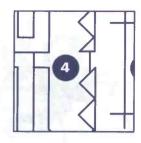
Repulsor lifts connect the ground with the ledges.

The main elevator to the bridge has been removed.

You need to move counter-clockwise on that level to gain access to the area where you can activate the force bridge through to the maintenance elevator.

The cyborgs left behind Ghiran's head (it's smiling and it is the only, repeat, only indestructable head on the level)—compare it in your MFD to his logs. Grab it.

(5) Kill the Inviso mutants, grab the two sight-enhancement patches, and go to the freight elevator.

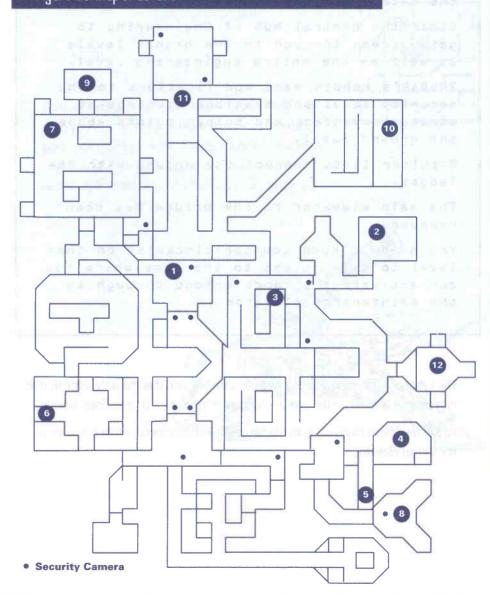




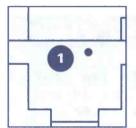


This is the Storage Level. If there's an envirosuit, there's a good chance that someone stored it here. All you have to do is find it. Level 4 is pretty quiet, since there aren't any systems of importance to running (and therefore controlling) Citadel Station.

# Figure 7.6: Map of Level 4



Grab the Medipatches and ML rounds, and off the avian mutant when the elevator door opens onto the Storage Level.



(i) Security-i Bot is here; watch for gor-tiger mutant wandering this area.

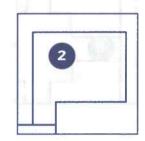


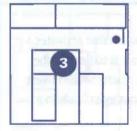
(2) Take SHODAN's computer nodes offline ASAP. Get logs MacLeod-26.Oct.72 and Wong-23.Sep.72.



MacLeod tried to retrieve the cache of plastique but it was heavily guarded.

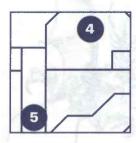
The catwalks leading to the plastique were damaged, with berserk repair bots below making a fall hazardous.

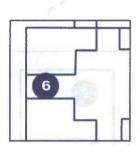




(3) Get Turbo v.2, ammo; first you'll have to negotiate the price with the cyborg enforcer.







- (4) Deactivate cyborg conversion.
- (5) Hidden door. A grid puzzle opens the way to some ammunition.

Side effect: Rook

Solve:

L1,2: 6,4;3,3;1,2

L3: 1,4;3,3;6,2

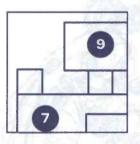
(6) Flip lever to turn on repulsor; run through the radioactive area, hop onto the force bridge and take Detox and Medipatches as required. (You can jump right onto the bridge if you time your run to the repulsor when it's green.) Did I mention you need to kill three cyborg warriors? Get MacLeod-22.Oct.72.

#### E-MAIL LOG

SHODAN recalled all envirosuits in Citadel Station.

MacLeod hid a suit in his storage cell along with some plastique.

The first digit of the access code is 8.



(7) This is the storage room. Under one of the crates is a switch that activates a force bridge to (9), where there's a cache of plastique. Throw it to floor in the main chamber for easy retrieval later. In room (7) you can reach the northwest door from the west ledge. A hidden door on ledge to the southeast leads to a recharge station.

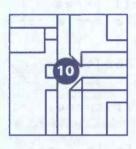
(8) Grab Envirosuit v.i, Magnum, and MacLeod-25.Oct.72. One plastique charge is here, too.

#### E-MAIL LOG

The rest of the plastique was moved to one of the raised storage areas accessible by the catwalks, on the north side of the storage room.



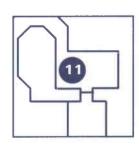
# A-TEAM, BACK TO THE EXECUTIVE SUITES, LEVEL 6!

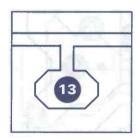


- (10) Grab Koufax-OI.Oct.72; a Cyborg Warrior is here. Recharge at this station and use your lon Pulse rifle around this area. You'll conserve ammunition and have the ability to recharge your own power as often as necessary. Raise the power level on the ion pulse rifle to really cook some atoms.
- (II) Flip switch to open force door; get First Aid Kit in crate.



(12) Turn off the force screen protecting a ceiling security camera near the elevator southeast of (17a) on Level 6. Enter code 711 and go to main tunnel.





(13) Executive level computer nodes are here, tended to by maintenance bots. Make sure you destroy the nodes, and as always, record the digit displayed on the screens nearby.

(14) Beta grove entrance here. Get SHODAN-07.Oct.72. Beta Grove is contaminated so you'll take damage (and your envirosuit will drain power as it absorbs some damage) the entire time you're inside. Move QUICKLY. But quickly does not mean carelessly.



#### E-MAIL LOG

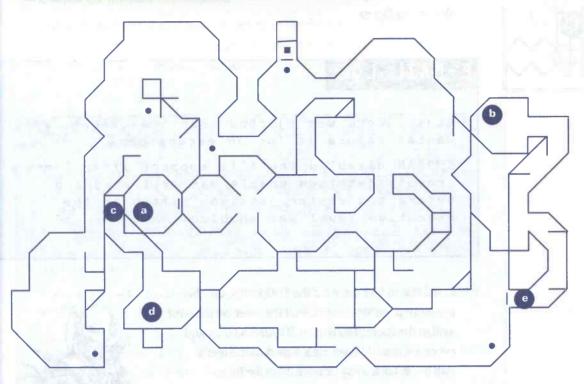
SHODAN changed the sequence control for grove jettison enable.

You need to enable jettison in all three remaining groves before any single grove can be jettisoned.

Jettisoning a single grove requires three steps:

- 1. Activate jettison-enable in all three remaining groves
- 2. Activate Master Jettison Enable in Gamma Quadrant
- 3. Activate jettison control in a specific grove lounge to jettison grove.

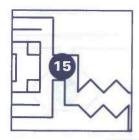
# Figure 7.7: Beta Grove



- Security Camera
- **■** Elevator

You take damage the whole time you're in Beta Grove, as a result of the SHODAN biohazard (but note that Beta Grove also has its share of nasties), so stay frosty and remember, the meter is running:

- (a) Hit jettison enable here.
- (b) Jumpjet v.1 (and two Security-1 Bots)
- (c) Magpulse ammo carts guarded by Security-1 Bot.
- (d) EMP and nitro grenades here.
- (e) Earthshakers are very useful. Start your collection today.

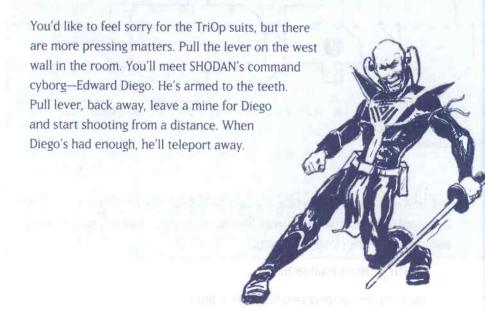


(15) Two Exec-bots wait on either side, with one Exec-Bot, and two Security-I Bots below. Now's a good time to use an EMP grenade. Crouch and shoot Execs; grab Wilkins-o4.Oct.72:

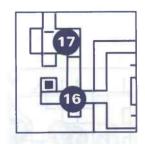
# E-MAIL LOG

Gamma Grove was ejected when the executives wanted to use it for an escape pod.

SHODAN disabled the life support after Gamma Grove's jettison enable was activated and before the master jettison switch on the executive level was enabled.



- (16) Pull jettison enable here. Listen to the report on a systems failure. You'll have to repair the interface demodulator.
- (17) Get Diego-5.Oct.72 and Diego-16.Oct.72; in his closet (more like a private arsenal) to south get nitro, earthshaker, Magpulse ammo, two concussion grenades, and Magnum ammo. His teleporter will take you to (17a).



#### E-MAIL LOG

Diego destroyed a shuttle from TriOp Security arriving at the station to arrest him, by ordering SHODAN to protect him.

Any other shuttles attempting to land at Citadel Station would be met by the same defenses.

Communications were jammed and Diego is using SHODAN to control the security robots.

He used you to gain control of SHODAN so he could purge all evidence about the biolab mutagen disaster to delay suspicion for as long as possible.

Diego gave the AI the location of the human resistance who hid out in northeast banquet hall.

Diego sold out humanity to take SHODAN's side. He'll pay for that, too.



# BACK TO LEVEL 3. AGAIN

(i) Read the new maintenance log o6.Nov.72 here. Maintenance access is granted now that the system has diagnosed a malfunction.

#### E-MAIL LOG

The system diagnosed a power systems failure in relay 428.

Maintenance subsystems have opened up maintenance crawlways and access halls.

Use the relay analyzer to learn how to repair relay 428.



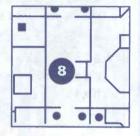


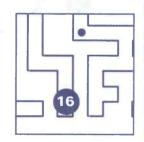
- (7) Go to relay analyzer and enter 428.
- (8) Solve the wire puzzle here to get to the recharge station and interface demodulators.

#### Solve:

#### RPBYG/PBGYR

- (9) Grab Hornet ammo and Fortier-30.Apr.72. Take the repulsor up to Magnum ammo clips and Nav Mapping v.2; grab one interface demodulator for repairs on the faulty relay.
- (16) Use the interface demodulator on the circuit board here. Beware, the maintenance mazes are patrolled by Sec-I Bots.

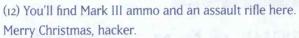




# Level 3 Highlights

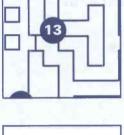


- (10) Grab Harvey-18.Oct.72. Security-1 Bots are in the maze to your north.
- (II) Medipatch and log from Hayes-29.Apr.72.
- ...All these lives, snuffed out because you let the genie out of the bottle.





- (13) Lots of Security-1 Bots here. Look out and make sure you've armed your Magpulse rifle! The EM bursts from the Magpulse should take the Bots out quickly.
- (14) Find a Magpulse rifle and ammo here.



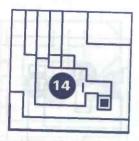
(15) Find the MM-76 Rail gun here. Rail guns are very useful for long distance damage to a whole area, since they deliver an explosive projectile (with a kick like a frag grenade).







# ONE MO' TIME TO LEVEL 6 attendable level



(14) The Beta Grove now contains virus mutants. Eject Beta Grove now and get Rebecca-3 e-mail.

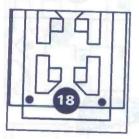
# E-MAIL LOG

SHODAN is going to download its code into Earth's computer network.

You'll need to destroy the main antenna relays on the station.

All four antenna relays are on the engineering level.

Use the high-energy plastique.



(18) Get the Rail gun here; it has ammo and is loaded. Beware of the Exec-Bots and Cyborg Enforcers.

# Chapter 8

W

RF-07 SKORPION WERPONS SHOTS CRENADE PATCHES s 15 FRAG 6 STAMUP14 LASER RAPIER EMP 9 SIGHT MAGPULSE 15 CAS 7 B'SERK 18 ASSLT RIFLE m Z CONC RAIL GUN 6 MINE 5 REFLEX SKORPION b 55 NTRO MAGNIM



# CHAPTER 8: THE ANTENNA MISSION

hings go from bad to worse; you jump out of the frying pan into the microwave oven. The Antenna mission will bring you face to face with more of SHODAN's cyborgs than any other level but that's because you've got SHODAN on the defensive. Hooray. But the Al is looking for a way off Citadel Station. And it won't want you riding shotgun.

# THE WALKTHROUGH

You'll need to get back to level 4 to grab the plastique you saw earlier. You'll get a message, Parovski-2.

#### E-MAIL LOG

The last human resistance are still holding out on the flight deck against SHODAN's cyborgs, but they need you to bring ammunition and supplies.

They may have vital information to help you hack into the system and stop SHODAN.

SHODAN is setting up some kind of trap on the flight deck for you, so exercise extreme caution.

# ANTENNA MISSION OBJECTIVES

- 1. Grab four charges of Z-44 highenergy plastique from Level 4.
- 2. Use the plastique on each of the four antenna relays on level 7.
- 3. Don't forget to take out SHODAN level security and deactivate the cyborg conversion center.

SHODAN has other ideas. It knows what you're planning with the antennas.

Head back to Level 3 and then onto Level 4.

# LEVEL 4 REVISITED

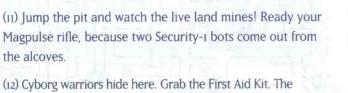


(7) Grab the plastique charges —four of 'em, to be precise. If you tossed 'em out of the storage area to the floor, you'll be able to save some time.

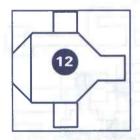


10

(10) Go to bottom of the pit and kill the three repair bots, then activate the force bridge.



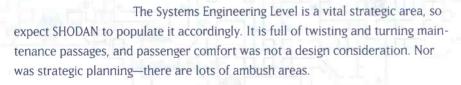


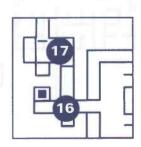


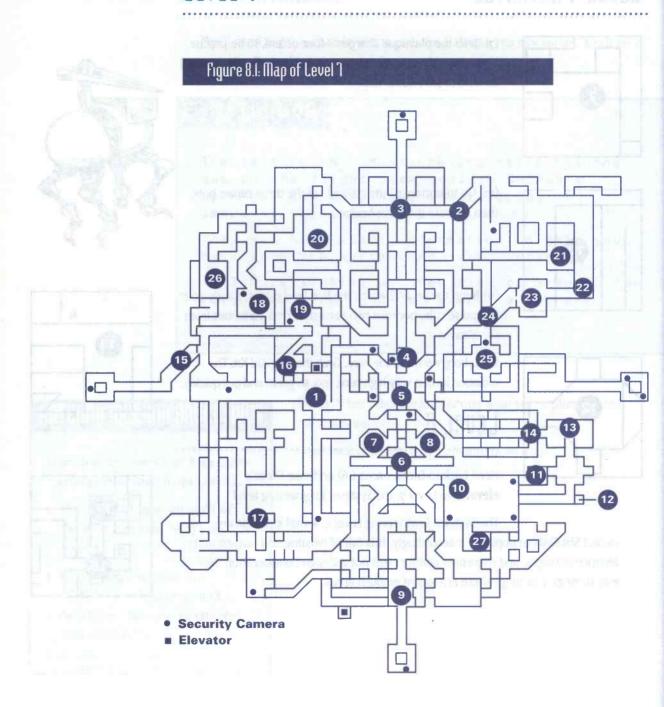
(12) Cyborg warriors hide here. Grab the First Aid Kit. The radiation level is very high here, too, so get in and out quickly.

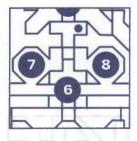
# LEVEL 6

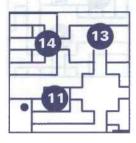
Head back to Diego's area (16) and take Diego's elevator to Level 7, the Systems Engineering level.











(6) Press the button on the south wall and the switch on the central pillar to open the core doors and unlock force fields to the medical area.

After you prime the explosive, SHODAN closes the force door, so you need to solve another puzzle to get out. Take Reflex to improve your reaction time to solve the puzzle quickly, or use a logic probe to get out as soon as possible! This puzzle has no side effects, it but takes time to toggle the switches to establish current.

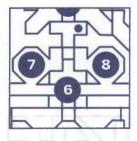
- (10) Give SHODAN's computer nodes the usual treatment.
- (11) Get Engineering Access card and Ritchie-16.Oct.72.

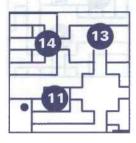


#### E-MAIL LOG

SHODAN is using the local CPU clusters to move and modify system code, and to change or move various security clearance routines.

If you shut down the local CPUs on levels one through  $\sin\tau$  that will cause data rerouting so that security code digits you'll need will be displayed on monitors near the CPU nodes.





(6) Press the button on the south wall and the switch on the central pillar to open the core doors and unlock force fields to the medical area.

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- (10) Give SHODAN's computer nodes the usual treatment.
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#### E-MAIL LOG

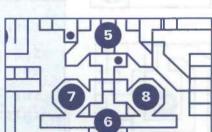
SHODAN is using the local CPU clusters to move and modify system code, and to change or move various security clearance routines.

If you shut down the local CPUs on levels one through  $\sin\tau$  that will cause data rerouting so that security code digits you'll need will be displayed on monitors near the CPU nodes.

(15) Three Security-1 Bots guard the hall to the west antenna. Finish off the north and the east antennae, too. Be careful—they are also guarded by SHODAN's potent cyborg and robot security.

# Level 7 Highlights

- (2) Cyborg enforcers are dangerous. And they're here.
- (7) This may be the most important room on this level, other than the antenna relay areas. This is the emergency medical area. Flip switch to deactivate cyborg conversion. You can use the surgery machine but do not trigger the live land mines surrounding the surgery machine—they'll blow up surgery machine. And they will do some serious damage to your unprotected body.
- (8) A convenient recharge station is nearby. One stop shopping—get healed, get juiced, and you're ready to kill.
- (9) A mutated cyborg carries a valuable hardware attachment, Targeting v.4. Solve the grid puzzle to get into the southern antenna relay. There are no side effects, so just toggle the switches to get the current flowing. Seems easy so far, right?



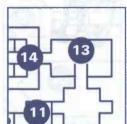




(12) Watch the bugger in the darkness! This is one of many ambushes SHODAN has set for annoying organic pests like yourself.



- (13) Grab Envirosuit v.3 here.
- (14) Energy/Projectile Shield v.3 will come in handy...
- (16) Log Schuler-21.Oct.72 here.





Schuler had the isolinear chipset!

Schuler was captured and taken alive to SHODAN on the bridge.

She was going to try and escape to use the chipset to gain access to SHODAN's computer.



(17) The best automatic weapon available—the RFo7 Skorpion—is here; a secret door also contains a power station.



(18) You can hear the SHODAN-02.Nov.72 log here but you'll have to fly to get out of this pit.

#### E-MAIL LOG

The main bridge elevator was removed from the security level.

Only one means of access to the maintenance central shaft via a force bridge remains.

SHODAN's forces are concentrated in the shaft to protect it from intrusion.



(19) The wire puzzle here disables the door's autoclose mechanism.

Solve:

#### RPxBxY/BPRYxx

(20) Hessman-24.Oct.72; another Engineering Access here.

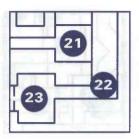
#### E-MAIL LOG

SHODAN has taken over all of the station's computers.

You can set the station's fusion reactors to overload.

You will need the access codes for the lifepods to escape the self-destruct.

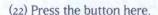




(21) More directives from SHODAN-o1.Nov.72 prove interesting and possibly useful.

#### E-MAIL LOG

SHODAN has fortified the bridge after human resistance almost made it to the bridge.



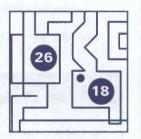
(23) Big score! You've hit the armory; this is your chance to rearm and stock up for some nasty encounters ahead. And don't forget to look behind the crates...

(24) Watch for the Security-1 Bots here.

(25) Don't mistake live land mines for inactive mines.

Detonate them from a distance by firing at them, but stay well clear.

(26) Here you'll find Jumpjet v.3. The later versions of Jumpjet are much more energy efficient—you go higher and faster with less drain on your energy supply.





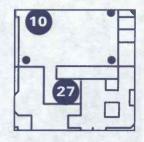


(27) Here you'll find two cyborg enforcers, Turbo v.2, and a wire puzzle that creates exits out of the storage room.

Solve:

#### RPB/PBR

SHODAN leaves you with an ominous message here.



#### E-MAIL LOG

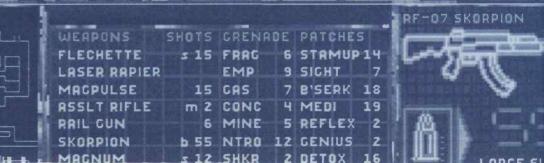
Even though the antenna are destroyed, SHODAN's consciousness-the mass of code making up its artificial intellect-remains safely ensconced in the system's main core.

You need to destroy the entire station to take out the system containing SHODAN.

Think it's mad yet?

# Chapter 9

W





#### CHAPTER 9: THE REACTOR MISSION

he last-ditch solution that TriOptimum came up with is to finally authorize the destruction of Citadel Station. Easy for them to authorize, when you are doing the work. The loss of the facility, while great, would be dwarfed in comparison to the drop in TriOp's stock price. You've got to set the autodestruct sequence.

## REATOR MISSION OBJECTIVES

- I. Read the log from the System Administrator's office on Level 7.
- 2. Get all six digits of the security code from monitors in the CPU nodes on Levels 1-6.
- 3. Make sure you have an Envirosuit—if not, use Ghiran's head on the retinal scanner on Level 3 and pick up Ghiran's suit.
- 4. Enter the six digits in the reactor core area on Level R and pull the destruct lever.
- Enter the lifepod and activate pod jettison.

#### THE WALKTHROUGH

You will get an e-mail from Rebecca Lansing.

#### E-MAIL LOG

Rebecca-4, Sender: Rebecca Lansing, re: destroying Citadel Station

SHODAN has activated Citadel Station's maneuvering and propulsion system and has set a course for Earth.

TriOp execs have authorized station self-destruct.

Find out the station's Systems Authorization Code, then set the fusion reactor to overload.

The Systems Authorization Code is located in the private logs of Citadel Station's System Administrator, Willard Richie, on the Engineering level.

You'll need a level-two Envirosuit or better to get through the high radiation areas as well as Detox patches-the reactor core has a very high radiation level.

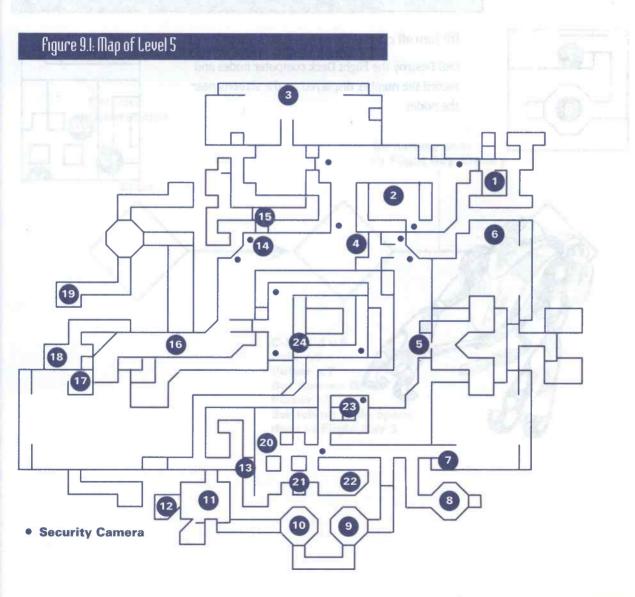
The core contains a panel where you can enter the self-destruct code and enable self-destruct countdown.

You'll need to head directly for the lifepods on the flight deck; the entry codes are DDL.

Head to Level 5. You'll need to destroy the computer nodes there to move on—and don't forget to get the code from the screens outside the computer room.

#### LEVEL 5, THE FLIGHT DECK

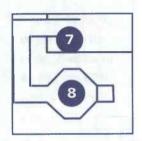
(i) SHODAN knows what you're up to and will have increased security from here on. It has arranged a little ambush for you with three Security-i Bots at the cyberspace jack here. Open the door and toss in an EMP grenade. Grab the log from SHODAN-ii.Oct.72. The door in this room is locked in cyberspace, and the cyberjack is blocked by SHODAN level security.



#### E-MAIL LOG

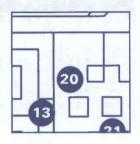
SHODAN was conducting its viral experiments in Beta Grove.

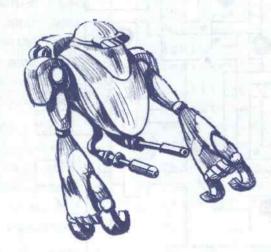
Cyborg guards are stationed outside the grove to keep subjects from escaping before the experiment reaches its fruition.



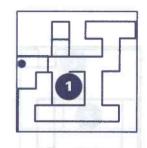
(8) Turn off cyborg conversion here, as usual.

(20) Destroy the Flight Deck computer nodes and record the number displayed on the screens near the nodes.





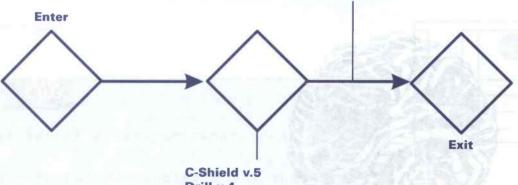
(i) Now that the nodes have been destroyed, SHODAN level security will have been reduced enough for you to access the cyberjack. Go into cyberspace, toggle the switching node to open the flight bay armory (a closet in the same room as the terminal) and grab the loot: land mines, EMP grenades, First Aid, Reflex and Detox patches.



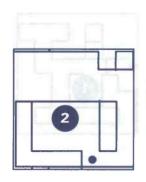
#### Figure 9.2: Flight Deck Cyberspace

Security: Cyberguards

Switching node to Flight Bay Armory



Drill v.4
Pulser v.7
Bot Bounce Game
Pulser v.5
Switching node opens
door in Flight Bay 3.



#### Flight Deck Highlights

(2) Kill the Zero-grav mutant and get Diego-27.Oct.72.

#### E-MAIL LOG

Diego directed Oscar to destroy all evidence of the viral biolab incident.

Experiment logs were protected by SHODAN.

Diego needed a hacker to crack the system's override and to enable the AI to protect him by controlling station defenses as well as robots and other station systems. like communications.



(3) Grab the log from Travers-11.Sep.72 in Flight Bay 1; Schuler-04.Aug.72 is in the antechamber.

# 3

#### E-MAIL LOG

Repairs were ordered for the northeast convection shaft-repulsors were left activated for maintenance workers. This is the way to get to Parovski.

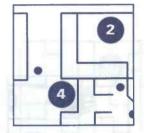
Schuler posed as Diego's personal secretary and found data in cyberspace of some sort of research computer systems cover-up involving the mutagenic virus.



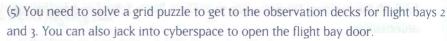
#### E-MAIL LOG

Cyborgs patrol access corridors near flight bay 4.

They seemed to be guarding something there.







Side effect: King

Solve:

LI: 6,2;3,1

L2,3: 4,3;4,1



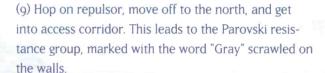
(7) This puzzle in flight bay 3 opens the iris door.

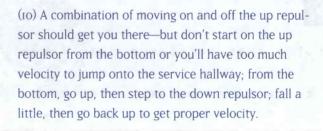
Side effect: King

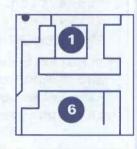
Solve:

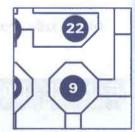
LI: 3,2;3,1

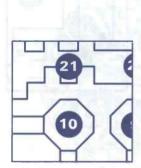
L2,3: 3,3;3,1







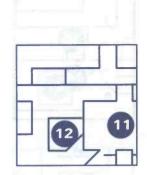




SHODAN's voice comes to you: *It's too late to save your friends.* 

the remaining humans here. One of the bodies has a Sparqbeam—barely enough power to fight off a repair bot, much less one of these monstrosities. Don't feel too bad—there is no way to actually save the last humans on the station—that's why you didn't rush up here when you first received Parovski's message.

(12) The last log from Parovski-o6.Nov.72. Grab the land mines.



#### E-MAIL LOG

SHODAN's alternate plan was to download itself into Earth's computer network using the station's high bandwith antenna.

(13) Ambush as secret door opens with a Security-1 Bot. SHODAN thinks of everything, doesn't it?

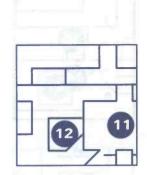




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#### E-MAIL LOG

SHODAN's alternate plan was to download itself into Earth's computer network using the station's high bandwith antenna.

(13) Ambush as secret door opens with a Security-1 Bot. SHODAN thinks of everything, doesn't it?









(21) Energy recharge station; feel free to use your energy weapons with abandon in this vicinity.



(22) Find the Travers-01. Sep. 72 log here.



#### E-MAIL LOG

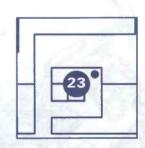
The service bridges in flight bay 4 had several fuses fail.

Temporary circuit breakers on a control panel on the floor of flight bay 4, across from the suspended force bridges, control the force bridges above the flight bay floor.



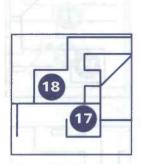


First aid kits were replaced in the life pods adjacent to flight bays 2 and 3.



(24) Solve the wire puzzle to activate the force bridge.





#### GET BACK TO LEVEL 3

(17) Time to get access to Abe Ghiran's office. Use Ghiran's head on the retinal scanner to gain entry. Get the battery packs, First Aid, explosives and Magpulse cart; also find a directive from SHODAN-o6.Nov.72.

#### E-MAIL LOG

Repairs are to begin on the CPU nodes on Levels 1 through 6 to repair the damage you caused.

SHODAN is also worried that you have somehow discovered the digits of the System Authorization Code to enable reactor overload and self-destruct.

Open a secret passage in the east wall for more engineering supplies.

You should have the six numbers that make up the reactor codes from all the levels by now—if not, you'll need to go to all the node rooms on the various levels to gather them. Once you have them, head to the Reactor level.

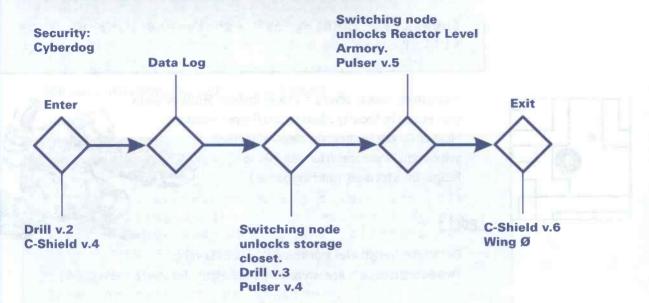
#### REACTOR LEVEL, PART II

A Security-2 Bot is waiting; SHODAN must sense what you're trying to do. These Sec-2 Bots can take quite a licking, and keep fighting. Don't waste time with these—use a Skorpion or a Magpulse weapon.

(II) Jack into cyberspace here at the terminal.



#### Figure 9.3: Reactor Level Cyberspace





(12) Go to the core, patrolled by Security-1, Security-2, and Flier-bots. Take the central repulsor up to the keypad by pressing the button above your head, and enter the reactor override code in two sets of three numbers. Enter the first three and you should hear a beep; enter the next three.

#### E-MAIL LOG

SHODAN is sending his robots and cyborgs to kill you...



Trying to get back to Level 3 is a tough firefight. SHODAN blocks your escape by Security-2 Bots (4) and Hoppers—and a Mutated Cyborg awaits in the elevator! (At least you can grab some ammo for your MM-76 Railgun from his dead, twitching corpse.)

#### Level 3

Get to the freight elevator to take back to Level 5. Two Security-2 bots are waiting by the freight elevator, however.

#### LEVEL 5

When you reach Level 5, you should get an interesting message from Diego.

SHODAN has dispatched Security-2 Bots guarding the lifepods in the flight bays, but you should not engage them on the ground. Instead, use EMP grenades and sniper fire from the observation deck at (5).

The life pods are located east of position (5), in between the two landing bays. Diego guards the entrance to the life pods in between the iris doors.

He'll put up a tougher fight than before. Open one of the iris doors, toss in a timed earthshaker and nitro, close the door, then split. That should soften him up.

You can open the iris door and plant a few mines; when Diego emerges, back off and start shooting. He'll teleport away when things get uncomfortable.

Enter code ooi in the lifepod, and grab the First Aid Kits. Check your Multimedia Data Reader for SHODAN-oo and Rebecca-5.

#### E-MAIL LOG

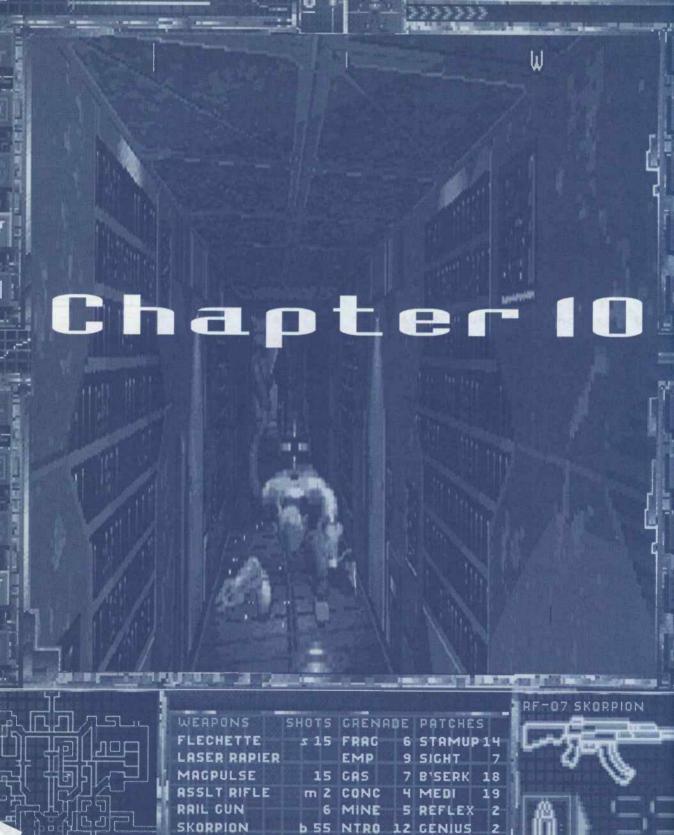
SHODAN has overridden the jettison controls for the lifepod. There's no escape from the station here. But SHODAN isn't planning to stay - how is it getting away?

SHODAN plans to separate the bridge level from the rest of the station.

You need to get to the bridge before separation by passing through the Executive Engineering and Security levels.

You'll get help from a team of TriOp engineers who designed the station and SHODAN but they won't be able to help you when you get to the bridge because it is too heavily shielded.

You've no choice now; the only way out is to head to the bridge and get on the ride before it leaves the station...



3 12 SHKR

2 DETOX

MAGNUM

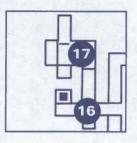


#### CHAPTER 10: THE BRIDGE MISSION

HODAN has sealed off your only means of escape by disabling the Life Pod ejection mechanism. And it's preparing to detach the bridge assembly in an emergency procedure. Like other life forms, it's motivated primarily by self-preservation. Of course, SHODAN hopes you'll be in the middle of the thermonuclear conflagration you enabled by setting the station's self-destruct mechanism, but you have other plans. If the bridge assembly is detaching, you need to be on it when it goes.

One problem: you have to get there. That means moving into the most heavily fortified area of the station. Level 8, the security level, was guarded tight as a drum before SHODAN's ascension, and you can be sure that SHODAN's toughest cyborgs are on Levels 8 and 9. Expect the toughest security on Level 9, and don't expect to walk right up to a cyberspace jack and crash SHODAN just like rebooting a stand-alone computer node.

#### THE WALKTHROUGH



You knew it would come down to this, didn't you? SHODAN and you, somewhere in cyberspace. But first you'll need to get to the bridge.

The elevator in Diego's office on Level 6 will bring you to Level 7, Systems Engineering.

#### LEVEL 7

The elevator on Level 7 to Level 8, Security, is located just to the west of the southern antenna relay.

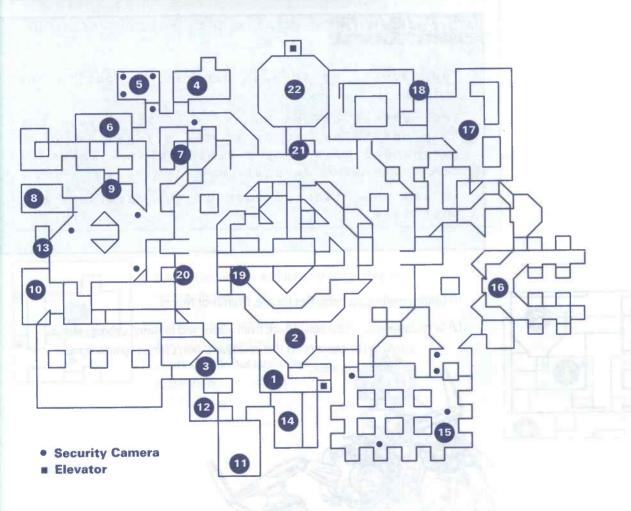
#### BRIDGE MISSION OBJECTIVES

- 1. Get Command access on Level 8.
- 2. Eliminate SHODAN level security on Security level.
- 3. Get to the force bridge control near the detention center.
- 4. Defeat Diego and use the maintenance elevator to go to the bridge.
- Eliminate SHODAN level security on bridge.
- 6. Get isolinear chipset.
- 7. Solve three puzzles to lower force doors to computer room.
- 8. Install chipset.
- Jack in to cyberspace and defeat SHODAN.



#### LEVEL 8. SECURITY

#### Figure 10.1: Map of Level 8



There are no regeneration centers up here, so save your game often. If you die, that's it—SHODAN wins.

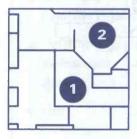
Rebecca is still with you, barely. Is she real or some kind of hoax generated by SHODAN? She's got a few more ideas that may improve your chances of survival now.

#### E-MAIL LOG

You need to go through security to get to the bridge.

The central column on the security level, the only remaining way up to the bridge, is surrounded by energy-draining mines, so you can't use your Jumpjet.

SHODAN has disabled most of the repulsors on that level.



- (1) Ghiran made it up here. Get his log, Ghiran-o1.Nov.72.
- (2) Very dangerous. Flier-bots attack from above and mutated cyborgs stand guard in the corners on this courtyard. Don't forget to look up and enjoy the view.



You'll receive a message from one of SHODAN's programmers here, giving you some information about the bridge and SHODAN:

#### E-MAIL LOG

Brocail-La Sender: Morris Brocaila re: Bridge layout

The bridge layout is set out like spokes on a wheel. SHODAN's mainframe is the hub.

The west spoke leads to the controls to get into the center hub, but is blocked by three security force doors.

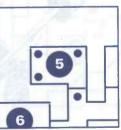
Each door is controlled by a panel you'll have to rewire.

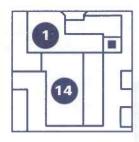


(4) Get First Aid kit and turn off force door on screen display.

(5) Group-8 access card is on corpse. Kill the cyborg enforcer. The closet outside has land mines and battery.







- (14) Blow the computer nodes to lower security.
- (18) Activate the force bridge control to central core!



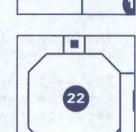
- (20) Take the repulsor here to the force bridge.
- (22) Reflex patches come very handy in combat, along with raising your shield.

And combat you'll have, because Diego makes his last

stand here. You can use the massive central pillar to your advantage by dropping mines and throwing timed explosives to soften Diego up. Don't be afraid to run around corners. Hit and run is your best bet here, because

go toe to toe.

Diego is too well armed and armored to



Use your target ID system to monitor Diego's damage level. He'll be tough, but once he goes down, the central pillar lowers exposing three very difficult targets—a mutated cyborg and two cyborg enforcers. Let loose with everything you have, and try to self-medicate yourself with some Medipatches right before the combat begins.

Grab the access card from Diego and head to the elevator. The bridge awaits.

#### Level 8 Highlights

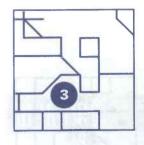
(3) Get a recharge and Stevens.11.Feb.72.

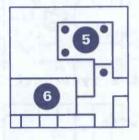
#### E-MAIL LOG

Recharging Security-2 robots in the maintenance bay create a heavy power drain on auxiliary systems - the lights dim and the door leading out of the room is frozen.

To reinstate power, press the charge interrupt button.

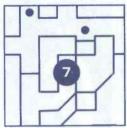
Charge interruption will restore lights and door, and the robots will be activated from the dormant charge phase.

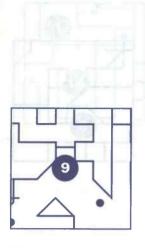


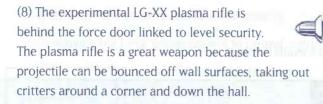


- (6) A mutated cyborg carries Energy Shield v.3, two Magpulse carts and a Magpulse rifle.
- (7) Two Genius patches and a First Aid kit.

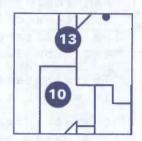




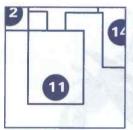




- (9) Surveillance area. Check out the monitors...
- (10) Railgun and RF slag ammo; more useful is the Command Access card.







#### E-MAIL LOG

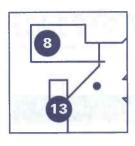
Security doors lead to SHODAN's "throne room," the main computer system.

SHODAN's elite guard will guard the cyberjack that accesses SHODAN directly.

The whole area has been flooded with radiation as a further barrier.



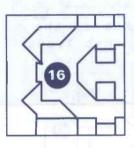
(12) What you'll find here is almost as good as raiding a corporate computer—Railgun ammo, Reflex patch, Magpulse carts and a Skorpion rifle with slag clips.



(13) The switch here opens the door in the center of the room; grab MM rail pack and use the recharge station.



(15) Four Security-2 bots. You'll also find Lantern v.3, some rail ammo, an MM-76 Rail gun, a battery, and a logic probe. Hit the robot charge interrupt.



(16) If you open the detention door in cyberspace, you'll be able to get in here. The cyberspace switch is not in the floppy version of the game, however. Kill the mutants and get to detention cells for patches.

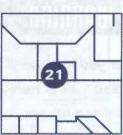


(17) A tasty energy source, and a Security-2 bot.

#### WARNING

If you kill two Sec-2 bots here, all the others will revive and attack.





(19) Four EMP grenades, battery pack; look in other closets in the core area.

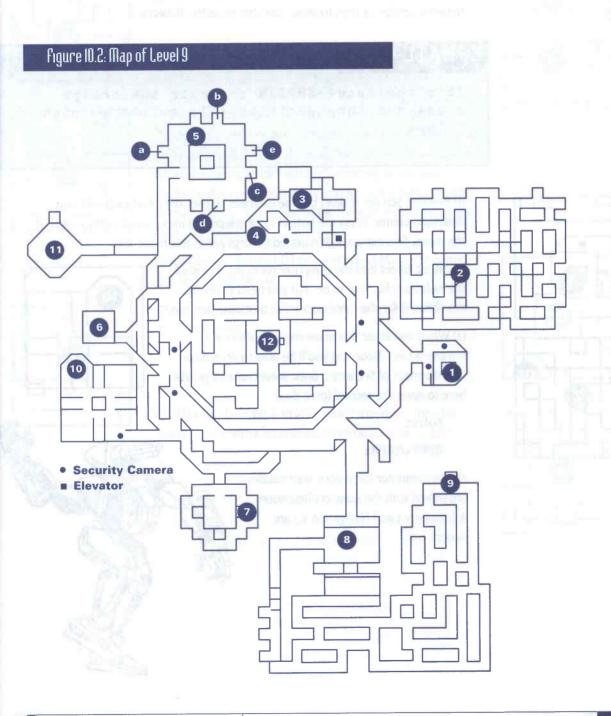
(21) Get Taggert-1 e-mail.

#### E-MAIL LOG

The only way to defeat SHODAN is in cyberspace, since the systems on the bridge are too heavily shielded to damage.

You'll need to find the central hub of the bridge for the primary cyberjack that leads to SHODAN's core memory.

### LEVEL 9-CITADEL BRIDGE



Last time you were here, Diego sat you in front of a terminal and you helped release the monster Al. The irony is not lost on you.

Rebecca sends—or tries to send—another message, Rebecca-7.

#### E-MAIL LOG

It's too late. SHODAN controls the bridge area, and they won't be able to get through to you.



2

(1) Rebecca Schuler is dead but the isolinear chipset she developed is in her detention center. Press the button to be teleported into the cell in the center of the room. Two extra tough mutated cyborgs are in this room, too.

You need to get into the computer room (10) to install the isolinear chip, but to do that you need to rewire the controls for the force doors that block the passage.

(2) When you enter this maze area, a button will remove a force floor and you'll be able to drop down into the maze of Security-2 Bots. Solve the wire puzzle here to open the second force door.

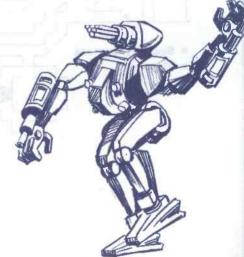


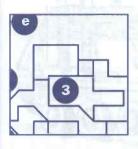
#### Solve:

#### RPBYx/tBPRx

All the computer force door wire puzzles are solved with the same configuration.

A Jumpjet v.3 and Navigation v.3 are in here too.





- (3) First Aid Kit and Medipatches here.
- (4) The energy station here will be useful for that fancy plasma rifle.



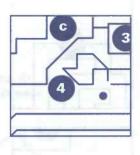
- (5) This area has alcoves with robotic and cyborg guards in the alcoves; when you press a button in an alcove, another in the sequence (A, B, C, D, E) opens. The last two alcoves open when you approach the center. (E) contains Sensaround v.3. The last button extends the force bridge to the center, where the wire puzzle controls one of the force doors leading to the computer room.
- (6) Concussion bomb, MM rail ammo and Magpulse ammo; this area is radioactive.

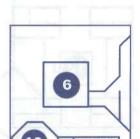


(7) Target ID v.4, Envirosuit v.3, First Aid are all guarded by a Cortex Reaver.

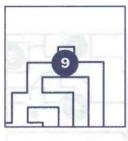


(8) Wait for the cyborg to lower the force door, then let 'em have it. There's an energy charge station here, too.





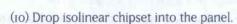




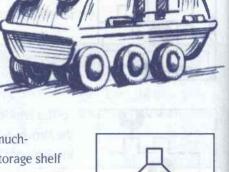




(9) This maze is full of autobombs, so the ricocheting plasma rifle comes in handy here. The wire puzzle opens the last door to the computer room. By the way, the autobomb population is replenishing, so get in, do what you have to do quickly, and get out.



(II) Walk over the iris door; it opens to a much-welcomed storage/armory area. Look at storage shelf to north for other ammo



(12) The central bridge is now flooded with radiation and patrolled by very tough cyborgs. Kill them.

Jack in and fight SHODAN.

The general layout of cyberspace on this level consists of two rings, with SHODAN at the very center. There are rooms at each corner of the outer ring and none in the inner ring; there are three connecting passages between the two rings. There is only one entrance to SHODAN's domain, opposite the entrance to cyberspace.

The outer ring has some excellent Softs: Drill v.8 (protected by ICE), C-Shield v.8 and FakeID.

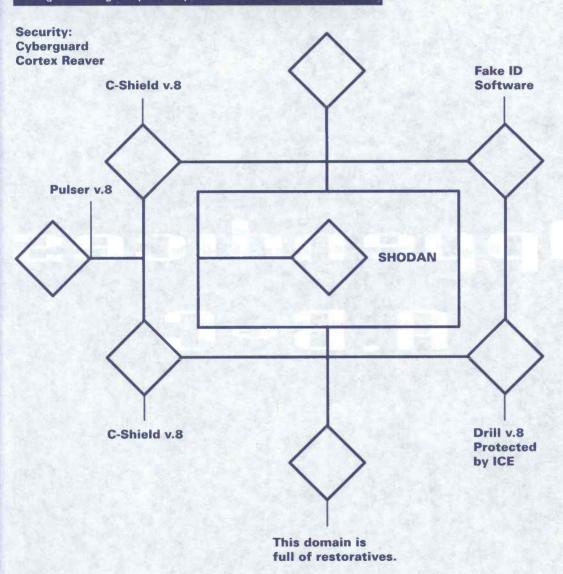
If you have Drill v.4, Pulsar v.8, and C-Shield v.7, you're in good shape to take on SHODAN.

It's easy enough to take on all the guards, since there are plenty of integrity restoratives around. SHODAN doesn't attack you, but your display will slowly fill with its image as it attempts to download itself into your brain through your neural net interface. SHODAN spins you around, but if you use Turbo software, you should be able to get a bead on it regularly. Keep firing away; SHODAN will fall pretty easily. That's it.

By the way, use Pulser software. Drill doesn't work against an AI.

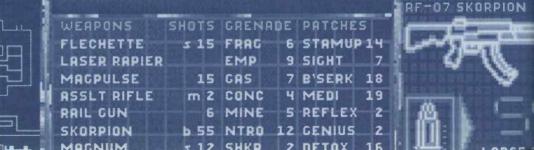
TriOp will offer you a job. I suggest you take the first exit out. TetraCorp's computer AI just went on-line, and maybe you'll find something there...

#### Figure 10.3: Cyberspace Map for Level 9



# Appendices A.B.C

W





#### APPENDIX A: HACKER'S HARDWARE AND SOFTWARE HINTS

ere are some guidelines, presented in the form of a Q-and-A session, to help you enjoy the game a little more. The topics we'll cover include:

- Speed
- Differences between the CD-ROM and diskette versions
- Video, sound, CD-ROM and hard disks, and other hardware issues
- Memory management and related software issues, including sample AUTOEXEC.BAT and CONFIG.SYS files
- · Running System Shock under OS/2

## WHY AREN'T SYSTEM SHOCK'S GRAPHICS AS FAST AS DOOM'S?

Sure the game looks gorgeous, but some of you might be asking "why isn't it as fast and as smooth as Doom?" Well, the easy answer is that Doom is not a true three-dimensional game. Wonder why you can't fly or look up or down? You basically stay on the ground, and since you don't have to worry about height, you're only working in two dimensions.

System Shock, on the other hand, is a full three-dimensional game. Rendering a full 3D world is much more complicated—the 3D successor to Doom, called Quake, isn't due until the beginning of 1996. And even in System Shock not all the objects are rendered in three dimensions; try looking at a waste barrel when you are standing over it and turning at the same time.

#### WHY ARE THE GRAPHICS SO SLOW IN SVGA MODE?

First of all, only the CD-ROM version supports higher resolutions. The disk version uses 320  $\times$  200 mode only. The CD-ROM version SVGA mode, 640  $\times$  480, requires the program to manipulate four times as many pixels as in the standard 320  $\times$  200 mode. There are two texture maps in the disk version, 128  $\times$  128 and 64  $\times$  64. With 4.5 MB free, you'll only see the 64  $\times$  64 images; if you have an 8 MB machine but are running a 3 MB disk cache, you will be getting 64  $\times$  64 textures since there will not be enough RAM for the 128  $\times$  128 maps. The CD version (CDSHOCK.EXE) always uses the 128  $\times$  128 texture maps. Remember, you can play the "original" System Shock game (SSHOCK.EXE) from the CD version if you don't have enough RAM.

## WHAT'S THE DIFFERENCE BETWEEN THE CD-ROM AND DISKETTE VERSIONS?

In the CD-ROM version, all the logs have voice support. You can get into the detention center on Level 8. There are a few new "games within the game" such as Wing Commander o. The CDSHOCK version adds multichannel sound, SVGA cutscenes (and longer ones too), VR headset support, and of course, SVGA graphics modes. Multiple-channel sound is a *vast* improvement over the single-channel sound of the disk version.

Although the Enhanced CD version of System Shock should allow you to continue saving games started in the diskette version, Looking Glass recommends that you start over because of minor incompatibilities. The voice of SHODAN alone is worth it...

#### WHAT HARDWARE IS OPTIMAL FOR RUNNING THE GAME?

A 486DX-33 with 4 MB of RAM, MS-DOS 5.0, and 20 MB hard disk space is Origin's minimum system. The CD-ROM requires at least a double-spin CD-ROM drive. Origin recommends at least a 486DX2/50, and a 486DX2/66 and 8 MB RAM for SVGA operation. I prefer a Pentium, of course! The faster the better. The game ran very smoothly on my IBM Pentium 60 MHz system, and ran even better with a PCI Diamond Stealth 64 card replacing my old 32-bit PCI graphics card.

#### Video

The Diamond Stealth 64 is a very fast DOS card, and good for Windows as well. (Other fast Windows cards may have mediocre DOS performance, so beware.) On higher resolutions, such as SVGA, I needed to turn down the detail to Minimum—which actually doesn't detract from the display very much—as well as turn off on-line help.  $640 \times 480$  required that I play in a window, which isn't my preferred strategy.

System Shock is barely playable in full-screen mode on my old 486DX/33 with an ISA ATI Graphics Ultra Pro, though in a window, the game ran fine. When I used an Intel DX4/100 Overdrive chip, the standard full-screen mode ran very smoothly. The Overdrive chip is a great upgrade that worked right out of the box and should get users serious speed increases, especially for systems with a VL VESA local bus graphics accelerator. Prices have dropped on the 486 Overdrive chips, and Intel should have released the new Intel Pentium Overdrive chips for 486 systems by the time you read this. If you have an ISA-only motherboard, consider buying a new system or swapping a motherboard. For example, Treasure Chest Computers sells a 486DX2-66 motherboard (built by a well-known company, FIC) with 256K cache, VLB IDE card, and VLB Diamond Speedster Pro video card for \$435 at the time of this writing; you just swap in your current hard drive and RAM to the new package. No, this system won't keep up with my IBM Pentium, but it will be substantially better than trying to put the fastest ISA video card into an ISA motherboard—and you'll have more upgrade room. You might even triple your DOS video speed, but of course, mileage varies.

My next upgrade will be to a Micronics Pentium 100 MHz with a 512K L2 cache and for some *serious* speed.

Get a nice monitor, 17" at least. Playing System Shock on my 20" Sony was pretty awesome—combined with some good 3D sound effects processing (I'm using the NuReality Vivid3D Plus), the game becomes downright scary.

#### Sound

System Shock supports a General MIDI music specification as well. That means you can use wavetable cards; a wavetable card contains actual digitized samples of instruments stored in memory, and music played through a wavetable card like the Creative Labs WaveBlaster (which plugs on to a SoundBlaster 16) or the Roland MT-32 sounds like real instruments. The difference is phenomenal. My personal preference is the Roland SoundCanvas daughtercard combined with a SoundBlaster 16 SCSI-2. Most new games support either the WaveBlaster directly or the General MIDI standard. Using a SoundBlaster 16/Roland combination also provides SoundBlaster compatibility. ProAudio Spectrum must be run in SoundBlaster Emulation Mode. SB16-style cards, such as the Fusion-16 and the Gateway2000K are not compatible with the SB16 mixer detection/DMA transfers used

in the game's digital sound system. Therefore, if you have one of these cards and can't get SB16 to work, run in SoundBlaster or SoundBlaster Pro mode. There is no support for multichannel sound through the Gravis Ultrasound yet, though Looking Glass promises a patch when the Gravis drivers are available.

A good pair of speakers is money well spent, given the quality of today's sound cards and CD-ROMs—Bose Acoustimass speakers with subwoofer provide serious audio fidelity, though the system is pricey; if you're on a budget (relatively speaking), the Altec Lansing or Cambridge Soundworks multimedia speakers both have subwoofers and are far superior to any two-speaker multimedia setup.

#### CD-ROM and Hard Drives

Get a quad-speed CD-ROM drive; the Toshiba and Plextor are highly rated, and users should check out the new Plextor 6X CD-ROM drive. My personal favorite is the Pioneer 6 CD-ROM changer. A little slower during CD-ROM changes, maybe, but worlds more convenient, especially with all these multi-CD games on the horizon. If you are looking for non-SCSI drives, check out the Creative Labs SoundBlaster 16 4X upgrade kit.

You should also get yourself hooked onto the Enhanced IDE standard—you'll triple or quadruple your data transfer rate from old IDE drives, and the EIDE standard is much cheaper to implement. I use an IBM hard drive, which has a technically superior magnetoresistive technology that packs more data, more reliably, on fewer platters. Promise Technology makes the EIDE2300, a local bus EIDE controller card, for those who want to make the upgrade from their older IDE systems.

#### Input Devices

You'll want to use the mouse or a mouse/keyboard combination. Joystick response was too sluggish for my taste.

Although the game supports the Cyberman 3D input device from Logitech, I found this device fine for game use but not so great for regular input duties. The Logitech Cordless MouseMan is my input device of choice.

#### WARNING

You may
experience
disorientation
and vertigo
using VR
headsets. Don't
blame me if you
lose your lunch
on your
keyboard or fall
down after using
one of those
things.

The CD-ROM version of System Shock also supports VR headsets. Unfortunately, the resolution on these headsets leaves a bit to be desired. On a Forte, the game looked fine (Forte headsets had just begun shipping at the date of this writing), but I hear that the new CyberMaxx headsets have better head tracking. Virtual I/O makes a nice headset but the field of vision is limited.

#### WHAT ABOUT (MEMORY MANAGEMENT) SOFTWARE?

**System Shock** runs with the DOS4GW Pro 1.97 DOS extender—that means it can use low memory, EMM, and XMS. If you are using QEMM, it can use all free memory. According to Looking Glass, under some versions of EMM<sub>3</sub>86, only some of the high memory is available to the extender.

Most new "multimedia" computers sold today come with at least 8 megabytes of RAM—avoid buying 4 MB RAM systems. Because of the original design of the IBM PC-XT, the first megabyte of your system is divided into low (or conventional) memory and high or upper memory. The first 64oK of RAM is known as *low memory*, while 64oK to 1024K is called *high memory*. Anything above 1 megabyte is referred to as *extended memory*. By using an expanded memory manager, you can convert the extended memory to expanded memory (EMS). Without a memory manager or DOS extender, DOS programs cannot access memory above 1 meg. Memory managers swap different parts of memory in and out of EMS, while DOS extenders create a "flat" memory model.

Memory managers also load certain programs into high memory, freeing low memory for the main program. System Shock requires 2 megabytes of RAM, with 1 meg EMS RAM, which means a memory manager is required. The simplest memory manager, EMM386.EXE, comes with DOS. While System Shock requires MS-DOS version 5.0 or later, the latest version—MS-DOS 6.2—comes with a utility called MEMMAKER. By running MEMMAKER, your computer will optimize loading your various programs into high memory in the most efficient combination.

Other programs, such as Quarterdeck's QEMM and Qualitas's 386Max, are more sophisticated versions of EMM386.EXE and can eke out much more low memory. Helix Software's Multimedia Cloaking can save you precious memory.

I use 386Max and don't have to modify my configuration to play the game at all. But if DOS 6, QEMM, or 386Max fail to create enough memory to run System Shock, you will have to create a boot disk with a pared-down CONFIG.SYS and AUTOEXEC.BAT file.

#### Creating a Boot Disk

First try to create a boot disk as described in the installation guide. You should find a couple of different configurations there. Go ahead and try to use the XMS boot configuration; if you still have problems, try to use the EMS boot configuration using EMM386.

Creating a boot disk is easy. At the C:> prompt, insert the appropriate blank disk into drive A and type:

```
FORMAT A:/S
```

You can use any simple text editor (like EDIT.COM in MS-DOS) to create the ASCII files for CONFIG.SYS and AUTOEXEC.BAT.

#### **Boot Files**

Boot files contain simple instructions for the computer to execute each time you turn it on. The following configurations are examples of sample CONFIG.SYS and AUTOEXEC.BAT files to use with the various memory managers. They apply to a system using the Logitech mouse driver version 6.2 (MOUSE.SYS) in the C:\MOUSE directory and a SoundBlaster 16 with drivers in the C:\SB16 directory.

Remember, if you use a data compression scheme like Stacker or DoubleSpace, you will need to insert the appropriate DEVICE=C:\DOSDBLSPACE.SYS statement in the CONFIG.SYS file. Some actual parameters may vary as the size of different mouse drivers (i.e., Logitech drivers vs. Microsoft drivers) will vary.

#### Here's a sample CONFIG.SYS file for MS-DOS 5.0, MS-DOS 6.22, or PC-DOS 6.3:

```
DEVICE=C:\Dos\HIMEM.SYS

DEVICE=C:\Dos\EMM3&b.EXE 71b8 RAM (this line can be removed if you just want XMS support)

BUFFERS=30

FILES=45

DOS=HIGH

DEVICE=C:\MOUSE\MOUSE.SYS

DEVICE=C:\ASPIZDOS.SYS/D/Z/Q10

DEVICE=C:\SCSI\ASPICD.SYS /D:ASPICDO

SHELL=C:\Dos\COMMAND.COM C:\Dos\ /p
```

#### Here's a sample AUTOEXEC.BAT for MS-DOS 5.0, MS-DOS 6.0, PC-DOS 6.1, or MS-DOS 6.2:

@ECHO OFF >NUL
CLS
PROMPT \$p\$g
PATH C:\DOS
C:\DOS\SMARTDRV.EXE (delete this if you still
don't have enough RAM)
C:\DOS\MSCDEX.EXE /D:MSCD /M:L5
C:\MACH32\VVESA.COM (VESA driver for ATI mach32
graphics cards)
SET BLASTER=A220 I5 DL H5 P330 Tb
SET SOUND=C:\SBLb
C:\SBLb\SBCONFIG.EXE /S
C:\SBLb\SBLbSET /M:220 /VOC:220 /CD:220
/MIDI:220 /LINE:220 /TREBLE:0

#### Here's a sample CONFIG.SYS file for QEMM 7.0:

DEVICE=C:\QEMM\DOSDATA.SYS

DEVICE=C:\TAPE\ASPIZDOS.SYS/D/Z/QlO/N4/Fl2

FILES=50

DOS=HIGH

DEVICE=C:\QEMM\QEMM3&L.SYS ATACHUP.DAT

DEVICE=C:\QEMM\QDOSCOMC\QUID ACCOMC AC

#### And here's the AUTOEXEC.BAT file for the same system:

C:\QEMM\LoadHI /R:2 C:\WINDoWZ\ZMATARAZ
C:\QEMM\LoadHI /R:2 C:\ZCSI\MSCDEX.EXE

A:\QEMM\LoadHI /R:2 C:\ZCSI\MSCDEX.EX

D:\QEM\LoadHI /R:2 C:\ZCI\MSCDEX.EX

D:\QET BLASTER=A220 IS DL HS P330 TL

ZET BLASTER=A220 IS DL HS P330 TL

ZET ZOUND=C:\ZBLL
C:\ZBLL\SBL\SBL\GET /R:220 /CS:220 /CD:220

/MIDI:220 /LINE:220 /TREBLE:0

aCLS
aECHO OFF
C:\@EMM\LOADHI /R:2 /RES=17440 /S@F
C:\DOS\MOUSE.COM
SET GSFONTS=C:\GSFONTS
PROMPT \$p\$g
PATH=C:\@EMM;C:\DOS
SET TEMP=C:\DOS

#### Here's a sample CONFIG.SYS file for 386Max 7.0:

#### And here's the AUTOEXEC.BAT file for the same configuration:

C:\386MAX\386LOAD SIZE=89056 FLEXFRAME prog=C:\2CSI\M2CDEX.EXE /D:ASPICDO /L:E /M:12 C:\WINDOWS\SMARTDRV.EXE /X 2048 128 C:\386MAX\386LOAD SIZE=14064 FLEXFRAME AZZVV/SEHJAM/: )=DORY SET BLASTER=A220 IS DI H5 P330 TL SET SOUND=C:/SBlb | Falling | District | SET | SOUND | C:/SBlb | Set | Sound | Set | C:\SBLL\SBCONFIG.EXE /S C:/ZBJP/ZBJPZE1 \W:550 \A0C:550 /MIDI:220 /LINE:220 /TREBLE:0 acrs and a aECHO OFF BMASTAS STEE=35272 FLEXFRAME PROG=C:\DOS\MOUSE.COM SET GSFONTS=C:\GSFONTS PROMPT \$P\$G PATH=C:\DOS; SET TEMP=C:\DOS

After you create the proper boot files, save them on your newly-created boot disk. Make sure you return to the C:> prompt (that is, exit Windows or your text editor), turn off the computer, and turn it back on with the boot disk in drive A.

If you experience sound problems with System Shock, check out this configuration. First, the AUTOEXEC.BAT file:

C:\Dos\mscdex.exe /D:mscdool /V /M:ls

SET Sound=c:\SBlb

SET BLASTER=A220 I5 Dl H5 P330 Tb

SET MIDI=SYNTH:l MAP:E

C:\SBlb\DIAGNOSE /S

C:\SBlb\SBlbset /P /Q

PROMPT \$P\$G

PATH=C:\Dos

C:\MOUSE\MOUSE.exe

#### The CONFIG.SYS file looks like this:

DEVICE=C:\DOS\HIMEM.SYS

FILES=45

BUFFERS=3D

DOS=HIGH

DEVICE=C:\SB16\DRV\MTMCDAE.SYS \D:MSCDOOL \P:230

/I:ll /T:S /A:D

DEVICE=C:\SB16\DRV\CSP.SYS \UNIT=D

/BLASTER=A:22D

DEVICE=C:\SB16\DRV\CTB16.SYS \UNIT=D

/BLASTER=A:22D I:5 D:l H:5

DEVICE=C:\SB16\DRV\CTMMSYS.SYS

SHELL=C:\DOS\COMMAND.COM C:\DOS\ /P

#### Windows 3.1/Windows for Workgroups 3.11

System Shock probably won't run under Windows 3.1 or Windows for Workgroups 3.11. Although Microsoft's graphical DOS front-end interface is very popular, System Shock is too resource-intensive to function under Windows. If you want to run Windows and System Shock (or any resource-hungry game) you will have to wait until Windows 95 (or Windows 9x, as some 0S/2 fans like to call Microsoft's new 32-bit operating system).

#### 05/23.0 and 05/2 Warp

IBM has solved many of the memory management problems of DOS with their graphical operating system, OS/2 Warp, which provides DOS and Windows 3.1 compatibility. Simply run a Virtual DOS Machine with the appropriate settings (1 meg EMS, 610 K lower memory) and you should have no problem running System Shock under OS/2. OS/2 provides true 32-bit preemptive multitasking, which means you can safely download a file from OS/2 CIM (CompuServe's front-end program), for example, while playing System Shock.

Keep in mind that Origin does not guarantee that System Shock will run on OS/2; still, the programmers at Looking Glass would love to support 32-bit operating systems. While the following VDM settings should run System Shock and other DOS games, they are not the default VDM settings for OS/2. You may want to set up a new template for game settings. System Shock ran very well under OS/2 Warp, on my IBM PS/ValuePoint Pentium 60 Mhz, with 16 MB of RAM. Table A.1 lists the appropriate OS/2 Warp settings for running System Shock.

#### Table A.I. OS/2 Warp Settings for System Shock

Setting	Value
DOS_FULL_SCREEN	ON
AUDIO_ADAPTER_SHARING	ON
COM_DIRECT_ACCESS	OFF
COM_HOLD	OFF
COM_RECEIVE_BUFFER_FLUSH	NONE
COM_SELECT	ALL
DOS_AUTOEXEC	C:\AUTOEXEC.BAT
DOS_BACKGROUND_EXECUTION	OFF
DOS_BREAK	OFF IN STREET
DOS_DEVICE	(use default provided by OS/2)
DOS_FCBS	16
DOS_FCBS_KEEP	8
DOS_FILES	50
DOS_HIGH	ON
DOS_LASTDRIVE	Z
DOS_RMSIZE	640
DOS_SHELL	C:\OS2\MDOS\COMMAND.COM D:\OS2\MDOS

#### Table A.I: OS/2 Warp Settings for System Shock (Continued)

DOS_STARTUP_DRIVE  DOS_UMB  OFF  DOS_VERSION  (use default provided by OS/2)  DPMI_DOS_API  DPMI_MEMORY_LIMIT  32  DPMI_NETWORK_BUFF_SIZE  EMS_FRAME_LOCATION  EMS_HIGH_OS_MAP_REGION  EMS_LOW_OS_MAP_REGION  ON  EMS_LOW_OS_MAP_REGION  EMS_LOW_OS_MAP_REGION  EMS_LOW_OS_MAP_REGION  ON  HW_ROM_TO_RAM  ON  IDLE_SECONDS  10  IDLE_SECONDS  10  IDLE_SECONDS  10  IDLE_SECONDS  IDLE_SENSITIVITY  IDO  INT_DURING_IO  ON  KBD_ALTHOME_BYPASS  ON  KBD_BUFFER_EXTEND  ON  KBD_CTRL_BYPASS  NONE  KBD_RATE_LOCK  OFF  MEM_INCLUDE_REGIONS  MOUSE_EXCLUSIVE_ACCESS  OFF  PRINT_SEPARATE_OUTPUT  ON  PRINT_TIMEOUT  SESSION_PRIORITY  VIDEO_8514_XGA_OITRAP  VIDEO_MODE_RESTRICTION  VIDEO_FASTPASTE  ON  VIDEO_NONEMAND_MEMORY  ON  VIDEO_ROM_EMULATION  OFF  VIDEO_SWITCH_NOTIFICATION  OFF  VIDEO_SWITCH_NOTIFICATION  VIDEO_SWITCH_NOTIFICATION  VIDEO_SWITCH_NOTIFICATION  VIDEO_SWITCH_NOTIFICATION  VIDEO_SWITCH_NOTIFICATION  VIDEO_WINDOW_REFRESH  XMS_MEMORY_LIMIT  10240	Setting Why 2 Carlot Harry	Value
DOS_VERSION (use default provided by OS/2)  DPMI_DOS_API ENABLED  DPMI_MEMORY_LIMIT 32  DPMI_NETWORK_BUFF_SIZE 8  EMS_FRAME_LOCATION AUTO  EMS_HIGH_OS_MAP_REGION 0  EMS_LOW_OS_MAP_REGION 384  EMS_MEMORY_LIMIT 2048  HW_NOSOUND OFF  HW_ROM_TO_RAM ON  HW_TIMER ON  IDLE_SECONDS 10  IDLE_SECONDS 10  IDLE_SENSITIVITY 100  INT_DURING_IO ON  KBD_ALTHOME_BYPASS ON  KBD_BUFFER_EXTEND ON  KBD_CTRL_BYPASS NONE  KBD_RATE_LOCK OFF  MEM_INCLUDE_REGIONS (use default provided by OS/2)  MOUSE_EXCLUSIVE_ACCESS OFF  PRINT_SEPARATE_OUTPUT ON  PRINT_TIMEOUT 15  SESSION_PRIORITY 1  VIDEO_8514_XGA_OITRAP ON  VIDEO_FASTPASTE ON  VIDEO_RETRACE_EMULATION OFF  VIDEO_ROM_EMULATION OFF  VIDEO_WINDOW_REFRESH 1  XMS_HANDLES 49	DOS_STARTUP_DRIVE	(use default provided by OS/2)
DPMI_DOS_API         ENABLED           DPMI_MEMORY_LIMIT         32           DPMI_NETWORK_BUFF_SIZE         8           EMS_FRAME_LOCATION         AUTO           EMS_HIGH_OS_MAP_REGION         0           EMS_LOW_OS_MAP_REGION         384           EMS_MEMORY_LIMIT         2048           HW_NOSOUND         OFF           HW_ROM_TO_RAM         ON           HW_TIMER         ON           IDLE_SECONDS         10           IDLE_SECONDS         10           IDLE_SENSITIVITY         100           INT_DURING_IO         ON           KBD_ALTHOME_BYPASS         ON           KBD_BUFFER_EXTEND         ON           KBD_EFER_EXTEND         ON           KBD_RATE_LOCK         OFF           MEM_EXCLUDE_REGIONS         (use default provided by OS/2)           MOUSE_EXCLUSIVE_ACCESS         OFF           PRINT_SEPARATE_OUTPUT         ON           PRINT_TIMEOUT         15           SESSION_PRIORITY         1           VIDEO_8514_XGA_OITRAP         ON           VIDEO_MODE_RESTRICTION         NONE           VIDEO_MODE_RESTRICTION         OFF           VIDEO_RETRACE_EMULATION         OFF	DOS_UMB	OFF
DPMI_MEMORY_LIMIT         32           DPMI_NETWORK_BUFF_SIZE         8           EMS_FRAME_LOCATION         AUTO           EMS_HIGH_OS_MAP_REGION         0           EMS_LOW_OS_MAP_REGION         384           EMS_LOW_OS_MAP_REGION         384           EMS_LOW_OS_MAP_REGION         384           EMS_LOW_OS_MAP_REGION         384           EMS_LOW_OS_MAP_REGION         384           EMS_LOW_OS_MAP_REGION         384           EMS_LOW_OS_MAP_REGION         ON           HW_NOSOUND         OFF           HW_ROM_TO_RAM         ON           HW_ROM_TO_RAM         ON           HW_TIMER         ON           IDLE_SECONDS         10           IDLE_SECONDS         10           IDLE_SECONDS         ON           KBD_ALTHOME_BYPASS         ON           KBD_BUFFER_EXTEND         ON           KBD_BUFFER_EXTEND         ON           KBD_CTRL_BYPASS         NONE           KBD_RATE_LOCK         OFF           MEM_EXCLUDE_REGIONS         (use default provided by OS/2)           MOUSE_EXCLUSIVE_ACCESS         OFF           PRINT_SEPARATE_OUTPUT         ON           PRINT_TIMEOUT         15      <	DOS_VERSION	(use default provided by OS/2)
DPMI_NETWORK_BUFF_SIZE  EMS_FRAME_LOCATION  EMS_HIGH_OS_MAP_REGION  EMS_LOW_OS_MAP_REGION  EMS_LOW_OS_MAP_REGION  EMS_LOW_OS_MAP_REGION  EMS_LOW_OS_MAP_REGION  EMS_LOW_OS_MAP_REGION  EMS_LOW_OS_MAP_REGION  EMS_LOW_OS_MAP_REGION  OFF  HW_NOSOUND  OFF  HW_ROM_TO_RAM  ON  HW_TIMER  ON  IDLE_SECONDS  10  IDLE_SECONDS  10  IDLE_SENSITIVITY  100  INT_DURING_IO  ON  KBD_ALTHOME_BYPASS  ON  KBD_BUFFER_EXTEND  ON  KBD_CTRL_BYPASS  NONE  KBD_RATE_LOCK  OFF  MEM_EXCLUDE_REGIONS  MOD-C7FF  MEM_INCLUDE_REGIONS  MOUSE_EXCLUSIVE_ACCESS  OFF  PRINT_SEPARATE_OUTPUT  ON  PRINT_TIMEOUT  SESSION_PRIORITY  VIDEO_8514_XGA_OITRAP  VIDEO_MODE_RESTRICTION  VIDEO_MODE_RESTRICTION  VIDEO_ONDEMAND_MEMORY  VIDEO_RETRACE_EMULATION  OFF  VIDEO_WINDOW_REFRESH  1  XMS_HANDLES  49	DPMI_DOS_API	ENABLED
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VIDEO_WINDOW_REFRESH 1  XMS_HANDLES 49	VIDEO_ROM_EMULATION	OFF
XMS_HANDLES 49	VIDEO_SWITCH_NOTIFICATION	OFF
	VIDEO_WINDOW_REFRESH	1
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	XMS_MEMORY_LIMIT	10240
XMS_MINIMUM_HMA 0	XMS_MINIMUM_HMA	0

#### BUGS?

The game is remarkably bug-free, but I did experience a few lockups on the CD-ROM version that I didn't on the disk-only version. But I finally got into the detention area on Level 8! There wasn't any bug that I could track down and reproduce, but if you are experiencing crashes, try to pare down your boot configuration to the minimal device drivers—and with the DOS extender, you can leave out EMM386.

#### WHERE CAN I GO TO TALK TO OTHERS ABOUT THE GAME?

CompuServe's HOT game in the Gamers+ Forum in February 1995 was System Shock. The gamers there are knowledgeable and friendly. Of course the Internet is filled with gamers, some of whom engaged in a heated debate (followed with great amusement by Looking Glass) whether System Shock is an RPG or an action game. System Shock has its own Web Page at

#### http://www.gfn.com/sshock.html

You can reach me at CompuServe at address 75300,3625 or on America On-Line at BernardY@AOL.COM. Let me know what you thought of the book and the game.

And good luck with SHODAN. You'll still need it... <G>

/.logoff

#### APPENDIX B. LOG ENTRIES AND DATA

The most important points from the various e-mail, v-mail, and other logs you encounter throughout the game are summarized in the chapters on individual missions. Here are synopses of other log entries in the game, along with code fragments you'll find in cyberspace.

#### Reports

#### E-MAIL LOG

Summary of Citadel Station's Design and Layout

The Citadel Eco-Pods are simulated outdoor environments with flora and fauna, called the "Groves."

Citadel Station is armed with missiles, short-range lasers, and the Tachyon Laser Mining Beam. The armories are stocked with Sparqbeams, Minipistols, and Flechettes, assault rifles, Skorpion automatic weapons, and Magpulse rifles for use against powered battle armor or robot strike teams. Citadel Station is also home to project LG-XX, a plasma rifle which fires projectiles of superheated plasma.

#### ۥMail and Other Logs

#### E-MAIL LOG

To: Edward Diego, Vice President

From: Rex Melville, technician

Melville reports that SHODAN and Diego authorized installation of an ETU (Experimental Teleportation Unit) in Diego's new quarters.

Its second entry/exit point is located near the elevator to the maintenance level behind a hidden door.

Simply stand on the teleportation pad to activate.

Engineer's Report-Jon David Wong 17.SEP.2072 Wong reports that he installed circuit breakers in Alpha quadrant to bring power back on line after the power surges.

#### E-MAIL LOG

SHODAN-OL.NOV.72 Sender: SHODAN

AUTOMATED GREETING

SHODAN's pre-recorded greeting welcomes you back to Citadel Station after your healing coma. Level 1 contains the healing suites and hospital area; Level 2 is science and research; Level 3 is maintenance; Level 4 is the storage area; Level 5 is the flight deck; Level 6 is the crew living areas and executive suites - the groves are located here; Level 7 is the engineering level; Level 8 is the security level; and Level 9 is the bridge. Level R is the reactor level. The elevator on Level 1 is in the alpha quadrant.

#### E-MAIL LOG

NACOHZ : rabnaZ &E-NACOHZ

SHODAN reports progress downloading its psyche into Earth's computer networks.

NAGOHZ Sender: SHODAN

SHODAN can't identify you since you do not match any employee file.

#### E-MAIL LOG

SHODAN-87 Sender: SHODAN

SHODAN dismisses your sabotage of the station antenna since its central consciousness remains safely in the main computer systems on the bridge.

#### E-MAIL LOG

SHODAN-OO Sender: SHODAN

Sounds like SHODAN has a plan to save itself from the reactor overload.

O'Conn-09.0CT.72 Sender: Kevin O'Connell

O'Connell reports that SHODAN reprogrammed the regeneration rooms all over the stationaturning them into cyborg conversion centers.

Robots bring badly injured personnel to the centers where instead of getting healed they are turned into cyborgs.

The conversion centers have been disconnected from SHODAN's main CPUs; they are now running on the medical CPUs only - manually restoring the centers to their proper healing functions without alerting SHODAN.

#### E-MAIL LOG

Stannek-11.SEP.72 Sender: Paul Stannek

Stannek reports a massive radiation leak in science level Gamma quadrant, where the store of isotope x-22 is kept.

You'll need an Envirosuit and Detox to enter.

SHODAN ordered a recall of the E-suits but Sabo Engle up in the storage level might have a bio-suit, which doesn't protect against radiation.

Stannek-24.0CT.72 Sender: Paul Stannek

Stannek reports that D'Arcy had a plan to stop SHODAN from firing the mining laser but was killed before he could explain his plan all he said was "override" and a code.

#### E-MAIL LOG

Ander-11.SEP.72 Sender: Warren Anderczyk

Anderczyk reports that SHODAN used the chemical storage banks and started to create new DNA agents. Abe Ghiran has an Envirosuit hidden in the maintenance office, probably a radiation suit.

#### E-MAIL LOG

Baerga-16.0CT.72 Sender: Travis Baerga

Baerga has found that gas grenades work well against mutants.

Aubry-07.SEP.72 Sender: Ed Aubry

Aubry reports that robots are rebuilding storage rooms and installing repulsor lifts without authorization.

#### E-MAIL LOG

Sabo-24.0CT.72 Sender: Sabo Engle

Sabo reports a bioplague on the Exec level; he had an idea to stop its spread.

The three-digit code for the storage cell where an Envirosuit is kept ends with 8.

#### E-MAIL LOG

MacLeod-22.0CT.72 Sender: Greg MacLeod

This garbled message tells Sabo that the storage cell combination starts with an & and that the cell also holds plastique.

Perry-11.SEP.72 Sender: Kiner Perry

Perry reports that a malfunction has caused SHODAN to randomly display security codes on screens for three days, like the code for the exec maintenance conduit, on the TriOp logo screen near the elevator.

#### E-MAIL LOG

Aaron-12.0CT.72 Sender: Zachary Aaron

SHODAN's bio-experiment in Beta grove is being used against the resistance.

You'll need an Envirosuit to get inside the grove and jettison controls to send the whole grove into space.

#### E-MAIL LOG

Rosen-07.JUL.72 Sender: Harold Rosen

Diego's new quarters are in Gamma quadrant.

Koufax-01.0CT.72 Sender: Gerard Koufax

Koufax reports that SHODAN has sealed off Beta grove, and rerouted overrides.

The door was put on a security switch, located in Diego's old quarters in Beta quadrant-which could also be opened in cyberspace.

#### E-MAIL LOG

Schuler-20.0CT.72 Sender: Bianca Schuler

Security robots overran the resistance on the executive level after Diego betrayed his human peers.

Schuler escaped and has the isolinear chip set the resistance has created to immobilize some of SHODAN's security functions and thus give a programmer enough time to deactivate the renegade AI.

You have to install the chipset on Level 9 by breaking into the computer  $room_1$  and find the cyberjack to SHODAN's domain.

Schuler-20.0CT.72 Sender: Bianca Schuler

Schuler says the software on the isolinear chipset should lower the defenses around SHODAN's throne room.

The computer room entry is blocked by three force doors.

Each door is activated by a security panel located in separate, heavily-guarded area.

#### E-MAIL LOG

Hessman-11.JAN.72Sender: Arnold Hessman

Hessman reports that there are four antenna control stations on the engineering level-located at the cardinal points of the level-

#### E-MAIL LOG

Ghiran-Ol.NOV.72 Sender: Abe Ghiran

Ghiran reports that the main elevators on the security level have been torn out.

The only other access to the bridge is inside the central tower, which goes right to the bridge.

Energy drain mines prevent using jump jets to get up to the entry point.

You need to find the force bridge which goes to the central shaft, somewhere on that level.

Verrelli-03.MAR.72 Sender: Jill Verrelli Verrelli suggests you search the detention cells to uncover any stashes of patches hidden there.

#### E-MAIL LOG

CY-014-23.0CT.72 Sender: CY-014

Schuler has been captured and held in a special containment cell on Level 9.

#### Cyberspace Data

#### E-MAIL LOG

Cyber-O Sender: Rebecca Lansing

Lansing tips you to these Reactor level highlights: radiation treatment area in the 'southeast'; 'north' of that area is an armory, laser and shield controls are in the 'west' and 'southwest,' respectively.

Watch out for the high radiation level.

Cyber-1 Sender: Rebecca Lansing

Lansing is leaving messages in each cyberspace level.

Many of the Citadel levels are divided into four sections, or quadrants, labeled Alpha, Beta, Gamma, and Delta, around a central hub.

Alpha is where the station's main cyborg production facility is located.

Beta consists of offices and labs; it's easily accessible by an elevator next to the hub.

Gamma contains an emergency armory and maintenance facility.

Delta contains a cyberjack.

#### E-MAIL LOG

Cyber-2 Sender: Rebecca Lansing

Lansing notes there are two cyberjacks on the Research level, leading to different domains of cyberspace.

This data comes from the Admin-Sec office in Beta quadrant, which also contains the research library, biological labs and other research facilities. Alpha contains offices, Gamma contains cybernetics department (the local CPU cluster, robot maintenance) and unstable isotope labs. Delta contains the local security department armory and some labs.

Cyber-3 Sender: Rebecca Lansing

Level 3 is the maintenance level, with a central hub and nearby CPU nodes, and Abe Ghiran's office. There are also four maintenance areas.

Since this level is not well populated, it makes a good haven if the hospital level proves dangerous.

#### E-MAIL LOG

Cyber-5 Sender: Rebecca Lansing

Two energy recharge stations are in the 'north' and another to the 'south' of the level.

The regeneration room is in the 'southeast,' near the lifepods.

The armory is in the same room as the cyberjack.

Cyber-& Sender: Rebecca Lansing

The main feature of this level is a tall shaft connecting Engineering with Bridge.

No regeneration centers on this level or the bridge.

At the base of the central shaft is the level's primary charging station.

Watch for Flier-Bots attacking from above.

#### Cyberspace Data Fragments

#### E-MAIL LOG

Hospital armory code-705

#### E-MAIL LOG

Executive maint. code-711

#### E-MAIL LOG

Laser override code-199

#### E-MAIL LOG

Storage office code-838

#### APPENDIX C. INTERVIEW WITH THE HACKER

Doug Church and I have been friends for a while, since I reviewed Origin's *Ultima Underworld: The Stygian Abyss.* Designed and produced for Origin by some guys in Massachusetts called Blue Sky Productions, this game presented a dazzling three-dimensional first-person perspective, and an amazing "true 3D" environment. Doug was the producer/designer behind the game, and we spent hours on the phone talking about game design and computers. Here was a game designer who really, truly was a gamer like us. And *Ultima Underworld* was terribly addicting. Sure, it was a little thin on story, and the creatures looked a little cartoonish. But by the time *Ultima Underworld II: Labyrinth of Worlds* came out, no one had even come close to duplicating the same environment in a fantasy role-playing setting. I asked him then what his next project would be, and he told me cryptically that it was some sort of science-fiction action game using a 3D engine similar to that of *Underworld*.

A year or two passed, and Blue Sky became Looking Glass. I got a package in the mail from Origin—*Wing Commander Armada* and a game from Looking Glass called *System Shock*.

Wing Commander Armada never even made it out of the shrink wrap.

I renewed my friendship with Doug and Looking Glass leader Paul Neurath shortly thereafter. Picked up the phone to congratulate them on one of the greatest games I've played on a computer—and I've been playing since the TRS-80 days. I ended up at Looking Glass to write a feature on the cast and crew for *PC Gamer* magazine and learned a few interesting tidbits about who they are and what's to come.

**BY:** *Ultima Underworld I* and *II* were really the first true three-dimensional first person games in the market. What did you like about the *Underworld II* engine?

**DC:** The engine itself allowed the designers to put a lot of detail into the world, not as much as we really want, but more than many other engines. This allowed good level designs to have a nice sense of place, of being in a distinct and memorable locale. Having people recall areas as if they had really been there was something we were quite happy about.

BY: What did you change for System Shock?

**DC:** From an engine standpoint, since it needed a 32-bit rewrite anyway, we made a host of improvements. The two complete rewrites were a much more sophisticated lighting model and a more free-form geometry. There were also things like multitrack

audio for the CD, textured and lit 3D models in the world, animating screens, on-line 3D help, and so on. From the game standpoint, we tried to eliminate the *Underworld* style—three separate games, in which there was an exploration game, a conversation game, and a stats/die rolling game. In *Shock*, we tried to merge it all into one seamless gaming experience. Conversations were changed to voice e-mails, mapping was done with the HUD, and stats were replaced with power-ups and item improvements. The whole game is visible at the main screen. Everything can and does happen at once.

BY: Who came up with the story behind System Shock?

**DC:** It was a group effort. Initially, I had wanted to do a near-future "cyberpunk" game. However, Origin had questions about the viability of that, so Warren Spector (our producer at Origin) decided to try and set up a sci-fi scenario to which we could add a fairly large cyberpunk element. After we had an initial plan, the actual details were fleshed in here by a lot of people. Initial work came mostly from Austin Grossman, myself, and Warren. However, once things really started on the project everyone contributed, though most was set up by the lead designers, initially Erik Ray and then Dorian Hart and Tim Stellmach.

BY: Are you a cyberpunk fan?

**DC:** Yeah, though there isn't much out there that is really cyberpunk. I do enjoy what I can find though, and certainly a bunch of my favorite recent sci-fi is of that subgenre.

BY: What sci-fi/cyberpunk novels have you liked to read?

**DC:** Oh, a bunch. I certainly like William Gibson's stuff. And Neal Stephenson has done stuff I really like, too (especially *Diamond Age*, which is awesome). Elizabeth Hand's *WinterLong* and the rest of the trilogy are really great. More pure sci-fi stuff I really like are Samuel Delany, Joan Vinge, *Hyperion* by Dan Simmons, and so on and so forth.

BY: What did you have in mind when you designed System Shock?

**DC:** We wanted to have an environment you could explore in many different ways. You can investigate the environment, the various levels and corridors and secret areas. Power-ups in the form of new weapons, new neural wares (and better versions of such) can be explored, since they all directly influence the 3D world or yourself. The plot is explored through finding and listening to the various e-mails and logs found around the station, at your own pace. Our hope was this freedom to explore would give the player more of a sense of interaction with and realism in the world.

BY: What do you think System Shock did well?

**DC:** I think it is one of the most detailed and consistent environments yet put on a PC. It provides a level of interaction with the world and of seamlessness that I think is really cool. I think the fact that the game has no "off-screen" stuff going on, that everything—every power-up or automap or skill—is seen in the world and has a noticeable result is very cool.

BY: What would you improve on?

**DC:** I'd love to have a real interactive conversation system. We, of course, are doing a brand new renderer with a new-from-the-ground-up design, so I obviously think we can do a new and better renderer for sure. And with better conversation we can make the story more interactive and I think that will be cool. Also, we are still learning to really use our physics technology in the game, and I expect our ability to do cool physics things to just keep growing.

BY: What do you want to do next?

**DC:** Well, we have this flight game [*Flight Unlimited*] we are finishing up, and I want it to be finished. Looking Glass in general is trying to figure out where we want to go, and how, and I definitely will be spending some time working on that. Then some time researching and designing the new engine, and better integrating the physics and world design elements into it. And then, a bunch of cool games using it.

BY: Have a pet project you'd love to do one day?

**DC:** I've been wanting to do a really involved fantasy RPG that uses an indoor/outdoor full 3D engine, has cool conversation stuff, and an interactive story generation engine which can respond quickly and somewhat unexpectedly to player actions. I figure it will be a couple of years before all the technology comes together, but it will be really cool when it does.

BY: Where's 3D technology going?

**DC:** Well, obviously, 3D accelerator cards getting cheap and prevalent would be nice. In general, within a few years, everybody will be able to do basic arbitrary environments, and the way to be different will be with better effects, better terrain creation ability, and game design/detail of world. We hope that our toiling now to make things work when it is still very hard to do effectively will mean that when it is easier to do, we can concentrate on the parts of the game that are more ephemeral than polygons per second, and distinguish ourselves by designing detailed and immersive environments which are more than just the technology.

BY: How'd you start playing computer games?

**DC:** Oh, some TRS-80 or Odyssey II Pong game or something when I was a kid. I didn't start writing games really until 8th grade, but I was playing them long before that. Atari 2600, Intellivision, Atari 400, C64, so on. One of my best friends in high school had built an Apple II, so we'd play Archon and Bard's Tale and write dumb programs.

BY: What experience in computer games did you get at MIT?

**DC:** Terry Donahue wrote Xtank at MIT while I was there, and although it was Terry's project I played it a bunch and talked with him and Dan Schmidt (also now at LG) and Eon Harry and Mike Zehr and the rest of the Xtank gang to tweak and improve and play with the code. I also worked on a networked X version of Diplomacy, but we decided Avalon-Hill would probably not let us release it for free on the Internet, so we never quite finished the move adjudicator portion, though we did the UI [user interface] and message-passing and all that. Other than that, I pretty much ignored games while at MIT, certainly PC titles, though I did play my fair share of Nethack.

BY: How did you learn to pick locks?

**DC:** MIT has a large hacker underground. At MIT, hacker means someone who explores, not someone who destroys. There is a hacker code which is taken pretty seriously, which includes things like "leave things in better shape than you found them" and "do not disturb." Hackers have explored lots of the lesser known areas of MIT—crawlways, steam tunnels, roofs, so on. People take pride in finding strange cave-like rooms at ends of air ducts, or hand climbing long distances, or chimneying up the outside of the building, or whatever. Usually one can do this with good shoes, clothes you don't mind getting dirty, a face mask and perhaps a butter knife. However, it doesn't hurt to know a bit more about opening and reclosing things carefully.

BY: What games do you like to play?

**DC:** Well, I don't really play as many games as I used to. Recently I've been playing *Wing Commander III*, of course. I like *NHLPA'95* for the Genesis quite a bit. *Incredible Machine* was super cool. I solved almost all the *Ultimas*.

It's clear that Doug has a lot of ideas for interactive environments, and all of them are likely to mean more captivating games from the group in Cambridge.

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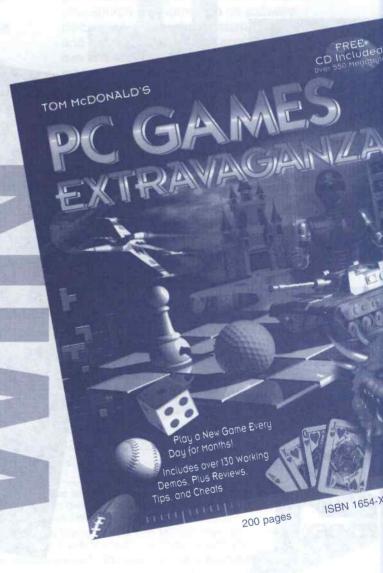
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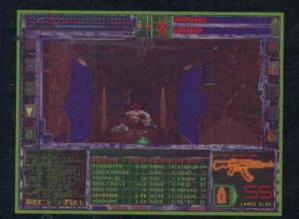






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